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The value of housing

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Introduction

The Value of Housing

Nelson Mota and Yael Allweil, editors

The housing question

Friedrich Engels's *The Housing Question* (1872) delivered a vital contribution to highlight the relation between adequate workers' housing provision, the prevention of social unrest and the promotion of economic prosperity.¹ With the global dissemination of the Industrial Revolution, housing rose to a prominent position in the apparatus of the capitalist mode of production. Eventually, in the interwar period, workers' housing performed a key role in the re-organisation of class relations and the city, and in shaping modernist architecture. The housing policies and design implemented during the so-called 'Red Vienna' period is a case in point.² Later, with the reconstruction of Europe in the aftermath of World War II, housing gained momentum as a key factor to secure the social reproduction of labour. The 'social project' of welfare state politics identified housing as one of its main pillars and attracted the engagement and creativity of talented professionals in private offices and public housing departments.³ The post-war focus on housing triggered the emergence of theories on the architecture of housing as a social and spatial practice, which proliferated and occupied the main stage in venues such as the CIAM, UIA Congresses, Team 10 meetings, Delos Symposia and so on.⁴

However, the notion of housing as a public good has been ideologically rejected by neoliberal regimes since the 1980s. From the 1980s until the first decade of the twenty-first century there was a sharp decline in the visibility of housing as a mainstream

topic in architectural scholarship, media and education. Furthermore, with the exception of a few events (e.g. the Barcelona Olympics, the IBA Berlin, or the harbour conversions of Amsterdam and Hamburg), over these three decades, mass housing projects have seldom made it to the portfolio of notable practicing architects and were rarely included in architectural publications. As Mary McLeod put it as early as 1989, 'in the 1980s most schools stopped offering regular housing studios; gentlemen's clubs, resort hotels, art museums, and vacation homes became the standard programs. Design awards and professional magazine coverage have embodied similar priorities'.⁵

Even recent scholarship seems to overlook the centrality of housing for a critique of how neoliberalism changed behavioural norms and models of subjectivation. In his *The Architecture of Neoliberalism*, Douglas Spencer analyses several architectural projects to assert that 'the truths shared by neoliberalism and the architecture compliant to its agenda have informed projects designed to serve as forms of environmental governmentality'.⁶ Spencer uses case studies designed by prominent architects and architectural firms to put through his critique of an architecture of neoliberalism. Conspicuously, while works designed by the likes of Zaha Hadid Architects, Foreign Office Architects, Rem Koolhaas/OMA are featured in the book, not a single housing project is discussed. Spencer apparently does not consider housing a visible manifestation of the architecture of neoliberalism.

This is what this issue of *Footprint* wants to challenge. Rather than examining projects like BMW's Central Building or the new headquarters for CCTV (China Central Television), we believe the focus should be placed on housing as the ultimate form of environmental governability.

Despite still being underrated as a topic in many scholarly publications, professional magazines and architectural schools, since the global economic downturn of 2008, housing once more gained notoriety. In particular, scholarship on the entwined relationship between the current housing crisis and the hegemony of the neoliberal economic system and its associated corporate monopolies is now gaining momentum.⁷

Theorisation of the current housing crisis within architecture and housing studies assigns responsibility to the neoliberal economic system, which has since the 1980s transferred responsibility for housing provision from the state to global markets and the corporate monopolies dominating them, and to the dwellers themselves. The collusion of government (de-) regulation, market ideology, and the architectural desertion of housing theory stalled the production of innovations in the architecture of housing, prompting a crisis in the mechanisms producing and distributing housing solutions for different publics.

To mitigate the growing social unrest created by the current housing crisis, the neoliberal state is now called upon to re-provide housing using planning and policy – an ideological contradiction placing 'solutions' to the housing crisis at a deadlock. From the vantage point of architects, designing housing – whether at the high- or the low end of the market – remains largely a response to the tight constraints of regulatory and financial considerations. Hence, the contribution of contemporary housing design to the growing inequality and deepening of the housing crisis is rarely considered

within the architectural discipline. Consequently, 'architecture' as cultural product is often seen as distinct and separate from 'housing' as a socio-economic need.⁸

In this issue of *Footprint*, we aim at bringing housing-as-design together with housing-as-policy and housing-as-market. We believe this transdisciplinarity is fundamental to discuss a key question: What is the value of housing today?

The value of housing

In her celebrated *The Entrepreneurial State* (2013), economist Mariana Mazzucato debunks the myths of private enterprise as the fast cheetah of innovation, opposed to the cumbersome and inefficient bureaucratic apparatus of governments and the public sector.⁹ Recently, in her *The Value of Everything* (2018), Mazzucato follows up on this discussion, relating stories of wealth creation that challenge some of the most entrenched neoliberal dogmas.¹⁰ To do so, Mazzucato raises a key discussion: what is value and where does it come from? She explains, for example, that a great deal of the wealth produced in Silicon Valley is indebted to public investment in education and research. Undervaluing the public sector is nothing but an ideological bias propelled by the neoliberal agenda.

This ideological bias has also contributed to downplay the importance of housing in the wider political economy. However, as Manuel B. Aalbers and Brett Christophers asserted in 2014, 'housing not only epitomizes but buttresses that wider capitalist ideology: it is in and through housing that much of the political work of reproducing and reinforcing the ideology of capital is performed.'¹¹ In his *The Financialization of Housing*, published in 2016, Aalbers further stresses the centrality of housing to the contemporary capitalist political economy in general, and particularly the financialisation debate.¹²

Both Mazzucato's and Aalbers's recent work operates mainly in the disciplinary field of political economy. They give us, however, an important intellectual framework to discuss housing in the field of architectural design, history and theory. What is the value of housing today and how has it evolved since the neoliberal turn? Is housing currently being used for value creation or value extraction? And what is the role of architectural design in this process? Are architects, architectural education and discourse more focused on contributing to enhance housing as a human right, as recognised in the 1948 Universal Declaration of Human Rights, or to confirm the commodification of housing?¹³ In other words, using John Turner's famous analogy, is the architecture discipline handling housing as a verb or as a noun? A process or a product?¹⁴

We believe these two aspects should not construct a polar opposition. We should be capable of examining the interdependence between housing-as-policy and housing-as-design in any discussion on housing. Both policymaking and design decisions have to address aspects such as density and liveability, conviviality and affordability. In any of these aspects, we cannot dissociate the process from the product. For this reason, we need a new housing theory that provides a conceptual apparatus to navigate seamlessly between design (morphology/typology/technology) and policy (governance/management).

Mazzucato's brief history of value provides an important framework.¹⁵ She explains how the boundary between what was considered productive (making value) and what was considered unproductive (taking value) have shifted since the first efforts to find a formal theory of value were made in the mid-eighteenth century. For the Physiocrats (e.g. François Quesnay), land was the source of all value. For the main thinkers of Classical Economics (Adam Smith, David Ricardo, and to a certain extent Karl Marx), value was associated with productive

labour. Currently, the dominant economic theory is based on the 'marginal revolution', a theory of value that sustains that marginal utility and scarcity are ultimately the measure of value, which is expressed as price. In other words, as she puts it 'value is in the eye of the beholder'.¹⁶

Now, is it possible to try and determine the value of housing following the theory of value established by the 'marginal revolution'? Should the architecture of housing be re-framed theoretically according to a price tag? There are some approaches that follow this tendency: the famous 'half-of-a-good-house' strategy developed by the Pritzker Prize winner, Alejandro Aravena and Andrés Iacobelli, his partner in Chilean architectural office Elemental, is a case in point.¹⁷ Their incremental housing scheme, especially Quinta Monroy, their pilot project built in the Chilean desert city of Iquique, has been celebrated in Europe and America as the return of social housing to the agenda of architects. Justin McGuirk described Quinta Monroy as an entrepreneurial triumph, an example of a new architectural approach 'designing for scarcity'.¹⁸

Another example of the use of the 'marginalist' theory of value to discuss the architecture of housing can be found in Reinhold Martin's study of the development known as 'New York by Gehry'.¹⁹ Martin uses this case study to discuss the architecture of inequality, using the intellectual background provided by Thomas Piketty's influential *Capital in the Twenty-First Century* (2014).²⁰ Martin concludes that Frank Gehry's project – just an example that could be replaced by many other cases – demonstrates 'how something as concrete as a house or apartment plan functions as an investment'. Martin's essay insightfully explicates the interdependence between design decisions and value extraction. He describes the design agency 'correlating a certain life-style with a certain market or helping to shape a particular type of "household" as the primary socio-economic unit around which wealth is built'.²¹

McGuirk's discussion of Quinta Monroy and Martin's reflection on 'New York by Gehry' discuss the architecture of housing after the neoliberal turn as a consequence of how the preferences of millions of individuals (or, conversely, the 1 percent of top earners worldwide) makes or takes value. In particular, this narrative reveals the ways in which architectural design can be used to make value but also harnessed to extract value. As such, it challenges the traditional role of the public sector – and its bureaucratic apparatus – in the production of housing as a social right, rather than a commodity.²² This raises a new set of important questions. To what extent do the taking and making of value determine the role of the public sector and the market in the production of housing? What are the consequences to the architecture of housing brought about by the changing dynamics of housing production?

In this issue of *Footprint* we want to discuss the implications of the neoliberal housing paradox for the discipline of architecture. Re-theorising the architecture of dwelling is urgent to critically assess past and current experiences and provide insights to engage with future challenges. Can this be an opportunity to reiterate the social relevance of housing and thus attract the best planners, urban designers and architects to contribute innovative solutions to accommodate the 'great number'? What possibilities are there to engage the architecture discipline in the housing question once more? What critical approaches to the housing issue after the neoliberal turn can be used to re-conceptualise the architecture of dwelling in a post-neoliberal period?

Housing: from social good to market commodity

The five research articles included in this issue unpack transformations in conceptions of value attributed to the architectural design of dwellings for the 'great number', providing us with a rich mapping of the transition from housing as social good to

housing as market commodity. Corinna Anderson's 'Good Life Now: Leisure and Labour in Cedric Price's Housing Research, 1966–1973' explores Price's 'short-life' housing system, as an explicit commodity. Designed in 1970–72 in response to the British crisis of housing provision, this was one of the first responses to consumer choice as the organising principle of the architectural design of housing. Price's experiments accommodate a lifestyle of precarity characteristic of neoliberal society, emergent in Britain at the beginning of the 1970s. The formal flexibility and the 'short-life' house blurs the separation between the house and workplace, while its customisability and disposability reduces the family home to an expendable commodity.

The market emerges as the ultimate arbiter that inspires the project, through the offerings of caravans, prefabricated living pods and self-build housing brochures amassed in the *Housing Research* files. The composition of the short-life house is driven by consumer choice: not choice exercised abstractly, but through the market and shaped by the market's offerings. Price's provocative approach, through representing individuals' choices, demonstrated that needs were going unmet; he imagined housing as a new commodity, that would satisfy where housing as an 'autonomous and peculiar commodity' had failed. Price's work asks: what happens when the house is not just a container for the paraphernalia of consumption, but when the house itself, the family itself is posited as consumable?

Breaking with traditional forms, Price asks of the house what he would ask of any commodity: what it can do for its user, what part of living it can enable or ease. Anderson's essay thus identifies Price's work in the realm of architecture and design theory as an early design approach to the socio-economic and political processes of neoliberalism. Placed against contemporary discussions in architectural circles, placing 'housing' and 'architecture' as two opposed modes of action, Anderson's revisiting of

Price's *Housing Research* files points to the role of architecture in challenging the dichotomy between social good and market commodity.

In 'Density: Objective Measure or Critical Tool of the Neoliberal Agenda?' Claire Harper focuses on density as the most economic aspect of housing design, and outlines a history of housing density ratios as principally economic metrics, against architects' uses and manipulations of density ratios. Harper situates density as a critical instrument of the neoliberal agenda vis-à-vis association of high urban densities with more sustainable, socially diverse, compact urban models. In its capacity to operate as both crude economic measure and qualitative descriptor of the urban experience, density has historically been a key device in the rebranding of urban living. The essay seeks to expand the role that architects have had in negotiating this duality, reviving an image of density that has been essential to its operation as a device for facilitating capital growth.

Housing density ratios, measured in terms of homes or rooms, have been recognised since the 1850s as principally economic metrics. The publication of the planning agenda *Towards an Urban Renaissance* in 1999 marked a turning point in the approach towards urban development and specifically towards urban density. Density was attributed with a range of physical, environmental and social implications, or at least potentialities. Most significant of these was the association of high urban densities with more sustainable, socially diverse, compact urban models – a positive affiliation that led to the introduction of minimum density ratios for new urban developments and the gradual introduction of density ratios as a component of development briefs for new urban housing.

The willingness of the architectural profession to manifest the desires of dominant capital forces in formal, elegant typologies valorises the use of

mechanisms such as density within the development agenda. Meanwhile, positing density as a simple ratio, a Euclidean concept empty of social, political and emotional significance reduces the scope for an expanded, qualitative reading that values the potential arising from conditions of proximity, congestion and chaos as part of a collectively negotiated urban experience. The acute significance of density as a tool of the neoliberal process is borne out of its inherent capacity to hold myriad different meanings, providing the flexibility that responds to the covert operations of neoliberal economics.

Susanne Schindler's article focuses on the language architects use to navigate the intersection of architecture, housing, and neoliberalism. In 'Context, Community, and Capital: Keywords for the Architecture of Housing under Neoliberalism', Schindler argues that terminology plays a powerful role in allowing architects to avoid the socio-economic assumptions embedded in their work. Schindler traces the emergence, evolution, and codification of two such terms, 'context' and 'community', and how they have frequently been conflated. She shows how they were central to New York City's gradual shift from welfare-state to neoliberal housing policies between the mid-1960s and the present day by connecting them to a third key term, 'capital'. The vest-pocket housing plan developed for the South Bronx as part of the federal Model Cities programme serves as a case study. In the Bronx, the triangulation of community, context, and capital led to new development models, as well as new housing typologies, including the large-scale rehabilitation of existing tenements and small-scale new construction of row houses. The resulting shift in architectural discourse, and the codification of these practices in zoning and tax laws, have remained in force in New York City to this day.

Examining a celebrated case of public housing, Zihao Wong critically historicises Singapore's housing legacy by pointing to 'The Nation's "Other"

Housing Project: Pearlbank, Pandan Valley, and Singapore's Private High-Rise Housing Landscape'. Singapore's privatised high-rise housing landscape is the nation's 'other' housing project, emerging alongside the city-state's dominant narrative of its successful public housing project since the 1970s. Unique to Singapore's privatised high-rise housing developments was the intervention of the state in the close regulation of scarce land. Singapore's private high-rise housing developments thus reflect a nation's attitude towards its land as resource, and its subsequent imaginations and productions of more 'land' in the construction of high-rise housing estates. State intervention also maximised these housing developments as part of wider national aspirations to the status of a global city, and for its citizens, a 'green and gracious' Singaporean society. Taking the Pearlbank Apartments and the Pandan Valley Condominium as two key developments of Singapore's emerging private high-rise housing landscape in the 1970s, this article examines the production of the nation's aspirational housing in the confluence of Singaporean state-led vision and a people's housing aspirations. Wong's essay thereby points to neoliberalism as a state project, manifest in alterations to the national project of public housing in ways which challenge common assumptions regarding the role of the market in state housing.

Florian Urban returns to the celebrated example of Vienna's mass housing, outlining a long history of the city's housing legacy, in 'Vienna's Resistance to the Neoliberal Turn: Social Policy Through Residential Architecture from 1970 to the Present'. Examining a number of case studies built at the turn of the twenty-first century, when public authorities all over Europe increasingly retreated from their responsibility for housing, Urban shows how Vienna refrained from large-scale privatisations. Upholding the system of state-subsidised housing, Vienna supported new architecture as a means to

regenerate the inner city and to promote innovative social policy. This was based on original design that took from a variety of mostly modernist precedents. The article unpacks Vienna's strategy of harnessing innovative architecture for social policy goals as a successful approach to provide affordable residences that respond to current economic needs. Urban thus argues that the Vienna case demonstrates that the 'neoliberal turn' in housing provision was a matter of political choice rather than economic necessity, challenging the basic assumptions regarding the privatisation of housing.

'The Common Apartment', a visual essay by Golnar Abbasi, looks at the Tehrani typology of what she calls the 'common apartment', where liberalising processes constitute middle class urban citizens as the main players in the market. Following the Iran-Iraq war, the role of housing as the locus of socio-political struggles of Tehrani citizens gradually became a space and a structure embodying complex processes: the state's subjugating agenda, forces of the housing market, its labour and material market, the desires of the people, their political action, and architectural practitioners' attempts to put their practices on the map. This visual essay focuses on three threads in Tehran in housing in the post-Iran-Iraq-war context: the liberalising procedures and regulatory frameworks that still constitute the most common form of housing, positing middle class citizens as the main players in the market; the architectural repercussions of the regulating mechanisms and the subsequent formation of a homogenised form of housing; and a reading of these forms of housing as sites of people's practices of resistance in a framework of constant re-appropriation. Abbasi's visual essay makes a point in letting the architectural data 'speak for itself', reflecting the applicability of seemingly unique case studies of neoliberal housing to many other remote stories, thus pointing to the overarching nature of the questions posed by this issue of *Footprint*.

Looking forward: agents and ideologies

In response to architects' acceptance of the neoliberal free market dictum regarding housing as commodity, Dirk van den Heuvel makes a provocative argument, stating: 'There is no Such Thing as a Free Market: Public Planning versus Private Opportunity in Housing'. This review essay deconstructs the still hegemonic narrative of free market ideologists in the realm of housing by unpacking the positions of Patrik Schumacher, Rem Koolhaas and Jaap Bakema, emphasising the importance of striking a balance between private opportunity and public planning. Van den Heuvel calls out contemporary leading architects' uses of neoliberalism as an alibi for absolving themselves from architecture's responsibility for housing. Positioning Bakema against Schumacher and Koolhaas, van den Heuvel points to the role of architecture history in maintaining disciplinary knowledge and traversing the neoliberal dictum.

In 'House Vision: Architects and Industry Awakening "House" Desires and Visualising New Ways of Living', Cathelijne Nuijsink explores Japanese architects' active proposals in response to the intensification of neoliberal policies, initiating a new housing trend based on sharing, renovation and re-use of the existing housing stock. This essay highlights the work of the House Vision think-tank and full-scale building exhibitions – initiated in 2011 by Japanese designer and art director Kenya Hara – as one response to the socio-economic-political conditions after the Neoliberal Turn. House Vision aims to generate awareness among 'the great number' about alternatives to mainstream housing options, stressing architects' responsibility to design the seeds of change. A collaborative project between designers and industries to push the latest technologies in home electronics, energy and mobility devices into new architectural form, this vision proposes an active, generative role for architects in the neoliberal framework, that challenges the common professional discourse.

Finally, Josep Maria Montaner, in an interview with David H. Falagán, provides a discussion of 'Housing in Barcelona: New Agents for New Policies'. The city of Barcelona has faced a serious period of housing emergency gravely affected by economic crisis, positioning housing at the centre of both municipal politics and professional practice, where the impact of neoliberalism on the political role of architecture can be elaborated. Josep Maria Montaner, chair of the Barcelona School of Architecture Housing Laboratory of the 21st Century, moved from the world of academia to politics as housing councillor for the mayor of Barcelona. In this interview, Montaner highlights the crucial importance of aligning housing policies, housing design, and citizens' participation as a strategy to combat the housing crisis triggered by the dominant neoliberal system. Montaner's professional path in response to housing conditions in Barcelona voices a call for stepping outside of architecture's service position in the neoliberal political economy – and into decision making positions in urban politics. Montaner reads the neoliberal condition identifying new agents, policy makers that understand all the actors.

The contributions included in this issue of *Footprint* show how housing needs to be re-examined as a multi-layered phenomenon. Design is left out of many current discussions on the political economy of housing. However, considering the central role that housing plays in the life of any ordinary person, this separation of architecture and politics ought to be undermined. We believe this issue can stimulate a new theory of housing that combines housing-as-design with housing-as-politics and housing-as-market to address the overwhelming challenges that the current process of rapid urbanisation will pose to future generations.

Notes

1. Frederick Engels, 'The Housing Question', in *Karl Marx, Frederick Engels: Collected Works*, vol. 23 (International Publishers, 1988), 317–91. For a recent account of Engels's influence in contemporary debates on housing, see Haus der Kulturen der Welt, *Wohnungsfrage: Exhibition Guide*, (Leipzig: Spector Books, 2015); Jesko Fezer et al., *Housing after the Neoliberal Turn: International Case Studies*, 1st ed. (Leipzig: Spector Books, 2015).
2. Eve Blau, *The Architecture of Red Vienna, 1919–34* (Cambridge, MA: MIT Press, 1999).
3. Since the turn of the century, many case studies with compelling examples of this process have been published. See, among many others, Ann Waswo, *Housing in Postwar Japan: A Social History* (London: Routledge, 2002); Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis: University of Minnesota Press, 2014); Gaia Caramellino and Federico Zanfi, eds., *Post-War Middle-Class Housing: Models, Construction and Change* (Bern: Peter Lang, 2015); Mark Swenarton, *Cook's Camden: The Making of Modern Housing* (London: Lund Humphries, 2017); Yael Allweil, *Homeland: Zionism as Housing Regime, 1860–2011*, Planning, History and Environment Series (Milton Park, Abingdon, Oxon; New York: Routledge, 2017).
4. Eric Mumford, *The CIAM Discourse on Urbanism, 1928–1960* (Cambridge, MA: MIT Press, 2000); Alison Smithson, ed., *Team 10 Meetings 1953–1984* (Delft: Publikatieburo Bouwkunde, 1991).
5. Mary McLeod, 'Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism', *Assemblage*, no. 8 (1989): 38.
6. Douglas Spencer, *The Architecture of Neoliberalism: How Contemporary Architecture Became an Instrument of Control and Compliance* (London: Bloomsbury Academic, 2016), 162.
7. See, for example, Jack Self, ed., *Real Estates: Life without Debt* (London: Bedford Press, 2014); Peter Marcuse and David Madden, *In Defense of Housing: The Politics of Crisis* (London; New York: Verso Books, 2016); Reinhold Martin, Jacob Moore, and Susanne Schindler, eds., *The Art of Inequality: Architecture, Housing, and Real Estate – A Provisional Report* (New York: The Temple Hoyne Buell Center for the Study of American Architecture, 2015).
8. Richard Burdett and Philipp Rode, eds., *Shaping Cities in an Urban Age* (London; New York: Phaidon Press Inc, 2018).
9. Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths* (Penguin Books, 2013).
10. Mariana Mazzucato, *The Value of Everything: Making and Taking in the Global Economy* (Allen Lane, 2018).
11. Manuel B. Aalbers and Brett Christophers, 'Centring Housing in Political Economy', *Housing, Theory and Society* 31, no. 4 (2 October 2014): 384.
12. Manuel Aalbers, *The Financialization of Housing: A Political Economy Approach* (London/New York: Routledge Taylor & Francis Group, 2016).
13. A detailed account of how housing is inscribed as a human right in the policies of the United Nations can be found in Office of the United Nations High Commissioner for Human Rights and UN-Habitat, 'The Right to Adequate Housing' (Geneve: United Nations Human Settlements Programme, 2009). For a good account of current processes of housing commodification see Martin, Moore, and Schindler, *The Art of Inequality*.
14. John Turner, 'Housing as a Verb', in *Freedom to Build: Dweller Control of the Housing Process*, ed. John F. C. Turner and Robert Fichter (New York: Collier Macmillan, 1972), 148–75. For a recent account of process-oriented approaches to urbanism and housing production, see Maroš Krivy and Tahl Kaminer, 'Introduction: The Participatory Turn in Urbanism', *Footprint* 13 (2013): 1–6.
15. Mazzucato, *The Value of Everything*, 21–56.
16. According to Mazzucato, the main figures behind the so-called 'Marginal Revolution' were Léon Walras, William Stanley Jevons and Carl Menger. This new theory of value was developed by British economists Alfred Marshall and Lionel Robbins. Cf. Mazzucato, 57–74. Mazzucato defines 'marginal utility' as something where 'value is in the eye of the beholder.' In

other words, any goods or services being sold at an agreed market price are by definition value-creating.

17. Alejandro Aravena and Andres Iacobelli, *Elemental: Incremental Housing and Participatory Design Manual* (Ostfildern: Hatje Cantz, 2013).
18. Justin McGuirk, *Radical Cities: Across Latin America in Search of a New Architecture* (London/New York: Verso, 2015), 80–98. In Elemental's writings and in Aravena's lectures, they stress their ability to use the Chilean government subsidy – seven and a half thousand dollars – in an intelligent way for building houses for the poor, complemented with a small amount provided by the owner, to enable people to progressively acquire middle-class living standards. In fact, schemes like Quinta Monroy created an astonishing accumulation of capital for the owner: Investing just four hundred dollars from their savings, each family has now a house whose net worth is approximately fifty thousand dollars. They multiplied their initial investment 125 times in just fifteen years!
19. Martin Reinhold, 'Real Estate Agency', in *The Art of Inequality: Architecture, Housing, and Real Estate – A Provisional Report*, ed. Reinhold Martin, Jacob Moore, and Susanne Schindler (New York: The Temple Hoyne Buell Center for the Study of American Architecture, 2015), 92–131.
20. Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014). This book was originally published in French in 2013.
21. Reinhold, 'Real Estate Agency', 125–27.
22. For an account of the contribution of public sector bureaucracy to the consolidation of housing as a social right in the twentieth century, see Nelson Mota and Ricardo Agarez, eds., 'The "Bread & Butter" of Architecture', *Footprint 17* (Heijningen: Jap Sam Books, 2015).

Biography

Nelson Mota is Assistant Professor at the Faculty of Architecture, TU Delft. He has authored the book *A Arquitetura do Quotidiano* (The Architecture of Everyday, 2010) and co-edited *Footprint 17: 'The "Bread & Butter" of Architecture: Investigating Everyday Practices'* (2015, with Ricardo Agarez) and *Joelho 8: 'Ideas and Practices for the European City'* (2017, with José António Bandeirinha and Luís Miguel Correia). Mota investigates the intersections between vernacular social and spatial practices and the architecture of housing. He is production editor and member of the editorial board of *Footprint* and of the book series *DASH – Delft Architectural Studies on Housing*.

Yael Allweil is an architect and Assistant Professor in the Faculty of Architecture and Town Planning at the Technion, Israel, where she heads the *Housing Architecture, History and Theory* research group. She completed her PhD in architecture history at UC Berkeley exploring the history of Israel-Palestine as a history of the gain and loss of citizen housing. Her research was published in the monograph *Homeland: Zionism as Housing Regime 1860–2011* (Routledge, 2017) and several journal articles in *Urban Studies*, *Footprint*, *Architecture Beyond Europe*, *City*, *TDSR* and *IJIA*. During 2019–20 Yael will chair the research group 'Re-Theorising Housing as Architecture' at the Institute for Advanced Studies (IIAS) in Jerusalem (with Gaia Caramellino and Susanne Schindler). Yael's work involves academic research and activism in the context of the Israeli housing social movement.

