

Rethinking Designing the Social

A Journey from Women's Studies in Architecture towards a Contemporary 'Vitruvius'

ABSTRACT

Pre-war functionalism, post-war humanism and recent post-humanism share a belief in Designing the Social. In the 1980s, Women's Studies in Architecture, TU Delft, which arose from the second feminist wave, questioned this idea of social engineering. Architecture and urban design may offer many possibilities, but will never really fit social ambitions, let alone be socially sustainable. The exemplary history of housing and urban design in the Netherlands – showing both mainstream and experimental projects – offers us that insight. This is due to the different pace of change of the spatial and the social. Moreover, the social, the feminist demands, turned out to be rather diverse: a variety of interests is at stake. Hence the epistemological challenge was taken up to systematically consider, on the one hand, what architecture and urbanism are capable of, and, on the other hand, what is meant by women's interests. Inspired by anthropologists, historians, and architectural theorists, Women's Studies has proposed an approach in which the habitat, architecture and city, and the habitus, the doings of people in rituals that take place in the home and the city, are analyzed side by side as independent fields of science. Architectural-historical and urban-anthropological studies, of Simon Stevin's 17th century architectural treatise and the everyday events of the Roman neighborhood of Testaccio respectively, have subsequently led to the understanding that matter and empirical knowledge play a crucial role in the ways in which habitat and habitus interact. This reveals the contours of the designer as reflective practitioner, able, like a contemporary Vitruvius, to grasp the material and the cultural in their mutual dependence.

[Heidi de Mare](#) is an independent scholar, educated in Art & Architectural History and Film Analysis (Radboud University, Nijmegen). Between 1984-2001 she was part-time attached to Women's Studies, Faculty of Architecture (TU Delft). In addition, she was until 2013 affiliated with various Dutch Faculties of Arts, Medical Humanities, and the Police Academy. Between 2009-2020 she was director of [Stichting IVMV](#) (the Dutch Foundation of Public Imagination). In 2003 she obtained her PhD (*cum laude*) with [The House and the Rules of Thought](#), a comparative study of early modern Dutch architecture (Simon Stevin), painting (Samuel van Hoogstraten & Pieter de Hooch) and literature (Jacob Cats). Her current research on visual rhetoric focuses on the genealogy of the concepts of 'nature', 'art' and 'image' on the one hand, and the role of these concepts in the contemporary public imagination (film, series, press photography, documentary, art, advertising, etc.) on the other. For publications, see <https://independent.academia.edu/HeidideMare>.

[Anna Vos](#) is educated at the Faculty of Architecture TU Delft. In 1978 she was one of the founders of Women's Studies in Delft and remained involved part-time until 1997. This academic work was combined with a career as an architect and urban designer in different positions on all possible sites of the 'urban development table' (Architectural offices Snijder and De Nijl, Amsterdam City development department, BVR consultants, MAB Development, Anna Vos Concepts for Urban Change). As such, her perspectives imply both research and design, content and process, public authorities and private parties. In addition, she chaired the Committee for Architecture and Monuments Amsterdam (2002-2005). In 2012 she started a Bachelor in Anthropology at the University of Amsterdam and accomplished a doctorate (PhD) *The eternal making of cities. People and stones interacting in Testaccio, Rome* (2020). See <https://annavos.nl>.

Introduction

With ‘Designing the Social’, Het Nieuwe Instituut (HNI), the Rotterdam-based museum for Architecture, Design and Digital Culture, is offering an overview of 100 years of heritage dedicated to the interaction between design and society in the Netherlands until July 2024.¹ The guiding principle is architectural and urban design as an instrument for bringing about social change. Architectural engineers, as well as politically activist groups such as workers, feminists, and squatters, have used design to turn traditional patterns, ingrained opinions, and dominant ‘normality’ in Dutch society upside down and to offer alternative views. Innovative housing forms would create new expectations and encourage people to behave differently. Such ‘social design’ aims to give shape to a new coexistence in which inequality, hierarchy and systemic repression have been resolved. This also applies to the current design task, which focuses both on forms of collectivity and connectivity and on an ecological perspective.

At the same time, the exhibition aims to question premises and preconceptions that underlie established design history, and to deconstruct possible underlying convictions. Such as, for example, dominant narratives like ‘the rock-solid belief in social engineering’ that is characteristic of the design discipline and ‘the thinking in terms of improvement’ by progressive emancipation groups that assumes that ‘every design (...) brings us one step closer to perfection’. Anthropocentrism and the position of professionals in relation to ordinary people are also questioned. This in order to make room for ‘less dominant visions of the past, present, and future of the design disciplines’ and to face the ‘fragility’ of mutual expectations of society and designers.

This duality – paying attention to various engaged design perspectives of the past century and thinking critically about the interaction between architecture and society was also characteristic of the curriculum of Women’s Studies (1978-2001) at the Faculty of Architecture of the Delft University of Technology and is close to our hearts as feminists, then and now.² It was a time when the social sciences disappeared from the Architecture curriculum and Women’s Studies was tolerated as its last variant. Although part of the regular curriculum, Women’s Studies became a niche during those two decades. Within Women’s Studies, the central question was how to think systematically and in a disciplined way about the relationship between the demands of the women’s movement and the design task. Meanwhile, we are again two decades down the road and similar problems are once again being put on the agenda. The main difference is that feminism today explicitly positions itself as intersectional, conceived as an accumulation of different ‘from the norm deviating’ identities (in addition to gender and class: ethnicity and sexuality) and the societal and symbolic power inequalities and discrimination that this causes.

¹ Objective according to the site of Het Nieuwe Instituut, ‘Designing the Social. 100 years of idiosyncratic living in the Netherlands’. Quotes and paraphrases in this introduction are taken from ‘Achtergrond’. The main part of the exhibition consists of design proposals for current (mainly Rotterdam) situations. Separate ‘rooms’ show specific chapters from history. We visited the exhibition on June 14, 2022.

² Women’s Studies, initiated and developed by both authors, was embedded in Department 1, History, Media and Theory.



Tokyo 2009 © Anna Vos

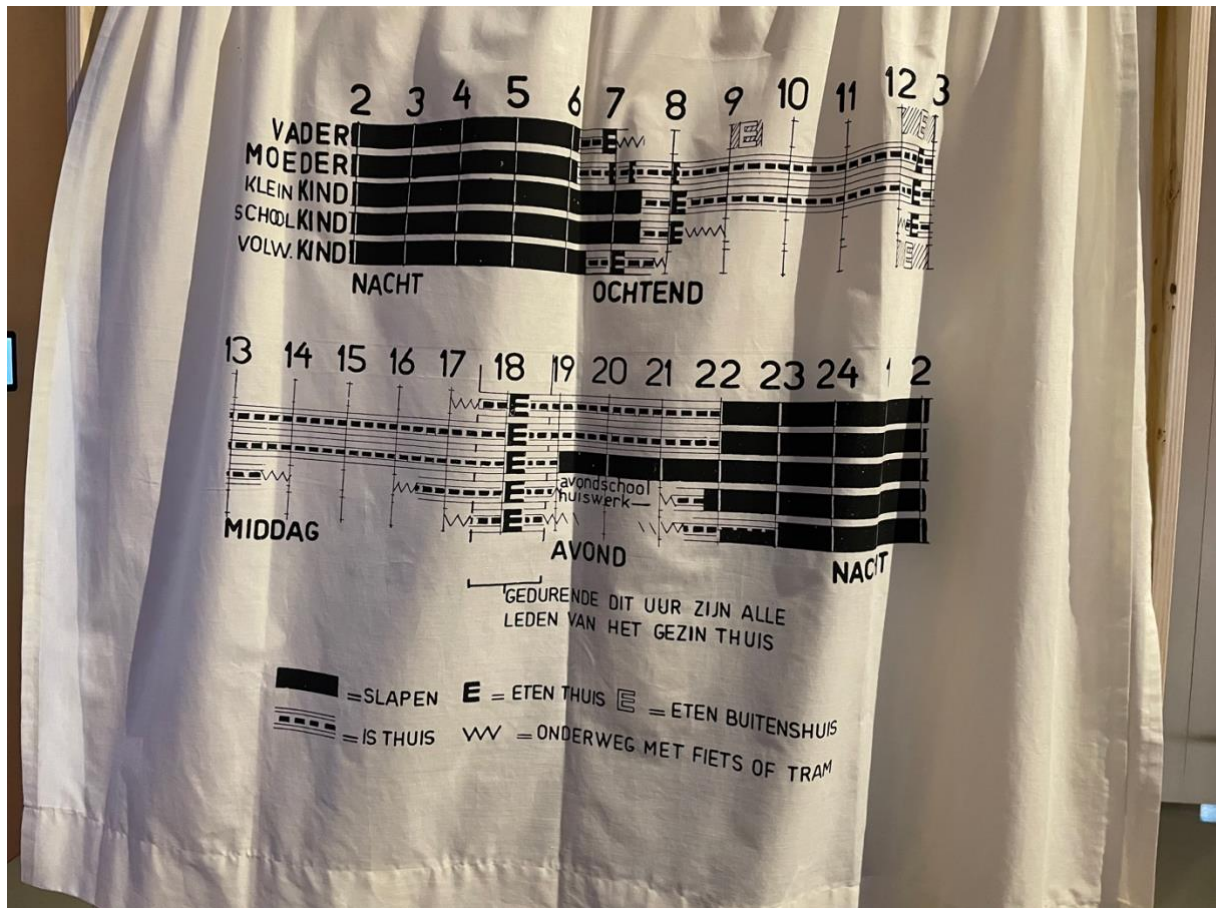
Triggered by the HNI-exhibition, but also by recent publications on feminism in relation to architecture and city (Van Wijk 2018, Rendell 2018, Kern 2019, Lange and Pérez-Moreno 2020, Hoekstra 2020), we would like to explore here what we – ‘older’ and ‘younger’ feminists, designers, and scholars – might learn from each other and from history with regard to the social capacities of architecture and city. We want to open up ‘feminist legacies, which are too often ignored and therefore inaccessible’.³ In addition, as an extension of our activities, we conducted further research, resulting in two dissertations. On the basis of historical and anthropological research into architectural thinking and acting, we gained more insight into the layered dynamics between design and society. We want to share those insights here as a contribution to innovative thinking about ‘designing’ a ‘desired collectivity in the future’ and realizing ‘the hope for equality and justice for all’ (Lange and Pérez-Moreno 2020: 6).

I. Design and Society – Dutch Experiments

The Netherlands has a long tradition of architects and engineers searching for spatial-physical solutions to social problems. This starts as early as 1855 with the *Verslag aan den Koning over de vereischten en inrigting van arbeiderswoningen* [Report to the King on the Requirements and Design of Workers’ Housing] (Vos 1986). Politicians, doctors, and lawyers

³ See Het Nieuwe instituut. *Feministische ontwerpstrategieën*, the ‘room’ that also mentions Women’s Studies in Architecture, TU Delft.

formulate their concerns in terms of disease, stench, pollution, overpopulation, vice, and crime. To address these problems, engineers propose flues, piping for water supply and sewage, dirt disposal systems, lighting, traffic breakthroughs, and housing. Since then, engineers and designers in the Netherlands have devoted themselves to developing spatial and technical formats. Partly in the written form of 'Programs of Requirements'.⁴ Partly by generating spatial concepts and, if possible, tangible buildings. The 'functional city', which with its light, air and space would offer a healthy escape from the overcrowded inner cities, is considered the prime example.



Mart Stam's Daily schedule of family members (1935; Ottenhof red. 1981) printed on cloth, at the exhibition Designing the Social in Het Nieuwe Instituut © Anna Vos

Particularly for the housing task, designers launched numerous new concepts, such as *Die Wohnung für das Existenzminimum* (CIAM Frankfurt 1929). The 1936 competition *Goedkope arbeiderswoningen* [Affordable Workers' Housing] (Ottenhof 1981) resulted in several exemplary plans, such as the flexible floor plan by Van Tijen and the day- and night plan by Van den Broek (both realized in Rotterdam). The 'schuifdeurwoning' ['sliding door apartment'] by Duinker and Van de Torre (1987) – in which the continuous space around a fixed core can be divided with sliding doors – fits into this design tradition (Grünhagen and Michel 1990). Architect Lucia Hartsuyker-Curjel drew 'de andere driekamerwoning' ['the

⁴ Including Studiegroep Woningarchitectuur 1944. *Architectenprogramma voor Woningbouw*, Centrale Directie van de Volkshuisvesting en de Bouwnijverheid. *Voorschriften & wenken 1951*, Studiegroep Woningarchitectuur/ Kerngroep 1955. *Gronden en achtergronden van woning en wijk*, Ministerie van Binnenlandse Zaken. *Bouwbesluit online 2012*.

other three-room dwelling'], in which three rooms of equal size share facilities and thus allow for different uses.⁵ Just recently a similar spatial invention was made by Studio M3H commissioned by De Key in a project for so-called 'friends-dwellings', meant for young starters in the housing market (*Lariks*, Houthaven Amsterdam, 2022). Each unit contains 3 rooms of equal size, all equipped with private bathroom facilities, and a living room annex kitchen and balcony to share. On their [website](#) the architects write: 'the units can be easily converted to regular single-family homes in the operating phase'. As such, the story of M3H's invention is reversed to that of Hartsuyker, spatially they are the same (although the contemporary version is considerably more luxurious).

In the never realized *Coöperatiehuis* [*Cooperative House*] (1926) conceived by Gulden and Geldmaker, family houses shared facilities (such as a central vacuum cleaner system) that would ease household labor (Bentinck and Vos 1981: 173). *Centraal Wonen* projects in the 1970s, realized indeed, offered nuclear families and singles different degrees of central, shared facilities. Today complexes for students and youngsters are being built after hotel-concepts, offering small units and shared spaces and facilities (Student Experience, The Cube, The social hub, Ourdomain, Change=, Domus Houthaven). The cooperative idea is also back. In their book *Operatie Wooncoöperatie* Arie Lengkeek and Peter Kuenzli present 'the "housing cooperative" as a third alternative between renting and buying. Not the individual question "how do I want to live?" but the joint shaping of the question "how do we want to live together?" is leading in this' (2022).

Furthermore, plans were devised and sometimes built for the housing of single people, such as the *Wilhelminahuis* in The Hague (1926), *Het Nieuwe Huis* (1928), the *Oranjehof* (1942), Margaret Staal-Kropholler's *Louise Wenthuis* (1963) in Amsterdam, and the *RVS-flat* (1959) in Rotterdam. All were projects where women's associations emerging from the first feminist wave took the lead (Bentinck and Vos 1981). The experiences of these experiments are reflected in the housing policy, first in the form of a subsidy scheme and example plans in *Huis voor Een* [*House for One*] (1952), later in the so-called HAT unit (1975-1995), housing meant for singles and couples. Again, experiments follow each other up to the present day. Now the 'tiny house' and the 'microhouse' are in the spotlight.

Finally, attention is also paid to vulnerable groups, such as the homeless and 'onmaatschappelijken' ['unsocials'], for whom special neighborhoods are built, such as Asterdorp in Amsterdam (1927). More recently *Tehuis Annette* (1985) was built, a shelter for mothers and children. The *Vereniging Tehuis Annette*, founded in 1905 in Amsterdam from the *Vereniging Onderlinge Vrouwenbescherming* [*Association Mutual Women's Protection*], aimed to offer shelter to unmarried mothers. Around 1980, as a result of the growing attention to domestic violence, there was a need for more modern housing.⁶ Currently, asylum seekers require specific attention. In addition to these variables in terms of

⁵ Dienst Volkshuisvesting Gemeente Amsterdam and Ruimtelijk Ontwikkelings Laboratorium: *De vrouwvriendelijke benadering van de woningplattegrond* (26 April 1984). Lucia Hartsuyker-Curjel's drawings are available in the archive of HNI.

⁶ Design Anna Vos. Initially engaged as an expert on housing single women to draw up a Program of Requirements with the users. Then involved in designing and realizing the project in the Rijtuigenhof Amsterdam, in association with Architectural Studio H.J. Snijder. In 2012 the complex was converted into 74 compact studio apartments.

household type, many other interests are taken seriously in the Netherlands – such as accessibility (for the disabled), safety (police certification), social security and sustainability – and translated into specific building requirements.

This nearly two-century long history makes several things clear. First, that because of the world-famous Dutch urbanism and public housing, many people have a decent roof over their heads and enjoy protection, safety, and health in many respects.

These Dutch experiments, secondly, do not take place in a vacuum, as shown above in their relations with the *Congrès Internationaux d'Architecture Moderne* (CIAM 1928-1959) (Van der Woud 1983). They fit into a broader Western context. However, history shows that every solution gives rise to criticism and calls for alternative solutions. Thus, Richard Sennett concludes that the ambitions of the 19th century foremen Haussmann, Cerdà, and Olmsted, to make Paris accessible, Barcelona socially equal, and New York green and inclusive, respectively, have not been fulfilled: 'each form was insufficient to solve the problems it addressed' (2018: 62). The functional city (CIAM 1933, whose principles Le Corbusier notes in the *Charte d'Athènes*) has been repeatedly exposed by social scientists as 'inhuman' (Jacobs 1993 [1961], Holston 1989, De Certeau 1988, Scott 1998, Jaffe and De Koning 2016, Sennett 2018). This is despite the fact that the functional city was inspired by and based on diverse scientific research (Simmel 2006 [1903], Giedion 1976 [1941], Van Lohuizen, as a researcher alongside designer Van Eesteren responsible for the *Algemeen Uitbreidings Plan* [*General Extension Plan*] (AUP) Amsterdam (1934)). This criticism also ignores the positive dwelling experiences of the pioneers (in the Netherlands immediately after World War II) and the euphoria that the careful urban design of the *Westelijke Tuinsteden* [*Western Garden Cities*] and in particular the unique Sloterplass still generate.⁷ The social science critique appears to be based not on empirical research, but on the reading of and belief in texts and drawings (Vos 2020: 25).

A younger generation of designers launches a new ideal of a more humane habitat immediately in the postwar period (CIAM Aix-en-Provence 1953, Dubrovnik 1956). They demanded a place for the architect 'as "imaginator" of a human society' (Vos 1986: 157-164) in response to the further industrialization of mass housing. Habitat aims '(...) to do justice to local cultural identities and existing landscape and urban qualities. (...). Cities should no longer be regarded as separate collections of buildings, but as coherent, ecological systems'.⁸ After CIAM fell apart, the international *Team X*, the Dutch *Forum* and the Italian *Associazione per l'Architettura Organica* (APAO) became the ideological bearers of an 'architecture for humans, modeled on the human scale, on the spiritual, psychological and material needs of the (...) human being', according to the APAO's declaration of intent (Aymonino 1957: 19-21). The structuralist architecture of Dutch architects in particular (Van Eyck, Hertzberger) as well as the organic architecture of the Italians (Zevi, Quaroni, Ridolfi) would be more livable (Vos 1992: 39; De Mare and Vos 1993: 1).

Third, a political change of focus takes place around 1990. Public buildings and areas come into focus: museums, theaters, schools, inner cities, port areas and waterfronts, as well as

⁷ In conversation with urban planners Frits Palmboom and Maurits de Hoog on June 30, 2022 at the opening of the Super-West exhibition in the Van Eesteren Pavilion in Amsterdam.

⁸ 'Habitat' in contemporary terms of HNI. See Het Nieuwe Instituut. *Habitat*.

the redevelopment of former 19th century industrial areas and hospital complexes. These projects are also given a 'social' charge focused on 'the open city'. The *creative class*, as vanguard, would represent the cultural ambitions of society and an innovative climate, engine for economic development. In 2002, Richard Florida identifies this as 'international development', but later he must acknowledge that this social goal has not been achieved (2017). However, this shift to public buildings and public spaces not only frees the architectural and urban design task from its functionalist straitjacket and its humanist ideology, it also leads to a more complete exploration of the capabilities of architecture and urban design, in which function, technology and aesthetics go more hand in hand. Since then, Vitruvius has also been diligently referenced again.

Fourth, this history reveals that architecture and the city on the one hand and social and societal interests, wishes and demands on the other, have different paces of change. That is why specifically tailored designs are only relatively successful. An analysis of the Dutch architectural discourse reveals how the discipline constantly reformulates its tasks in criticism of previous programs (Vos 1986). The question is to what extent there are actually new spatial interventions, or whether it is mainly the stories that change while architecture shows itself to be flexible. The HNI-exhibition too, referring to the formal parallel between the minimum dwelling and the current 'tiny house', notes that the difference is primarily social in nature: 'But where the minimum dwelling aimed at contributing to the emancipation of an entire social class, the tiny house is above all an individualistic and rather ecologically motivated response to the wasteful practice of building, housing, consuming and living'.⁹

Nevertheless, confidence in the make-ability of the social has not been shaken. For however different, there appear to be great similarities between pre-war functionalism, post-war humanism, and contemporary post-humanism: they share a belief in the social-solving capacities of the design discipline, providing 'other' architecture.

II. Duality as Epistemological Challenge

In the 1970s and 1980s, the women's movement makes itself heard again, in the second feminist wave. New is the 'feminist critique of the built environment'. On the one hand this resulted in a practical inventory of all kinds of problematic factors and experiences with the (realization of) the built environment. On the other hand, various women's interests appear to be at stake (Van Schendelen, Vehmeyer and Verloo 1982; De Mare, Vos and Edhoffer 1986).

In the universities, women's studies are initiated: the social history of the family, of women, of domestic labor, informed by Marxism, semiotics, and psychoanalysis.¹⁰ Oppression is named, in terms of patriarchy, capitalism, and domestic labor, with the bourgeois family as the cornerstone of society. The woman who enjoys great freedom in medieval times is pushed back into the home, as evidenced by the differentiated, functional floor plan that

⁹ Het Nieuwe Instituut. *De minimumwoning*.

¹⁰ Between 1980-1985 both authors were involved in the *Tijdschrift voor Vrouwenstudies* [Journal of Women's Studies] (from 1998 onwards, *Journal of Gender Studies*).

emerged from the 17th century onwards. We read Catherine Hall (1975) on the history of the housewife who confirms the feminist experiences using historical examples. And we read Gisela Stahl (1982) on the economics of housekeeping. The separation public-private turns out to be the mechanism for realizing power inequality between the sexes, housing the instrument of family politics. The aim of the feminist critique of the built environment is to change this dominant tradition, in which the man as architect has held power for centuries.

This feminist engagement, in the women's movement and at the university, led in 1978 to the start of what was formalized in 1984 as the Women's Studies sector in the Faculty of Architecture at the Delft university. As Rixt Hoekstra rightly points out, this involves a tension between 'activism concerning the built environment and an intellectual approach' (2020: 6). The central question is what the task of architecture and urban design is herein. In addition, the question of what is actually meant by women's interests is also relevant – that denominator does not automatically bridge all possible (economic, physical, cultural) differences that may exist between women (De Mare, Vos and Edhoffer 1986: 5-30). Hoekstra regrets that in Delft's Faculty of Architecture – 'leading institute for the training of architects' – the political commitment has not been used 'to implement the changes in architecture and design practices that feminist activists had demanded' (2020: 6). The sector, however, understood that engagement more fundamentally by challenging this direct relationship in which design reflects requirements (De Mare, Vos and Edhoffer 1986: 30; De Mare 1987; Vos 1987). Unlike Hoekstra prematurely concludes, that Women's Studies in Delft 'became convinced that there was no direct link between social ideals and the world of architecture, hence "designing for a better world" was an impossibility', Women's Studies developed a varied program to explore that very relationship (Hoekstra 2020:6).

In feminist circles, existing architecture was understood as reflecting patriarchy and oppression. This thinking was identified by Women's Studies as the reflection theory (De Mare, Vos and Edhoffer 1986: 10). In addition, feminists expected 'other' floor plans, 'other' architecture and urban design to liberate women from a patriarchal society. 'Other' architecture was supposed to be instrumental to bring about change. We find a remarkable similarity here with the HNI exhibition. The feminist critique of the built environment appeared to fit into the philosophy of social engineering that characterizes the Dutch experiments. 'As for this pretension of wanting to order life (in a feminist way) by means of architecture, one could learn from the post-war architecture, which, like the feminist interventions, was committed to the happiness of its inhabitants c.q. the family. It was precisely these idealistic floor plans (or 'Programs of Requirements'?) that now did arouse the greatest resistance among feminist critics' (De Mare 1986: 115). Two things were neglected in feminist criticism: the assumption of a causal relationship between space and use, and the presupposition of the equality of women (and their difference with men, which should be equalized) (idem: 110-117).

think about the possibilities of such a museum: is it a place to show 2D and 3D images of nudes to visitors, and/or is it a place that itself – as a whole of material substances with light, color, temperature and texture – wants to affect visitors? An intuition whose value we only began to realize later. In the same years we studied literature on other kinds of relations between city, house, and use. This offered (Erasmus) students a framework for reflection on their own experiences of living in their parents' house, compared to what a 'Program of Requirements' usually entails. Thinking exercises – in which we introduced the concept of 'spatial rituals' – that also served as the starting point for the international seminar *Ritual Spaces* (1989), organized together with Inge Bobbink and Liane Lefaivre.¹³ That seminar formed the basis for our publication *Urban Rituals* (De Mare and Vos 1993).

At the time, a number of authors were helpful in reflecting sharply on the fundamentals of design practice and the knowledge and skills contained therein. Of importance here was the Italian influx into Delft of critical architects such as Manfredo Tafuri, Giorgio Grassi and Aldo Rossi. An important lesson, first, that we learned from the Italians is that in our search for the relationship between women's interests and architecture, we could not simply use historical examples to criticize or legitimize (feminist) design interventions in the present. Those who did do so include Beatrice Colomina (1992), Mark Wigley (1992), and Aaron Betsky (1995), the former director of the NAI (precursor to HNI). Starting from architecture as 'a system of representation' that can be reread 'in sexual terms', they read the 'patriarchal oppression of women' from historical maps and paintings or found 'the domestication of female sexuality' illustrated in *De Re Aedificatoria* (1450) by Leon Battista Alberti. Projections eagerly received in the Netherlands by feminists in search of the gender perspective in architecture (Heynen and Delhaye 1997). Instead of such 'operative criticism', 'historical criticism' sought to understand the historical provenances of current conceptions, both in terms of architecture and society.

This meant, secondly, asking why 'the social' and 'use' would be readable from the drawn floor plan of house and city, as in Robin Evans' article, 'Figures, doors, and passages' (1978). Drawing on the history of architecture and art, he wrote a socio-spatial history. Evans 'reads – regardless of historical context – all floor plans in a modern, functionalist way. And in fact, the same applies to his reading of the visual material' (De Mare 1996: 12). Anthropological literature questioned this literal reading – such as by Claude Lévi-Strauss (2009 [1955]) on the Bororo and by Susan Harding (1975) on a Spanish village. It is true that a spatial positioning of men and women is evident, but not in the fixed functionalist sense. Moreover, and more importantly, this information told us nothing about the mutual, social and kinship relations. What impressed us most is that in these non-modern cultures the biological distinction between the sexes was seized upon – by appreciating each other's qualities – to create lasting bonds based on mutual dependence which in these communities were beneficial to both man and woman (De Mare 1986: 72-81). Life and the village plan appeared to be intimately intertwined, but in a way that was not immediately visible.

Of course, the situation is different in modern society. We read in Jacques Donzelot (1979) how the social, and especially the family, from the 19th century onwards was increasingly woven into a society in which the pursuit of safety, health and hygiene became policy, see

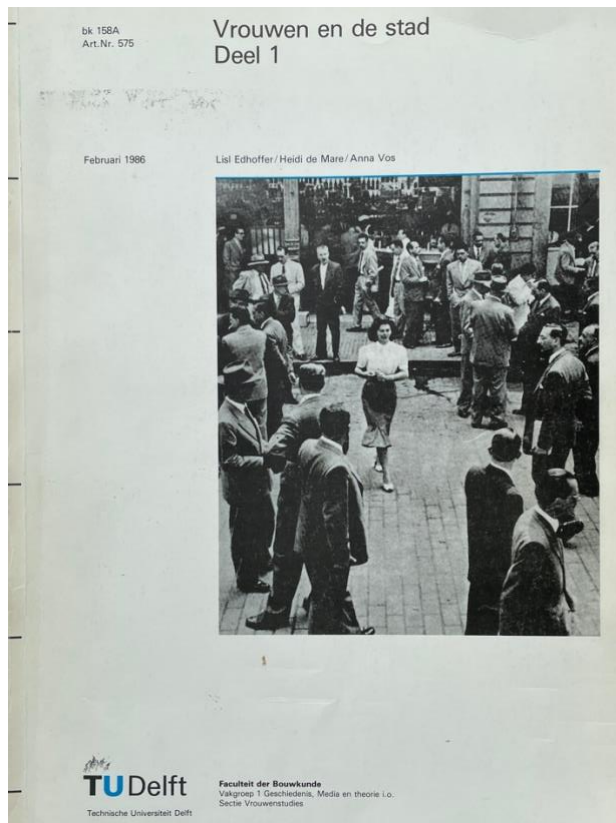
¹³ With historians Peter Burke and Willem Frijhoff and architectural historians Christine Boyer, Richard Ingersoll and Thomas Reese as speakers.

the previously mentioned *Report to the King* (1855). Numerous special institutions appeared in which the architectural order played an important role – think of hospitals, schools, and prisons. Michel Foucault was also fascinated by this: he did not consider buildings as places of repressive exercise of power and oppression, but of productive disciplining of bodies. Both authors make it clear that the way modern life developed was usually not by brute force but by policy. At the same time, it became clear that Foucault was reducing architecture to a single level: the nature of society could be read from the ordering of spaces (1975).

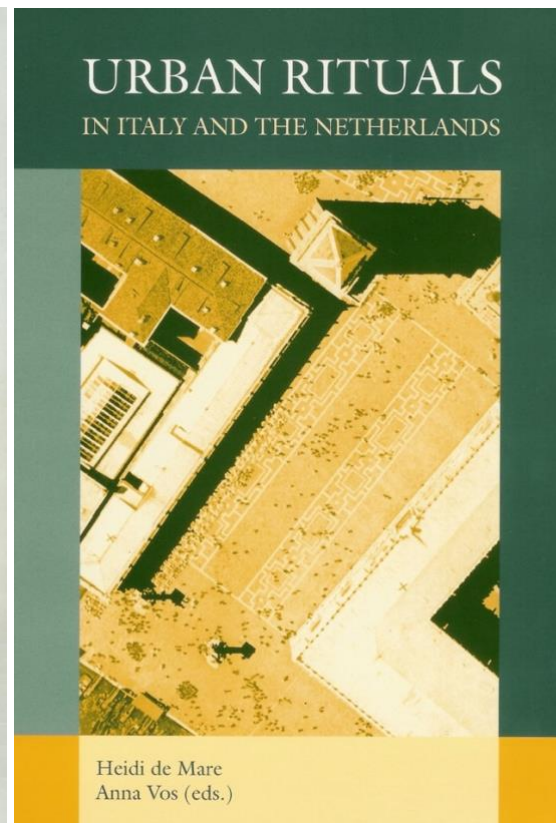
Aldo Rossi served as a counterpart to this socio-spatial architectural history. He had an eye for the uniqueness of the architecture of the city which usually has a permanence that goes far beyond the life span of the people who temporarily form part of the city and make it their own. For him, architecture was much more than a space where human life happens more or less by chance, year in year out. Architecture is also locus, typology (forms carried over time), substance (texture, appearance of materials), images accumulated over time which form an urban memory. *The Architecture of the City* (1982 [1966]) is a plea for a science of urban design. He introduced a systematic thinking based on an analytical conceptual apparatus, a theoretical research object, morphological and typological research, and rigorously distinguishes this discipline from the study of the human dimension.¹⁴ The work of Alexander Tzonis (1982 [1972]) was also important. He described the genealogy of architectural thought and the different rationalities and visual forms that could be distinguished within it. Both authors proposed a more disciplined, scientific framework of thought as the foundation of the architectural profession, which they each had related to design practice in their own way. In doing so, they distanced themselves from the widespread views, not only among designers but also among scientists, of architecture as a representation, as a mirror of social relations, or as an instrument to effectuate certain behavior, as a framework for social relations (Heynen 2013).

Together, these authors have impressed upon us that the social and the architectural are separate domains in modern times, each with its own rules, its own pace, and its own consequences. That understanding culminated in an analytical proposal for a structured reflection on the relationship between these domains: the tearing apart and strictly separation of the layers – for the duration of the analysis – that in everyday reality and in individual experience always come together simultaneously and spontaneously.

¹⁴ Strictly speaking, this implies a so-called ‘*theoretical* anti-humanism’ (ital. authors) that he shares with French authors. This epistemological principle holds that the rationale of cultural artifacts cannot be reduced to the social, nor to human intentions, and that it obeys its own rules.



Women and the City 1986



Urban Rituals 1993

In our publication *Urban Rituals* (De Mare and Vos 1993) this duality is further crystallized. On the one hand, architecture is more than an ‘arrangement of spaces’, with attention to aspects such as materiality and form, meaning, and imagination. On the other hand, the ‘use’ that people make of house and city is taken seriously. Not as a list of universal functions (eating, sleeping, cooking, living), walking routes, and sightlines situated in the floor plan. But as enduring habits with their own qualities to which people are attached, as ‘rituals’ that take place in the house and in the city (De Mare 1989). The distinction between ‘city’ and ‘use’ is further elaborated by introducing ‘habitat’ and ‘habitus’ following Devillers (1987) and Bourdieu (1990 [1980]) (De Mare and Vos 1993: 21).¹⁵ These concepts are further broken down into different layers with their own rules. Habitat is distinguished into 1a) composition of the natural subsoil, 1b) historical and typological ensemble of architectural artifacts (networks and buildings) and 1c) city’s topology of significance (from street names to meaningful locations and the stories that circulate about them).¹⁶ Habitus similarly encompasses 2a) the biological conditions of existence and the life cycle, 2b) all the doings of people, daily routines as well as periodic (festive, dramatic) interruptions thereof; 2c) the production of values and stories, of images, imagination and feelings linked to life (De Mare and Vos 1993: 11-12).

By dissecting these domains first, it paved the way for examining later, in both dissertations, where the two domains intersected and how the interactions between these domains became apparent. History and anthropology as disciplined ways of thinking in relation to

¹⁵ Similar to Sennett’s distinction between *cité* and *ville* (2018).

¹⁶ In the late 1990s, the layer approach came into vogue as an analytical and design tool (Van Schaick and Klaasen 2011).

architecture were thus not deployed in the 1980s and 1990s to retrieve, to confirm and thus legitimize current assumptions. On the contrary, these were necessary detours in order to critically examine contemporary self-evidences and expectations in a more controlled way.

III. Detours to Open Up New Room for Thought

In *Urban Rituals*, the first contours of the cases that would later become central to both dissertations (anthropological-urban development and architectural history) were outlined: the Testaccio district in Rome (Vos 1993) and the early modern architectural thinking of engineer Simon Stevin (De Mare 1993). Both academic studies showed that natural matter, substance – in the sense of physical materials and in the sense of people’s biological and sensory qualities – and empirical knowledge played a central role in understanding the ways habitat and habitus interacted (De Mare 2003, 2012; Vos 2020).

Early modern thinking about house and mistress of the house

Challenged by the feminist idea that all women in history were oppressed by patriarchy, and that the house, especially in 17th century Holland, was a crucial tool to bring this about with the ‘housewife’ as outcome, a comparative study was initiated of different types of historical sources: the architectural treatise of Simon Stevin (1548-1620), the *Houwelick* [Marriage] of poet and Grand Pensionary Jacob Cats (1577-1660), the genre paintings of Pieter de Hooch (1629-1684) and the treatise on the art of painting of Samuel van Hoogstraten (1627-1678).

One of the major obstacles in analyzing Simon Stevin’s architectural treatise was formed by his drawings. His house drawing, which included ‘dining chamber’, ‘kitchen’ and ‘sleeping chamber’, can easily be read as a functionalist floor plan (De Mare 1983). Stevin is known as rationalist, focusing on the technically efficient control of water, light and heat, and thus taken as precursor of the modern engineer (Van den Heuvel 2005). But in his treatise Stevin did not apply the term ‘function’. A closer analysis of Stevin’s thinking, his vocabulary in relation to his drawings of house, housing blocks and town, as well as his relationship to the architectural tradition, clarifies where the coherence and consistency of his early modern thinking lies (De Mare 2003: 117-248).

Stevin, like Vitruvius and Alberti, considered ‘firmitas, utilitas and venustas’ to be the foundation for architectural thinking and acting. But unlike today, where this trio is seen as three separate, autonomous characteristics that a building must satisfy (solidity, functionality, aesthetics), in classical and early modern times these terms were conceptually connected and embedded in natural philosophy. Knowledge of the (good and bad) properties of building materials is indispensable for any durable and stable structure. A similar kind of practical natural knowledge concerns natural phenomena such as wind, sunlight, and water. This results in Stevin’s technical inventions that freed the house lengthily from smoke, darkness, and stench. But it did not stop there; the natural-philosophical universe pervaded everything. For example, Stevin classified commodities that entered the house (fuel, food, books, clothing, crockery) in terms of their sensitivity to moisture or heat and located them in the house accordingly (damp cellar or dry attic). Finally, and rather inappropriately for modern people, Stevin, Alberti, and Vitruvius also classified human beings by virtue of positive as well as negative qualities bestowed upon them by Nature.

Given that knowledge of Nature, classical suitability strives to avoid the nuisances that human beings may inflict on each other through contrasting qualities and unregulated traffic. Applying this 'natural apartheid' up to the early modern period justice was done to everyone's innate characteristics, given the heterogeneous group of human beings (in terms of age, sex, health, kinship) that lived together under the same roof, thereby ensuring everyone's dignity in the house (De Mare 2003, 2023).

Jacob Cats, in his treatise on marriage, explicitly emphasized the dignity of the 'mistress of the house'. He encouraged her to develop her innate talents. Cats regarded the domestic enterprise as a marital affair of honor, in which both spouses, while maintaining their own dignity, would have better chances of survival than as solitary individuals. This implies at the same time that the master of the house should adjust his potentialities accordingly. This view recalls the aforementioned surplus value of mutual dependence. It is clear that the early modern conditions of existence are in sharp contrast to those of our modern welfare state – with our homes equipped with all kinds of technical conveniences and the availability of the contraceptive Pill – in which feminism has been able to develop her ideas (De Mare 2019, 2021b).

Until modern times, everything on and in the house and town is subject to the forces of Nature. Thus, the master builder must know that the client is by nature (too) easily seduced to spend his money on beautiful ornaments and will have less eye for the danger of eroding, natural influences. For Stevin, and this is perhaps the most unexpected, lines and numbers from which the drawing sprouts are also included in Nature. This is most evident in the dynamic, regulated enlargement or diminution of the house drawing: when housemates (and thus the natural potentials) change, the proportional, naturally pleasing proportions are retained.

In short, Stevin's architectural thinking rests on the view that architecture, in the broadest sense, should draw on all that Nature – positive and negative – has to offer. Stevin, around 1600, stands on the shoulders of others, such as Vitruvius, who urges the master builder 'to study the philosophy of Nature with great diligence, because it deals with many diverse natural philosophical questions' (Book I. 1.7.). The art of building that they both advocate forms a coherent system in which all the knowledge that the master builder must possess, namely concerning the nature of all the substances involved (building materials, climatic phenomena, human nature), is assembled. Stevin's house drawing thereby operates as a layered visual memory of these various dimensions, crucial to produce order out of the chaotic practice. The value of this research of historical sources is that it reminds us that architectural thinking is never self-evident. It is always embedded in a conceptual universe that also determines what can be expected from designing (De Mare 2000, 2016a, 2021a).



Dissertations Heidi de Mare, *The House and the Rules of Thought* (2003) and Anna Vos, *The Eternal Making of Cities* (2020)

Interactions between people and stones in Testaccio, Rome

The anthropological-urban development research in Testaccio, a 19th-century working-class neighborhood built on top of the harbor district of ancient Rome, further examines the previously analytically distinct pairs of concepts of 'city and use', 'habitus and habitat', in the diverse ways in which they interact. The research highlights daily and uncommon events in which people and 'stones' – pars pro toto for sand, bricks, glass, trees, asphalt, natural stone, whatever material around – constantly 're-make' each other. Different agents – residents, architects, archaeologists, politicians, owners, squatters, tourists – enter into different and constantly changing relationships with the physical environment. Usually, these interactions occur obviously: people are literally and figuratively touched by the stones. Their senses are caressed or tormented, memories and stories are fed. People preserve and musealize stones or adept and change them. Stones connect people because people appropriate stones or use them commercially. As such, people and stones affect one another. The whole of all these interactions between people and the physical environment has been named 'inhabitare', following Ingold's concept of 'inhabiting', although he reserves this term for being in and with nature. According to Ingold, the modern city is 'already built', and therefore cannot be inhabited, only 'occupied' (2011: 44, 123, 163). However, the research shows that also an urban area like Testaccio is constantly being worked upon by and interacting with people in a variety of ways. At the same time, 'inhabitare' calls into question the rigid distinction between 'building' by professionals and 'dwelling' by ordinary people. All the agents, in their actions and doings, show their 'response-abilities' in the literal sense of the word: their capacity to respond to, to act in relation to the stones.

For this empirical research (2015-2020) as much information as possible was casually gathered during walks with respondents, who showed their Testaccio by listening to them,

but especially by reading their movements, their body language. Some let themselves be led astray by what they happened to come across, others walked purposefully to somewhere, only to stop for a moment on the way. People sigh, raise their eyebrows, shrug their shoulders, look surprised, hesitate, almost jump. Buildings, trees, smells, curbs, ornaments, signs, colors, plants, sounds, all these things enrapture people and make memories and stories alive. This all points to other types of drives behind human activity, other than intentional, ratio-driven choices which are often the starting point for design. Affect, sensory experience, and active memory sometimes correspond to rational considerations, sometimes not. For those who see the human being as a calculating citizen, everyday actions are full of illogicalness.

The research shows the effect of architecture and city in all their material qualities – polished, rough, in decay, fragrant, warm – on people, on their bodies, which in the full breadth of ‘affectio’, ‘imaginatio’ and ‘ratio’ are integral parts of their thinking (the ‘mindbody’). Conversely, it becomes clear how different agents shape their specific ‘response-ability’. In their collectivity, of struggle and cooperation, of clashing and scouring, they have determined the state of the art of the ‘inhabitare Testaccio’ in the first decades of the 21st century. This ‘inhabitare’ is thus anything but coherent. The difference in time perspective is striking. On the one hand, agents consider their doings in the present – the self-evident ‘vivere’ – but also in the contemporary memories (‘memory-images’) and stories (‘story-images’) that they derive from and attach to the stones. The stones, whether old or new, are part of the here and now: they are being ‘re-now-ed’. On the other hand, agents place their actions in a historical perspective: old stones should be preserved as they used to be in the past, new stones should bring about changes for the future. Here the present is neglected: the stones are being ‘de-now-ed.’¹⁷ However, what all agents share, and might connect their different perspectives, are precisely the tangible stones, as they manifest themselves synchronously in the here and now.

The knowledge of the stones is not something that is available to us from the outside. The multiple knowledge of the matter, the substance of the city – affective, sensory, and rational – constitutes the source from which people’s doings are realized. As a result of this anthropological research on the urban developments of Testaccio, it has become conceivable, instead of having a discussion about people’s social ambitions and ideals – into which the stones tacitly fit – to more systematically map out and name this multiple knowledge of the tangible stones. Agents will be able to recognize and appreciate the importance of that knowledge and deploy and share it with each other.

These historical and anthropological studies turn out to be fruitful detours in the reflection on the interaction between architectural thinking and acting and human daily and uncommonly doings. The room for thought acquired in these interdisciplinary studies – by taking multiple registers seriously given their own merits (De Mare 2000, 2009) – challenges the reconsideration of current designing in terms of architectural and social sustainability.

¹⁷ In the dissertation the use of the terms ‘re-now-ed’ and ‘de-now-ed’ is explained: ‘I deliberately avoid the use of ‘re-present-ed’, as this concept in fact means the opposite of what I want to say. In representing, the here and now is supposedly turned off in favor of the past (or the future); it is in fact de-now-ed. Re-now-ing implies that there exists only a here and now, and that the past can be made part of it by means of the active memory’ (Vos 2020: 398).

We propose the *reflective practitioner* as a new agent who will be able to find a balance between all these kinds of knowledge and skills. Coined by Donald Schön in 1983, it is a concept that does justice to the knowledge and practical qualities of professionals in the field (Van den Brink, Van Hulst 2012: 69-82). How this agent will be articulated has everything to do with a necessary reflection on the current time in which everything seems to be changing.

Accolade

What has been changed in 2022? On the one hand, not so much. The narrative about the subordinate position of women from the time of the second feminist wave appears to be unchanged and is revived in almost the same negative terms as oppression, discrimination. We still (and again) find authors reading pure patriarchy from architecture and city. Feminist geographer Leslie Kern's favorite quote is taken from colleague feminist geographer Jane Darke (1996): "Any settlement is an inscription in space of the social relations in the society that built it.... *Our cities are patriarchy written in stone, glass and concrete.*" (Kern 2020: 13; italic in original). Kern continues: 'Patriarchy written in stone. This simple statement of the fact that built environments reflect the societies that construct them might seem obvious' (2020:14). Exactly because it seems obvious, it would be worthwhile to demonstrate curiosity to find out what exactly is reflected and what is not, instead of too simply marking the physical world as man-made, thus oppressive for women.

Albeit now – in the 'fourth feminist wave' – oppression is multiplied in relation to 'intersectionality'. Thus, philosopher Rosi Braidotti, in the *Posthuman Feminism project*, has for many years been calling feminists to action against the resurgent virulent patriarchy that, reinforced by white suprematism, is responsible for 'the ever-growing injustices of sexism, racism, ecocide and neoliberal capitalism' (2022). We have reasonable doubts whether a fusion of all these disparate issues could make any sense, and whether this view could offer any perspective for action other than just polarized resistance. All of this, however, does not alter the fact that as feminists, we consider that social injustices towards women and other groups must be fought. On the one hand political action – the struggle for equality, justice, labor, right to abortion, etc. – remains absolutely vital. On the other hand, serious and meticulous scholarly dissection of the contemporary conditions of existence that have generated both welfare and social turmoil is necessary (De Mare 2016b, 2019).

At the same time, the belief in the resolving power of women's inputs turns out to be unchanged: 'What if women design the city?' is how the Amsterdam site of WomenMakeTheCity (2021) opens.¹⁸ It is remarkable that the modern magic of 'designing the social' has still not vanished. At the HNI-exhibition, feminist hopes remain undiminished for 'powerful design strategies intended to reshape society', through 'designing equality'.¹⁹ However, these strategies do not appear to be about architectural thinking and acting, but instead about networking, sharing knowledge, telling each other stories and developing

¹⁸ WomenMakeTheCity (WMTC) is a movement set up to give women a voice in the drafting of the Omgevingsvisie Amsterdam 2050 [Environment Vision]. WMTC is now a foundation.

¹⁹ Het Nieuwe Instituut. *Het ontwerp van het sociale*.

scenarios.²⁰ Similarly, the designs by Rotterdam architectural firms, tailored to current events, show that ‘the social’ is not so much in the design as in the story about it. The exhibition reveals the extent to which the discipline of architecture has, over time, made itself dependent on input of external disciplines – social sciences, humanities, philosophy.

What has changed, on the other hand, is the nature of the stories. They have become primarily ideological. The so-called posthuman humanities (sic), a term promoted by Rosi Braidotti, would help find a way from the Anthropocene, in which human dominated, into a balance between (the new technologically extended) human, environment and climate. Recently, HNI launched a partnership with Braidotti in the form of The New Academy. The point of departure is the link she establishes between technology, ecology, and socio-economic factors, ‘crucial to initiate a transition’. The goal is to design ‘a sustainable, socially just and inclusive city’ based on a variety of heterogeneous ingredients, with Rotterdam as testing ground.²¹ This post-human discourse, however, is about everything but materials, the ‘stones’ as we marked them, living or dead. Moreover, the human being is still the overarching reference point despite the negation. Thus, the ‘theoretical anti-humanism’ as ‘practiced’ both by Aldo Rossi and Michel Foucault – the latter named by Braidotti as her tutor – in their formal analyses of architecture, written texts and art, temporarily disconnected from ethics and morals, meanings and intentions, is completely forgotten. Instead, all is mixed or even scrambled in one big bowl full of complexity.

These kinds of philosophies are eagerly absorbed by designers to legitimize and substantiate design solutions and tempt them into creative writing, as the above-mentioned Rotterdam design notes testify. Stories like these are welcomed by clients also. In short, in the idea of social engineering – nowadays propagated in such global, futuristic narratives that evoke ‘a delightful new world’ – engaged philosophers, designers, and clients affirm and reinforce each other’s power.

We are convinced that imagination as a *cultural dimension* is indispensable for designers, let there be no mistake about that. But historical awareness and the gathering of empirical knowledge are equally indispensable in architectural thinking and acting. This implies that new developments that emerge must be questioned – not everything that is new and different is an improvement. ‘A discipline that is not interested in itself cannot correct or improve itself’, as architectural historian Freek Schmidt once noted (2010).

But this is just as true with respect to *social developments*. With regard to social sustainability, for example, it is important to understand that new emancipation groups have emerged in recent decades, stimulated precisely by neoliberalism, which promotes self-identity more than ever, at the expense of community (Van den Brink 2020). Achieving collective, social justice can mean – for designers and other professionals – that you no longer ask inhabitants about their (ever-changing) wishes, but that you look and listen to what people (inhabitants and professionals) do or not do with all those ‘collectively shared’ stones. This requires designers to develop a conceptual framework in order to understand

²⁰ Henk Oosterling: ‘It’s not that design is social. Through media, tools and products you design relational fields, networks. The social is in the connectivity, in connecting. Social design must above all have a scenario-like character...’, Het Nieuwe Instituut. *Het ontwerp van het sociale. Achtergrond*.

²¹ Braidotti 2022.

how people are affected by and affecting materials around and what role the imagination plays therein. Then the question of how architecture and urbanism would be able to provide a common ground for different groups could also be answered.



© Anna Vos

In terms of *material sustainability*, of dealing with raw and building materials, much has changed since the architecturally lean 1970s. Since the 1990s architecture has had to meet not only functional but also aesthetic requirements. This has also renewed the focus on the handling of materials and the appreciation of craftsmanship (Sennett 2008). The technical component has now received a new impetus in terms of environment and sustainability. The systematic gathering of natural knowledge is helping to develop architectural thinking and acting as a discipline. Research in Delft, Amsterdam and Wageningen inspires designers in their practical search for climate adaptive measures, energy neutral environments, circularity, optimization of urban metabolism, etc.²² In ‘biobased’ building, working with plant-based materials such as wood, bamboo, loam, hemp, flax is being explored (Pit 2022). ‘Nature-inclusive’ design and building aims to increase ‘the opportunities for plants and animals to settle’, in green roofs and facades and in wall openings – challenged to do so by landscape architecture ‘that designs with what lives around us’ (Van Stiphout 2020: 9). Designers explore new spatial possibilities with the aim of bringing about ‘resilient ecosystems’ and ‘muting environmental impact’ (Van Stiphout 2020: 24). In doing so, it remains important to critically examine the designer’s own problem-solving approach and to empirically test the many proposals that emerge from it. ‘New Materialism’, a recent philosophical ‘turn’, by the way, has little to do with this renewed architectural attention to empiricism and matter: ‘materiality’ here remains mere abstract fantasy (Gamble, Hanan and Nail 2019).²³

²² Environmental Technology and Design sector, Faculty of Architecture TU Delft, the Amsterdam Institute for Advanced Metropolitan Solutions (AMS) and Wageningen University and Research.

²³ Or, as in the case of feminist Leslie Kern, who touches on the importance of materials when she notes that stone, brick, glass and concrete do have agency: ‘(...) their form helps shape the range of possibilities’, (2020: 14). But instead of asking about the nature of the agency of materials, she immediately lapses into her own frame of reference: it ‘helps make some things seem normal and right and others “out of place and wrong”’ – *id est* the gendered, man-made patriarchal oppressive environment.



London 2011 © Anna Vos

Thus, the contours of the designer as a *reflective practitioner* become visible, as someone who takes the aforementioned social, material and cultural dimensions seriously on their own merits. In cooperation with other disciplines, a conceptual framework can be articulated based on empirical research, comparable to Vitruvius' natural philosophical inspired triad of 'firmitas, utilitas and venustas', but now tailored to the present time. This social commitment to delineate the inherent capacity of architecture, urban planning and the design discipline in a coherent and consistent manner is of a different order than trying, on the basis of unreflected experiences and (hyper)sensitivities, to adjust the world through discourse and architecture. Let's build on our knowledge, strength, and resilience, as professionals, and as feminists as German philosopher Svenja Flasspöhler argues (Debuschere 2022). The task of the *reflective practitioner* can be described as reformulating the mutual expectations of society and design discipline and converting them into scientifically based thinking and acting. Only in this way can the disappointment that is automatically woven into 'designing the social' be avoided.

References

- Alberti, L.B. 1485. *De Re Aedificatoria* [The Ten Books of Architecture. Leon Battista Alberti. The 1755 Leoni Edition. Dover Publications, Inc. New York 1986].
- Aymonino, C. 1957. Storia e Cronaca del Quartiere Tiburtino. *Casabella continuità*, 215: 19-21.
- A.Zine 2021. Mevr. De Architect. Available at A-zine.nl [Last accessed 5 July 2022].
- Bentinck, S. and Vos, A. 1981. [Zedelijkheid en Zelfbeheer](#). *De Huisvesting van Alleenstaande Vrouwen in Nederland 1850-1965*. Unpublished thesis, Faculty of Architecture TU Delft. In Dutch. [Last accessed 7 December 2022].
- Betsky, A. 1995. *Building SEX. Men, Women, Architecture, and the Construction of Sexuality*. New York: William Morrow & Co.
- Bourdieu, P. 1990 [1980]. *The Logic of Practice* 1990. Cambridge: Polity Press (First published: Bourdieu, P. 1980 *Le sens pratique*. Paris: Les Éditions de Minuit).
- Braidotti, R. 2022. [On posthuman feminism](#). [Last accessed 6 December 2022].
- Cats, J. 1625, *Houwelick* [On Marriage], in: *Alle de Wercken van den Heere Jacob Cats*, Amsterdam 1712 [Reprint 1975].
- Centrale Directie van de Volkshuisvesting en de Bouwnijverheid 1962. *Voorschriften & wenken 1951*. 's Gravenhage: Staatsdrukkerij- en uitgeverijbedrijf.
- Ciorra, P., Motisi E. and Tinacci, E. (curators) *Donne in Architettura / Women in Architecture*. Exhibition MAXXI Roma 16 December 2021 > 11 September 2022.
- Colomina, B. 1992. *Sexuality and Space*. Princeton: Princeton Architectural Press.
- Debusschere, B. 2022. Filosofe Svenja Flasspöhler houdt vurig pleidooi voor weerbaarheid: 'We zijn te gevoelig geworden'. *DeMorgen* 25 augustus.
- De Certeau, M. 1988. *The Practice of Everyday Life*. Berkeley, Los Angeles, London: University of California Press.
- De Mare, H. 1983. *Wellevenskunst. Archeologie van het vrouwbeeld in het 17de-eeuwse Amsterdam*. Unpublished thesis, Art History, Catholic University Nijmegen.
- De Mare, H. 1986. [Van huisvrouw tot vrouwenhuis, van mannenhuis tot huisman](#). Een eerste afbakening van het object van vrouwenstudies bouwkunde. In: Edhoffer, L., De Mare, H. and Vos A. (eds.) *Vrouwen en de stad*. Faculty of Architecture TU Delft. pp. 61-119. Available in English: [From housewife to women's house, from men's house to houseman](#) [Last accessed 6 December 2022].

De Mare, H. 1987. [Vrouwenstudies Bouwkunde Delft](#): haar situering ten opzichte van de feministische kritiek op de gebouwde omgeving. In: Berens, H., Bruins S. and Netel L.M. (eds.) *Inrichten*. Zomeruniversiteit Vrouwenstudies Groningen. pp. 87-98 [Last accessed 6 December 2022].

De Mare, H. 1989. Ruimtelijke Rituelen, Ritual Spaces. Aantekeningen bij het thema. In: De Mare, H., Bobbink, I. and Lefaivre, L. *Ritual Spaces*. Publication on the occasion of the international seminar 19 May 1989. Faculty of Architecture TU Delft. pp. 9-32.

De Mare, H. 1993. [The Domestic Boundary as Ritual Area in Seventeenth Century Holland](#). In: De Mare, H. and Vos, A. *Urban Rituals in Italy and the Netherlands*. Assen: Van Gorcum. pp. 108-131 [Last accessed 6 December 2022].

De Mare, H. 1996. [Woonculturen](#): een cultuur-historische benadering In: De Mare, H. and Vos, A. (eds.) *Ruimtelijke Rituelen. Het huis als plaats der gewoonten*. Reader Faculty of Architecture TU Delft 1996/1997: 11-17 [Last accessed 6 December 2022].

De Mare, H. 2000. [A Disciplined Eye](#). From Art History to Historical Formalism. (First published in: *Kunstlicht. De toekomst van kunstgeschiedenis*, 20 (3-4): 14-20.) [Last accessed 6 December 2022].

De Mare, H. 2003. [Het huis en de regels van het denken. Een cultuurhistorisch onderzoek naar het werk van Simon Stevin, Jacob Cats en Pieter de Hooch](#), *Cum laude* Dissertation Vrije Universiteit Amsterdam (PhD); English translation [The House and the Rules of Thought](#). A Historical-Comparative Research into the Work of Simon Stevin, Jacob Cats, Samuel van Hoogstraten, and Pieter de Hooch), [Last accessed 6 December 2022].

De Mare, H. 2009. [Ars sine scientia nihil est](#). The Art of Interdisciplinary Research. (First published in: *Kunstlicht. Jubileumnummer Kunstgeschiedenis & Interdisciplinariteit*, 30 (3-4): 90-99) [Last accessed 6 December 2022].

De Mare, H. 2012. *Huiselijke taferelen. De veranderende rol van het beeld in de Gouden Eeuw*. Nijmegen: Vantilt.

De Mare, H. 2016a. [Review. The Technical Image. A History of Styles in Scientific Imagery](#), H. Bredekamp et al. (eds.). 2015. The University of Chicago Press. *The Journal of Design History*, N.Y.: 93-95 [Last accessed 6 December 2022].

De Mare, H. 2016b. [Carnatry or the difficulty of flesh color](#). Blog 5 December 2016, Stichting IVMV [Last accessed 6 December 2022].

De Mare, H. 2019. [#MeToo, Representation & the Cleansing of the Image](#). The Role of Gender Studies in Media, Art and Culture [Last accessed 6 December 2022].

- De Mare, H. 2021a. [Visual rhetoric and the potencies of the image](#). (First published in: Kok, A. (ed.) 2021 *Bewegen en bewogen worden. Retorisch handelen in taal, beeld en muziek*. Nijmegen: Valkhof Pers. pp. 118-164.) [Last accessed 6 December 2022].
- De Mare, H. 2021b. [Double Review](#) Martha Moffitt Peacock, *Heroines, Harpies, and Housewives* (2020) and Piotr Oczko, *Bezem & Kruis* (2021) [Last accessed 6 December 2022].
- De Mare, H. 2023, forthcoming. Inward Dignity. The Liberated House in Simon Stevin's Architectural Knowledge System as Indication of his Early Modern Conception of 'Privacy'. In: Green, M. and Huisman I. (eds.). *Early Modern Privacy*. Copenhagen: Brepols Publishers [peer reviewed, accepted 19 December 2021].
- De Mare, H., Vos A., and Edhoffer L. 1986 [Vrouwen en de stad. Vrouwenstudies Bouwkunde in het Post-Feministische Tijdvak](#). In: Edhoffer, L., De Mare, H. and Vos A. (eds.) *Vrouwen en de stad*. Faculty of Architecture TU Delft, pp. 3-59. Available in English: [Women in the City. Women's Studies in Architecture in the Post-feminist Era](#). [Last accessed 6 December 2022].
- De Mare, H. and Vos, A. 1993. [Urban Rituals in Italy and the Netherlands](#). In: De Mare, H., and Vos A. (eds.) 1993. *Urban Rituals in Italy and the Netherlands. Historical contrasts in the Use of Public Space, Architecture and the Urban Environment*. Assen: Van Gorcum. pp. 5-25 [Last accessed 6 December 2022].
- Devillers, C. 1987 [1974]. Habitat en stedelijke vormen. Typologie van de habitat en stedelijke morfologie. *Oase, Ontwerp, Onderzoek, Onderwijs*. 15: 13-21. (First published: 1974 *Habitat & Formes Urbaines. Typologie de l'habitat & morphologie urbaine. L'Architecture d'Aujourd'hui* 174).
- Dienst Volkshuisvesting Amsterdam and Ruimtelijk Ontwikkelings Laboratorium (ROL). 1984. *De vrouwvriendelijke benadering van de woningplattegrond*. Report of a theme discussion (26 April 1984). In: Edhoffer, L., De Mare, H. and Vos A. 1986 *Vrouwen en de stad. Deel 2 Tekstfragmenten*. Faculty of Architecture TU Delft. pp. 81-91.
- Donzelot, J. 1979. *The policing of families. Welfare versus the State*. London: Hutchinson & Co.
- Evans, R. 1978. Figures, doors, and passages. *Architectural Design* 48: 267-278.
- Florida, R. 2002. *The rise of the Creative Class and How It's Transforming Work, Leisure and Everyday Life*. New York: Basic Books.
- Florida, R. 2017. *The New Urban Crisis. How our Cities are Increasing Inequality, Segregation, and Failing the Middle Class – and what we can do about it*. New York: Basic books.
- Foucault, M. 1975. *Surveiller et Punir. La Naissance de la Prison*. Paris: Editions Gallimard.
- Gamble, C.N., Hanan, J.S. & Nail, T. 2019. What is new materialism? *Angelaki. Journal of the Theoretical Humanities* 24(6): 111-134. DOI: 10.1080/0969725X.2019.1684704

Giedion, S. 1976 [1941]. *Raum, Zeit und Architektur. Die Entstehung einer neuen Tradition*. Zürich und München: Verlag für Architektur Artemis. (First published: Giedion, S. 1941 *Space, time and architecture. The growth of a new tradition*. Cambridge: Harvard University Press; London: Humphrey Milford, Oxford University Press.)

Grünhagen. H.C. and Michel, ir. J. 1990. [Nieuwe Ruimtelijkheid zet kamers op de tocht](#). *NWR Woningraad* 22 [Last accessed 6 December 2022].

Hall, C. 1975. De geschiedenis van de huisvrouw. *Te Elfder Ure 'Feminisme 1'*: 20: 676-704.

Harding, S. 1975. Women and Words in a Spanish Village. In: Reiter, Rayna R. (ed.), *Toward an Anthropology of Women*. New York: Monthly Review Press. pp. 283—308.

Here we are! Women in Design 1900-today. Kunsthal Rotterdam 18.06.2022 > 30.10.2022; Vitra Design Museum Basel 23.09.2021 > 06.03.2022.

Het Nieuwe Instituut. [Feministische ontwerpstrategieën](#) [Last accessed 6 December 2022].

Het Nieuwe Instituut. [Habitat](#) [Last accessed 6 December 2022].

Het Nieuwe Instituut. [De minimumwoning](#) [Last accessed 6 December 2022].

Het Nieuwe Instituut. *Het ontwerp van het sociale. 100 jaar eigenzinnig samenleven in Nederland; Designing the Social. 100 years of idiosyncratic living in the Netherlands* [Last accessed 6 December 2022].

Het Nieuwe Instituut. [Het ontwerp van het sociale. Achtergrond](#) [Last accessed 6 December 2022]

Heynen, H. 2013. Space as Receptor, Instrument or Stage: Notes on the Interaction Between Spatial and Social Constellations. *International Planning Studies* 18 (3-4): 342-357.

Heynen, H. and Delhaye C. (eds). 1997. De Zij-kant van architectuur. *Tijdschrift voor vrouwenstudies*, 18:2, 171-190 [and their introduction pp. 99-109].

Hoekstra, R. 2020. Second-Wave Feminism in Dutch Universities: Revisiting the Work of Feminist Scholars and Its Consequences for Dutch Architectural History. *Architectural Histories* 8 (1):13, 1-17. DOI: <https://doi.org/10.5334/ah.374>

Holston, J. 1989. *The Modernist City. An Anthropological Critique of Brasília*. Chicago and London: The University of Chicago Press.

Ingold, T. 2011. *Being Alive. Essays on Movement, Knowledge, and Description*. London and New York: Routledge.

Jacobs, J. 1993 [1961]. *Death and Life of Great American Cities*. New York: Modern Library.

Jaffe, R. and De Koning, A. 2016. *Introducing Urban Anthropology*. London and New York: Routledge.

Kern, L. 2020 [2019]. *Feminist city. Claiming Space in a Man-made World*. London and New York: Verso.

Lange, T. and Pérez-Moreno, L.C. 2020. Architectural Historiography and Fourth Wave Feminism. *Architectural Histories*, 8 (1): 26, 1-10. DOI: <https://doi.org/10.5334/ah.563>.

Lengkeek, A. and Kuenzli, P. 2022. *Operatie Wooncoöperatie. Uit de Wooncrisis door Gemeenschappelijk Bezit*. TrancityValiz.

Lévi-Strauss, C. 2009 [1955]. *Het Trieste der Tropen*. Amsterdam/Antwerpen: Uitgeverij Atlas. (First published: Lévi-Strauss, C. 1955 *Triste tropique*. Paris: Librairie Plon.)

Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. [Bouwbesluit online 2012](#) [Last accessed 6 December 2022].

Ottenhof, F. (ed.) 1981. *Goedkope Arbeiderswoningen (1936)* Amsterdam: Van Genneep.

Pit, M. 2022. [Biobased bouwen. Wie durft?](#) *De Architect* 21 juni 2022 [Last accessed 6 December 2022].

Rendell, J. 2018. [Only resist: a feminist approach to critical spatial practice](#) [Last accessed 6 December 2022].

Rossi, A. 1982 [1966]. *The Architecture of the City*. Cambridge, Massachusetts and London, England: The MIT Press. (First published: Rossi, A. 1966. *L'Architettura della Città*. Padova: Marsilio Editori).

Schmidt, F. 2010. De uitdaging van de architectuurhistoricus. In: *Bulletin KNOB* 2010-4. pp. 114-123.

Scott, J.C. 1998. *Seeing like a State. How Certain Schemes to Improve the Human Condition Have Failed*. New Haven and London: Yale University Press.

Sennett, R. 2008. *The Craftsman*. New Haven: Yale University Press.

Sennett, R. 2018. *Building and Dwelling. Ethics for the City*. Allen Lane.

Simmel, G. 2006 [1903]. *Die Grossstädte und das Geistesleben*. Frankfurt am Main: Suhrkamp Verlag.

Stahl, G. 1982 [1977]. Van Huishoudkunde tot Huishouding of hoe een Huis een Woning wordt. In: Van Meijel, S. et.al. *Vrouwendomicilie en mannendominantie. Reader over vrouwen, wonen en gebouwde omgeving*. Amsterdam: SUA. pp. 54-81. (First published Stahl,

G. 1977. Von der Hauswirtschaft zum Haushalt, oder wie man vom Haus zur Wohnung kommt. In: *Wem gehört die Welt, Kunst und Gesellschaft in der Weimarer Republik*. Neue Gesellschaft für bildende Kunst. Berlin.)

Stevin, S. 1600 [1649, posthumous]. Onderscheyt vande oirdeningh der Steden, and Byvough der stedenoordening, van de oirdening der deelen eens hvis Met 't gheene daer ancleeeft. In: H. Stevin, *Materiae Politicae. Burgherlicke Stoffen*. Leiden.

Studiegroep Woningarchitectuur 1944. *Architectenprogramma voor Woningbouw*. Typoscript.

Studiegroep Woningarchitectuur - Kerngroep 1955. *Gronden en achtergronden van woning en wijk*. Amsterdam: G. van Saane.

Ter Horst, J., Theunissen, K. and Vos, A. 1987. *Normering in de woningbouw in relatie tot veranderende woon- en leefvormen*. Onderzoek in opdracht van het Directoraat-Generaal van de Volkshuisvesting. Directie Onderzoek en Kwaliteitszorg en van de Emancipatieraad.

Tzonis, A. 1982 [1972]. *Het architectonies denken. Ontwerp, rationalisering van de architectuur en maatschappelijke macht*. Nijmegen: Socialistische Uitgeverij (SUN). (First published: Tzonis, A. 1972. *Towards a Non-Oppressive Environment*. Boston: iPress Series on the Human Environment).

Van den Brink, G. 2020. *Ruw ontwakten uit een neoliberale droom en de eigenheid van het Europese continent*. Amsterdam: Prometheus.

Van den Brink, G., M. van Hulst, et al. 2012, 'Hoofdstuk 4: Personages in de literatuur', in: *Best persons en hun betekenis voor de Nederlandse achterstandswijk*. Boom Lemma Uitgevers, pp. 68-82.

Van den Heuvel, C. 2005. *'De Huysbou'*. A reconstruction of an unfinished treatise on architecture, town planning and civil engineering by Simon Stevin. Amsterdam: Royal Netherlands Academy of Arts and Sciences.

Van der Woud, A. 1983. CIAM – Housing – Town Planning. In: *CIAM Housing Town Planning. Catalogue for the exhibition 'Het Nieuwe Bouwen International'*. Rijksmuseum Kröller-Müller Otterlo. Delft: DUP. pp. 11-157.

Van Hoogstraten, S. 1678. *Inleyding tot de Hooge Schoole der Schilderkonst: anders de Zichtbaere werelt*. Facsimile Davaco Publishers 1969.

Van Schaick, J. and Klaasen, I.T. 2011. The Dutch Layers Approach to Spatial Planning and Design: A Fruitful Planning Tool or a Temporary Phenomenon? *European Planning Studies*, 19 (10): 1775-1796.

Van Schendelen, M., Vehmeyer Y. and Verloo M. 1982. Inleiding. In: Van Meijel, S. et al. *Vrouwendomicilie en mannendominantie*. Amsterdam: SUA. pp. 9-21.

Van Stiphout, M. 2020. [Eerste gids voor natuurinclusief ontwerp](#). Nextcity.nl – platform for nature inclusive and biodiverse cities.

Van Wijk, C. 2018. [Women's Studies at the Architecture Department of Delft Technical University](#) [Last accessed 6 December 2022].

Verslag aan den Koning over de vereischten en inrigting van arbeiderswoningen door eene commissie uit het Koninklijk Instituut van Ingenieurs. 1855 's Gravenhage.

Vitruvius, 33 BC. *De Architectura*. (Translated and republished 1997 Handboek Bouwkunde. Amsterdam: Athenaeum – Polak & Van Genneep).

Vos, A. 1986. Van woning tot architectuur, van stedenbouw tot stad. In: Edhoffer, L., De Mare, H. and Vos, A. (eds.) *Vrouwen en de stad*. Faculty of Architecture TU Delft. pp. 121-175. Available in English: [From housing to architecture, from urban design to city](#). [Last accessed 7 December 2022].

Vos, A. 1987. Wat is eigenlijk een woning? In: Berens, H., Bruins S. and Netel L.M. (eds.) *Inrichten*. Zomeruniversiteit Vrouwenstudies Groningen. pp. 99-117.

Vos, A. 1992. Het papier van de plannen en het steen van de stad. Veertig jaar architectonische cultuur. In: *Italië & Italië. Cultuurhistorische hoofdstukken uit het naoorlogse Italië*. Amsterdam: Meulenhoff. pp. 33-58.

Vos, A. 1993. Testaccio: Change and Continuity in Urban Space and Rituals, in: De Mare, H. and Vos A. *Urban Rituals in Italy and the Netherlands*. Assen: Van Gorcum. pp. 58-89.

Vos, A. 2020. [Eeuwig stad maken. Interacties tussen mensen en stenen in Testaccio, Rome](#). Dissertation (PhD) University of Amsterdam. In Dutch, with English and Italian summary [Last accessed 6 December 2022].

Wigley, M. 1992. Untitled: The housing of gender. In: B. Colomina (ed.) *Sexuality & Space*. Princeton: Princeton Architectural Press. pp. 327-389. (Partly translated in Dutch: Zonder titel. De behuizing van gender. *Tijdschrift voor vrouwenstudies*, 1997, 18:2, pp. 171-190).

WomenMakeTheCity. 2021. [Een vrouwelijke blik op de Omgevingsvisie Amsterdam 2050](#) [Last accessed 6 December 2022].