

MECHANICAL SYMPHONY

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MECHANICAL SYMPHONY

A Study of the Domestic Economy in Three Parts

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Fig. 1

Frontispiece to a collection of poems titled *El infierno musical* (The musical inferno)
From Alejandra Pizarnik, *El infierno musical*, (Buenos Aires: Siglo Veintiuno Argentina Editores, 1971.)

Introduction

1 Christian Marazzi, *Capital and Affects: The Politics of the Language Economy*, trans. Giuseppina Mecchia (Los Angeles: Semiotext(e), 2011), 80.

2 Maria Mies, *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour* (London: Zed Books, 1986), 74-81.

3 Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London: Routledge & Kegan Paul, 1966), 24.

In this study, household management is approached as a mechanism capable of ordering and reforming the social relations of production that give form to the domestic economy. The title “Mechanical Symphony” refers to the orchestrated nature of domestic practices across historical periods and the subsequent shift towards a systematization of domestic order into a coordinated science in the mid-nineteenth century. A series of units of measurement central to household management are examined in three distinct parts; material and labor in the first instance, language in the second, and habits in the third. The underlying motivator is to reveal as Christian Marazzi notes in *Capital and Affects: The Politics of the Language Economy* that “within the One, the measuring unit, difference hides...and multiplicities dwell.”¹

Part I examines these disparities through the emerging discourse of household management in antiquity by situating the division of labor, both reproductive and productive, within the material conditions of the ancient Greek household. A reflection on the embeddedness of the domestic economy within the larger political context of the city serves to illustrate a paradoxical relation of inclusion and exclusion between the private and public domains, which will persist as a point of contention throughout the analysis. Part II serves as an intermediary episode, in which classical notions of household management resurface in treatises of the Italian Renaissance. These served as an early precedent to the design and privatization of the domestic interior in which language acted as an important mediator in creating a logic of domestic things, subjects, and objects by means of their naming and classification. Part III records the shift initiated by reform movements in the late eighteenth century towards an emerging science of politics and economy that initially sought to measure moral and social issues within the home against commercial modernity. As political economy evolved into an increasingly technical study of finance and wealth so did the discipline of home economics, which by the end of the nineteenth century in the United States was institutionalized as an applied science that introduced a methodical approach to housework through scientific principles. This field of study, exclusively targeted toward middle-class women, directly contributed to the process of “housewifization”² and was further reinforced by the foundation of the Bureau of Home Economics. This evolution left irreversible the institutionalization of the discourse of household management. By the early twentieth century, home economics would subsume to capital enterprises and ultimately serve as a mediator between producers and consumers.

On ‘early man’s’ beliefs of order, the anthropologist Mary Douglas provides a reflection that might be useful in understanding the beginnings of household management. “For them the universe was moved by impersonal, mechanistic principles. Fumbling for the right formula for controlling it, they stumbled on some sound principles”³ which domesticate subjects and objects through a primarily visual economy of detection aimed at eliminating excess and idleness through careful control of surfaces, spaces, and behaviors.

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PART I
MATERIAL AND LABOR

Embeddedness

In *The Need for Roots*, Simone Weil works towards a definition of rootedness by means of a list. The first item to appear is order, which she describes as “an infinite number of independent mechanical actions that concur so as to produce an order that, in the midst of variations, remains fixed.”¹ The description of a mechanism that structures a series of forces could equally apply to the apparatus of household management in antiquity, or *oikonomia*, given its aim to preserve a domestic order or “texture of social relations.”² In this analogy the household which is generally understood as an association formed out of biological necessity or kinship is instead rendered as a set of social relations of production that aim to fulfill material needs.³ Pierre Bordieu elaborates on the importance of rituals and habits in this process of ordering:

Through the economic and social necessity that they bring to bear on the relatively autonomous world of the domestic economy and family relations...(forms of the division of labor between the sexes, household objects, modes of consumption, parentchild relations, etc.), the structures characterizing a determinate class of conditions of existence produce the structures of the *habitus*...⁴

The mutual association between household members, or *philia*, will be problematized by means of a close reading of the division of labor and its material counterparts — in other words, a reading of both the texture and the grain it runs against.

In the ancient household, labor was ordered through classifications that intervened in reality; an index of tools, personal possessions and the rules of their engagement are but a few examples featured in household treatises. Given that the imperative to take on duties was often concealed in the form of advice, the household was built upon the reality each member was compelled to participate in and simultaneously excluded from.⁵ Textual sources served to legitimize values attached to different economic activities within the household and were idealisms that were often communicated orally and later transcribed into written form, either as dialogues or lengthy poems. Written records on household management emerged with the consolidation of an alphabet in the eighth century BC and ranged from the Archaic (seventh and sixth century BC) to the Classical period of Ancient Greece (fifth and fourth century BC), serving as indicators of a developing discourse.⁶ Recent archaeological findings are equally as indicative of household production with an increasing amount of archaeologists engaging in methods that seek to move towards a contextual approach that is less reliant on textual sources by presenting the material record “as a relatively independent form of evidence.”⁷

An inventory of the place the domestic economy occupied and its material traces, beginning with the *oikos* (οἶκος), is useful in determining its overarching function as an economic unit within the *polis* (πόλις). This pairing shows that activities of exchange in antiquity are enmeshed in a diverse set of institutions each with the aim of becoming self-sufficient yet remaining admittedly interdependent.

1 Simone Weil, *The Need for Roots: Prelude to a Declaration of Duties Toward Mankind*, trans. Arthur Wills, preface by T.S. Eliot (Boston: Beacon Press, 1955), 9-10.

2 Ibid., 10.

3 William James Booth, *Households: On the Moral Architecture of the Economy* (Ithaca: Cornell University Press, 1993), 36.

4 Pierre Bourdieu, *The Logic of Practice*, trans. Richard Nice (Stanford: Stanford University Press, 1990), 86. In Bourdieu's words, *habitus* refers to “a subjective but not individual system of internalized structures, schemes of perception, conception, and action common to all members of the same group or class.”

5 Booth, *Households: On the Moral Architecture of the Economy*, 37.

6 “Literacy was not widespread in Athens in the fifth century, and the oral tradition was regarded as trustworthy.” In Sarah B. Pomeroy, Xenophon, *Oeconomicus: A Social and Historical Commentary* (Oxford: Clarendon Press, 1995), 215.

7 Bradley Ault and Lisa Nevett, eds., *Ancient Greek Houses and Households: Chronological, Regional, and Social Diversity* (Philadelphia: University of Pennsylvania Press, 2005), 4.

8 Booth, *Households: On the Moral Architecture of the Economy*, 17-33.

9 Ibid., 26.

10 Pomeroy, Xenophon, *Oeconomicus: A Social and Historical Commentary*, 270.

11 Maurice Godelier, *The Mental and the Material: Thought Economy and Society*, trans. Martin Thom (London: Verso Books, 2012), 160-166.

12 Ibid., 166. Both control the potential threat posed by the continuous negotiation of flexible boundaries, between labor, gender, and class, needed for the economic stability of the household. The courtyard of the *oikos* serves as the primary site of these negotiations, at once a place of labor, representation and surveillance. See Ruth Westgate, "The Greek House and the Ideology of Citizenship," *World Archaeology* 39, no. 2 (2007): 214-216.

13 Thomas S. Noonan, "The Grain Trade of the Northern Black Sea in Antiquity," *American Journal of Philology* 94, no. 3 (1973): 231.

14 Karl Polanyi, Conrad M. Arensberg, and Harry W. Pearson, eds., *Trade and Market in the Early Empires: Economies in History and Theory* (Chicago: Henry Regnery Company, 1971), 250.

One of the earliest models that Western literature has adapted into an instrument of narration is the voyaging towards and from home of Homer's *Odyssey*.⁸ Its accounts of the household and the threat that its absence posed remained a central point to the pursuit of livelihood in Archaic Greece. Sustenance and its proper distribution over time granted continuity to the *oikos* and in turn the lineage of its free members. Unlike a group of merchants navigating the seas, the household was not depicted as a lucrative association, but rather an instrument through which freedom from physical labor and participation in the political realm of the *polis* could be acquired by the patriarch. Wealth, even during the transition into a system of coinage in Athens in the fifth century BC, was seen as the means to achieve self-sufficiency.

Although the Homeric household was described in cycles of time, with intervals of idleness, this would have applied exclusively to the head of household.⁹ These inequalities rely on a series of relations of power that are leveraged, between man and woman, master and slave. Labor, reproductive and productive, was reserved exclusively for the latter in these relations in order to guarantee the freedom of the former. This division was made explicit in major treatises, notably in Xenophon's *Oeconomicus* (Οἰκονομικός) and Aristotle's *Politics* (Πολιτικά), written within a short interval of each other in the second half of the fourth century BC. Both sources used the term *ponos* (Πόνος) to describe physical labor which was subject to an internal-external divide, with reproductive labor situated within and productive labor taking place externally in the form of agriculture. Recent archaeological evidence, however, softens this divide by locating productive activities within the *oikos*. It was also widely acknowledged by textual sources that the same type of labor, weaving for instance, was not carried out in the same way or intensity by those who were granted free or servile status within the household.¹⁰ Inhabitants of cities that had fallen into dispossession and foreigners uprooted from other territories involved in the trade of grain, were in their majority subject to slave labor and had no rights or a path to acquire them within the household, given that they could not marry or establish kinship relations. The anthropologist Maurice Godelier elaborates that, "for relations of exploitation to be formed and reproduced, they must be presented as an exchange, and as exchange of services."¹¹ The fact that the services carried out by the head of household were invisible, as is the case with household management, was critical to the stability of "ritual and material control."¹²

If the Homeric household was a self-contained unit, the Aristotelian household was rather embedded within the Greek polis. Its autonomy was dissolved as it became increasingly interdependent in securing its livelihood. This was supported by the description of the *polis* in Book I of Aristotle's *Politics* to which was dedicated, paradoxically, a significant part of the discussion to *oikonomia* (οἰκονομία), or the art of household management. Also significant was the description of the trading port of Piraeus into which flowed a portion of Athen's grain from the northern region of the Black Sea, signaling foreign trade as no longer playing a marginal role within a growing political community.¹³ Economic activity as a result was subordinated to a set of purposes by the *oikos* or the *polis* and did not exist independently of the dominant material needs of the community.¹⁴

Xenophon's *Oeconomicus* coincides with a period of transition as the social cohesion of the Athenian polis faced a decline towards the mid-fourth century after a warring period with other dominant city-states. The shifting place of the domestic economy can be seen in the evolving relation between *oikos* and *polis*, wife and husband, within Xenophon's discourse. The text assumes the form of a dialogue in which Socrates inquires about these concerns with other figures. In conversation with Kritoboulos and Ischomachos, Socrates alternates between arguments and counter-arguments through which a series of contradictions emerge and are left largely unresolved.

He begins by asking Kritoboulos, an Athenian aristocrat, whether the management of a household is effectively a specialized field of knowledge, "as medicine, smithing, and carpentry are."¹⁵ Receiving an affirmation, Socrates then asks whether just as with the given examples, which he then calls arts, it would be possible to know what the work of managing a household consists of. Kritoboulos replies, somewhat redundantly, that the task of a good manager of the household is merely to administer it well. The ambivalent response given by Kritoboulos will remain central to the positioning of household management as a practice that is not ruled by a precise set of principles but rather responds actively to changing conditions much like the act of navigating the seas. This ambivalence will persist until it is challenged by social reformists towards the end of the eighteenth century (as discussed in Part III). He continues with a reference to the title of the text, "A good manager of the household, or an *oikonomikos* (Οἰκονομικός), could very well manage that of another man."¹⁶ This transferability onto what is not one's own extends onto the political domain as described by another of Xenophon's Socratic writings titled *Memorabilia* (III,12):

For the management of private concerns differs only in quantity from that of public affairs. In other respects they are very much alike, and particularly in this, that neither can be carried on without people, and the people employed in private and public transactions are the same.¹⁷

Thus, governance over a bounded territory corresponded to the *oikos* and *polis* alike, the difference being only a matter of scale. The knowledge of the utility of possessions, money included, was a prerequisite for exerting power and the claim of property.¹⁸ Kritoboulos reasons that this also extended beyond objects to useful relations, including friendships, enemies, and servants. On the other hand, all laboring activities based on the use of specialized knowledge, or *techne* (τέχνη), were described as being acquired by means of an apprenticeship in a workshop external to the household. Their practitioners, often depicted in Xenophon's writings as male foreigners who had been excluded from owning land, would have relied on both the presence of a client and the subsequent aid of slave labor for their livelihood. Making was therefore synonymous with the physical labor needed to give form to material, while its antithesis, using an object, involved acting upon it through *praxis* (πρᾶξις). This perceived marginalization of labor has been contested by recent archaeological evidence which suggests, despite the attempt by textual sources to externalize them, that a range of productive activities would have taken place within the household.¹⁹

15 Pomeroy, *Xenophon, Oeconomicus: A Social and Historical Commentary*, 105.

16 Ibid.

17 Xenophon, *Memorabilia*, trans. E. C. Marchant and O. J. Todd, rev. Jeffrey Henderson, Loeb Classical Library 168 (Cambridge, MA: Harvard University Press, 2013), 201.

18 Pomeroy, *Xenophon, Oeconomicus*, 282-283.

19 Ault and Nevett, *Ancient Greek Houses and Households*, 5-7. Further evidence of household production at Olynthus: Nicholas Cahill, *Household and City Organization at Olynthus* (New Haven: Yale University Press, 2002), 263-288.

20 Aldo Tirelli, *Una moglie come si deve: Lo Statuto Della "Gynē nell'Economico di Senofonte* (Naples: Arte Tipografica, 2001), 62-63.

21 On the Athenian economy after the war (357-355BC.) Xenophon, *Poroi (On Ways and Means)*, in *Minor Works*, trans. E. C. Marchant, Loeb Classical Library 183 (Cambridge, MA: Harvard University Press, 1925).

22 Michel Foucault, *The History of Sexuality, Volume 2: The Use of Pleasure*, trans. Robert Hurley (New York: Vintage/Random House, 2012), 156-157.

23 Pomeroy, *Xenophon, Oeconomicus: A Social and Historical Commentary*, 35, 53, 58-60.

24 Tirelli, *Una moglie come si deve*, 61.

The distribution of wealth within the *oikos* and the *polis* is similarly a factor that archaeologists have attempted to clarify. Textual sources recurrently described it as the relative means to a virtuous end, that would include the participation of male citizens within the political community. Aristotle recognized the necessity of reciprocal exchanges and encourages, like Xenophon, their moderation in light of a community that had become increasingly open to a monetary system. These ethics of moderation were being challenged by an imminent crisis in which sustenance provided by the rural economy had been progressively overtaken by increasing demands of social stature, which citizenship alone could no longer guarantee. An increasing amount of obligations that would have included offerings of hospitality, raising city tributaries due to warring conflict, and liturgical commitments of public worship contributed to this tension between individual and citizen. Xenophon's response was to selectively reinsert the *oikos* as a productive unit with the *polis*, unlike its total exclusion by predecessors, as a means to mitigate the signs of a declining community.²⁰ This aligned with the appearance of an ethics, not only of moderation, but of profit and a growing governing class of citizen men, and for that matter indirectly women, educated in household management.²¹

Marriage in antiquity was then the vehicle through which the knowledge of domestication was imparted onto women, both in its capacity to generate growth within the *oikos* as well as the city-state through the reproduction of the community. As Michel Foucault argues, the treatment of parity in the partnership between wife and husband masked inequalities by uniting them under a common purpose with an,

...emphasis on the necessary equalization of initial differences between the husband and the wife, and on the partnership that must be established between them: and yet it is clear that this community, this *koinonia*, is not established in the dual relation between individuals, but it is mediated by a common purpose, which is the household: its maintenance and also the dynamics of its increase.²²

The *oikos* as a consequence remained the spatial enabler of marriage and cannot be thought outside of it. Myths of polarity between women and men were perpetuated from the Archaic into the Classical period and contributed, as a legitimizing factor, to marriage as a social unit.²³ This skewed relation of parity and polarity turned on itself constantly, with women seemingly exercising autonomy over a sphere that was in turn limited by a belief in their lack of ability to act independently, resulting therefore in the need for surveillance. This handing over of control was also seen in the passage that occurred in the mid-fourth century of the term *oikonomos* which moved from the female domain to refer to that of the male head of household.²⁴ Ultimately, the acknowledgment of the utility of domestic labor was mediated by means of established practices, such as marriage, that delegated it unevenly and in differing intensities.

Women, the household, and other true abstractions²⁵

In the prologue to *Economy of the Unlost*, Anne Carson poses a series of questions that are central to the concerns of the management of the household at large. Carson asks:

Humans value economy. Why? Whether we are commending a mathematician for her proof or a draughtsman for his use of line or a poet for furnishing us with nuggets of beauty and truth, economy is a trope of intellectual, aesthetic and moral value. How do we take comfort in this notion?²⁶

This sense of comfort, and its visual expression, provided by the economy of the household are best illustrated in the following passage of *Oeconomicus* (VIII.18):

I have already told you how fine it is to keep one's stock of utensils in order, and how easy to find a suitable place in a house for each set. And what a beautiful sight it is when shoes lie in rows, all in their own proper places! How beautiful it is to see clothes sorted, all in their own proper places! and blankets, and bronze ware, or table ware!....It follows that everything else seems somehow more beautiful when set out in order. For each set looks like a chorus of utensils, and the space between the sets is beautiful to see when each set is kept clear of it, just as a cyclic chorus is not only a beautiful spectacle in itself but the free space looks beautiful and unencumbered.²⁷

Returning to Carson, the prologue continues by asking "...what does it mean to save time, or trouble, or face, or breadth, or shoe leather? Or words? What exactly is lost to us when words are wasted? And where is the human store to which such goods are gathered?"²⁸ Although the author goes on to address an economy of language in practices of poetry, a useful analogy can be made with the management of the household by rephrasing the question. What exactly is lost to us when material and labor are wasted? And where is the human store to which such goods are gathered?

Xenophon's imagery of a chorus of utensils acting in unison invokes a sense of harmony that seems inherent to the objects themselves, making labor practically invisible. This draws from Homer, who described reproductive work, or the raising of "splendid offspring" as "love-work," zleaving women to the store of those who labor out of love.²⁹ The objects in Xenophon's account seem inseparable from their inscribed place within the *oikos* and their organization requires an attentiveness, through registers of looking and detecting, to the place of things. Following the line of Carson's questioning, it seems fitting to address where in the visible choreography of objects and bodies the invisible — water, air, dirt, and pollution — fits within the *oikos*.

The recognition paid by Xenophon to things in their place veils what is missing or out of place. Dirt according to Carson, is nothing but matter out of place and is often applied in antiquity to resolve moral contradictions by invoking certain "beliefs of pollution," particularly relating to activities that

25 Title is adapted from Maggie Nelson's publication on the women that formed part of the New York School of poets from 1960 onwards. Maggie Nelson, *Women, the New York School, and Other True Abstractions* (Iowa City: University of Iowa Press, 2007).

26 Anne Carson, *Economy of the Unlost: Reading Simonides of Keos with Paul Celan* (Princeton: Princeton University Press, 2009), 3.

27 Xenophon, *Oeconomicus*, trans. E. C. Marchant and O. J. Todd, rev. Jeffrey Henderson, Loeb Classical Library 168 (Cambridge, MA: Harvard University Press, 2013), 465.

28 Carson, *Economy of the Unlost*, 3.

29 Anne Carson, "Dirt and Desire: Essay on the Phenomenology of Female Pollution in Antiquity," in *Men in the Off Hours: Essays and Poetry* (Toronto: Vintage Canada, 2001), 149.

involved heat and water like cooking and the heating of bathwater.³⁰ The following passage of *Oeconomicus* (IV. 2-3) illustrates how notions of pollution are attributed to the harshest forms of physical labor:

For indeed those that are called mechanical [referring to the type of labor] are spoken against everywhere and have quite plausibly come by very bad reputation in the cities. For they utterly ruin the bodies of those who work at them and those who are concerned with them, compelling them to sit still and remain indoors, or in some cases even to spend the whole day by a fire. And when the bodies are made effeminate, the soul too become much more diseased.³¹

The state of being out of place therefore not only applies to matter in the form of dirt but also subjects that are faced with the condition of being displaced, and as a result directly associated with an 'effeminate' or feminized character.³² The anthropologist Mary Douglas elaborates on this notion by stating that "pollutions are used as analogies for expressing a general view of the social order."³³ The threat of this order by means of displacement underlied ancient sources and was rooted in the avoidance of free men spending their days within the household and the duties of its management delegated onto women, who are by definition displaced, as they have limited claim over their condition.³⁴ Physiological descriptions of women and their need for containment due to a perceived lack of secure boundaries are constantly invoked; Carson cites Aristotle's retelling of the proverb of a "Melian boat" and its use to refer to a leaky vessel, which first arose as a mythical account of a navigator who was sent to found a colony but Melian men refused to sail. "They made excuses, some saying that boats were leaking, others that their wives were unwell, and so they stayed behind. Hippotes then laid a curse on them: that they should never find a boat that was watertight, and that they should be ruled by women forever."³⁵

The reference to navigation could have hardly been coincidental, neither were legislative and customary practices, which imposed a series of restrictions on the movements and attire of women, one of which states that brides should carry with them a storage vessel throughout their wedding procession, symbolic of their abilities of containment. These gendered subjectivities however are not effectively expressed as readable boundaries within the *oikos*. Archaeological evidence shows a degree of flexibility in the use of spaces with looms and milling plates being consistently found in the courtyards of *oikoi*. Rather the system of relational exchanges, such as labor, marriage, gifts, or gestures of hospitality, that necessarily require the transgression of boundaries within the *oikos* are mediated by a conscious application of codes of conduct and ritual passages. Carson refers to this as a "crisis of contact" within the ancient household, where a reciprocal choreography, phrases of movement over time, were needed to conserve order.³⁶ The *oikos* therefore acts as a mechanism of domestication, which seeks in its economy to eliminate excess through a control of its surfaces.³⁷ The pleasure Kritoboulos takes in well-defined spaces between objects is but one example of this, with the most striking being the discouragement of the use of cosmetics by his wife, whose inner virtue is meant to be equally expressed externally and without intermediaries, of which he says should also apply to the household.

30 Ibid., 149-150. On additional anthropological studies of dirt and pollution: Douglas, *Purity and Danger*, 35-36.

31 Xenophon, *Oeconomicus*, 465.

32 Carson, "Dirt and Desire", 149-151.

33 Douglas, *Purity and Danger*, 3.

34 Ibid., 114. "A polluting person is always in the wrong. He has developed some wrong condition or simply crossed some line which should not have been crossed and this displacement unleashes danger for someone." The fear of displacement was directly tied to its associations with servitude as a condition that was rooted in the inability of belonging to a place.

35 Carson, "Dirt and Desire", 149.

36 Ibid.

37 Xenophon is translated in several secondary sources as using the adjective 'domesticated' in *Oeconomicus* (VII.10) (Pomeroy, 141; E. C. Marchant, 443; Strauss, 30.)

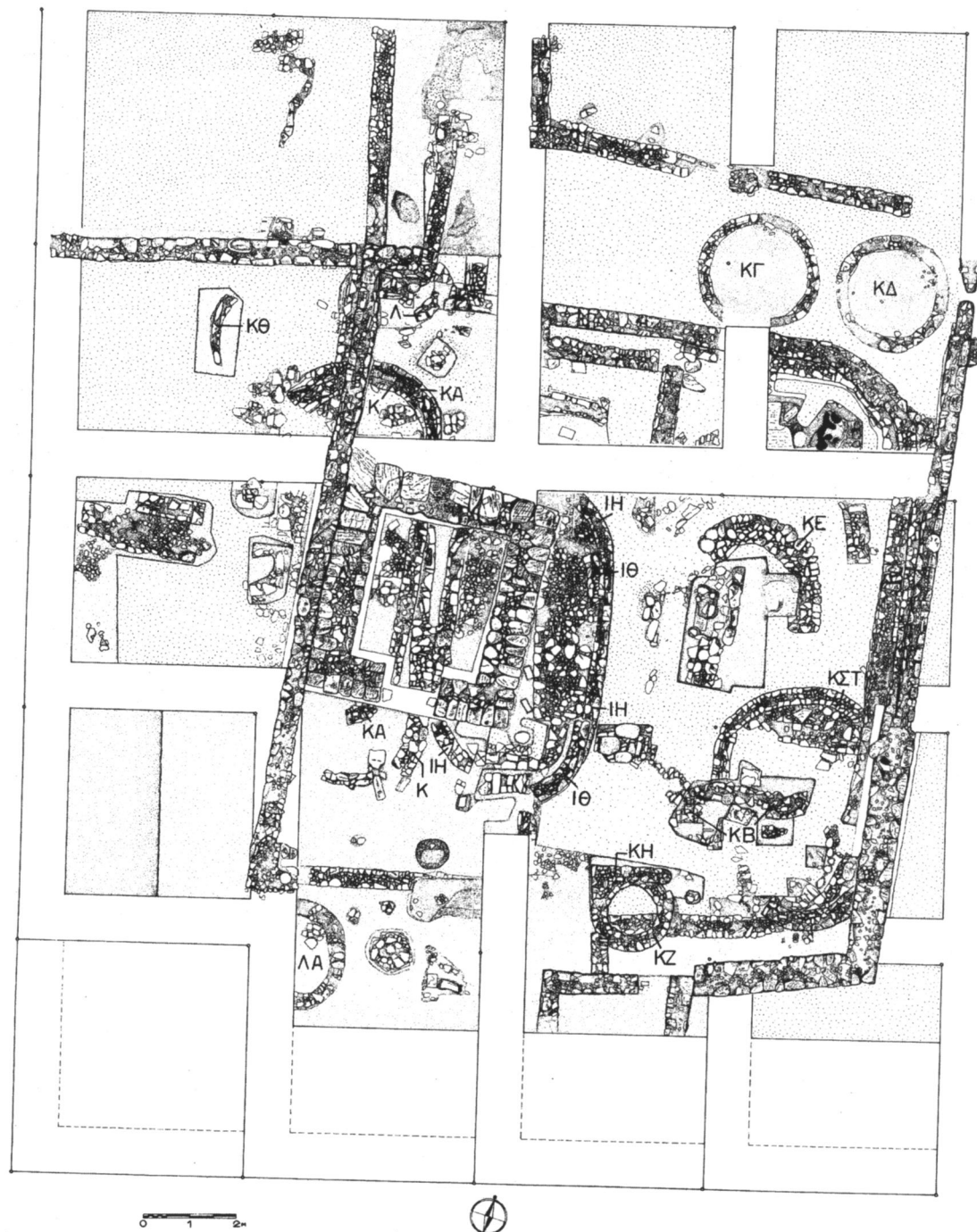


Fig. 2

Oropos: plan of West Quarter, 2001 with successive architectural phases reconstructed
 From Alexander Mazarakis, In "Architecture and Social Structure in Early Iron Age Greece," British School at Athens Studies 15 (2007), 160.

The Location of Things

38 Philip L. Kohl, "Materialist Approaches in Prehistory," *Annual Review of Anthropology* 10 (1981): 89.

39 Franziska Lang, "Structural Change in Archaic Greek Housing," in *Ancient Greek Houses and Households: Chronological, Regional, and Social Diversity*, ed. Bradley A. Ault and Lisa C. Nevett (Philadelphia: University of Pennsylvania Press, 2005), 12-35.

40 Ruth Westgate, "The Greek House and the Ideology of Citizenship," *World Archaeology* 39, no. 2 (2007): 229-245.

41 Ruth Westgate, "Space and Social Complexity in Greece from the Early Iron Age to the Classical Period," *Hesperia: The Journal of the American School of Classical Studies at Athens* 84, no. 1 (2015): 54.

In "Materialist Approaches in Prehistory" Phillip Kohl reflects on a mid-twentieth-century shift in the field of archaeology in which its practitioners "consciously or unconsciously adopt the materialist premise that there is a significant correlation between what a society produced and how it functioned."³⁸ As a result, the second half of the twentieth century brought on notable advances in the investigation of ancient households with excavations at the sites of Zagora and Olynthus contributing to a better understanding of how houses evolved from single-room to multi-room structures. *Haus und Stadt im klassischen Griechenland* (House and City in Classical Greece, 1986) presented one of the first comprehensive surveys of ancient settlement arrangements while putting forth the argument that the abstracted grid of planned *poleis*, such as Olynthus and Miletus (Fig. 3-4) supported the reading of egalitarian societies. This hypothesis has been critically revisited by contemporary archaeologists, such as Ruth Westgate and Nicolas Cahill, who have aimed to record with greater precision the degree to which labor and wealth were distributed across households. By examining object permanencies over time they offer a more nuanced reading of social relations by contextualizing evidence within the bounds of an inhabitable space.

Within a limited set of available evidence, archaeologists have recorded the tendency towards subdivision of houses from the eighth century BC onwards. Single-room structures are shown to have evolved into multiple rooms arranged around a central courtyard in the span of a generation, as is the case at Zagora. The gradual introduction of the courtyard involved an ordering and reorienting of space around a center that has been by contrast found to be relatively flexible in its use through the presence of a variety of artifacts. Similarly, spaces of storage in Olynthus were often adjacent to courtyards or combined with smaller-scale rooms used for different types of skilled work. The recording of a shift in exchange patterns serves to contest certain idealisms, such as the marginalization of labor, inherited by textual sources that are predated by this significant change.

At Zagora (Fig. 5) from the second half of the eighth century onward, "apsidal houses were remodeled or directly overbuilt by rectangular shaped ones."³⁹ The new house types, overlaid over the former, present the pattern of an increased amount of rooms which the archaeologist Franziska Lang interprets as caused by a growth in the amount of activities and rhythms of exchange within the household. The fact that a single entrance is maintained throughout these changes contributes to a new access system in which the courtyard necessarily becomes a transitional space. Ruth Westgate points to the fact that "The need for physical boundaries and increased rooms intensifies as the size and heterogeneity of communities increased, with stronger cues in the built environment needed to ensure that behavioral conventions were observed."⁴⁰ The splintering of space would have also allowed for the isolation of activities that were seen as contaminating. In Zagora, kitchen-related artifacts found in the rooms on different sides of the courtyards suggest that it would have been possible to accommodate guests away from areas used for service functions.⁴¹

The hills at the site of Olynthus (Fig. 4) remained largely preserved prior to their excavation in 1931.⁴² Originally thought to contain the remains of monumental temples, the early excavation of the site offered unexpected evidence of houses and the productive activities taking place within them. Nicholas Cahill notes that in many instances houses contained the equipment to process agricultural goods in large quantities, where “about fifteen were equipped with facilities for crushing olives, pressing grapes and grinding grain.”⁴³ This increased capacity would have exceeded the normal needs of a household and suggests that portions of the production were being exchanged for other goods. House A6 was found to contain the remains of an oil press in the courtyard and a cement platform that sloped down towards a storage basin, along with twelve individual grindstones used for milling, signaling both olive oil and grain processing. House A10 (Fig. 6) follows a similar pattern with a room containing the foundations for an oil press, two storage vessels, and a separate workroom in the northern area. Traces of the spinning and weaving of wool involved in textile production have been found in the presence of loom weights which usually consisted of small dense objects made of clay or carved stone that provided tension to vertically placed threads. Cahill estimates that one or two looms would have been sufficient to sustain the needs of one household, with roughly 30-40 loom weights each. Several houses were found to contain larger quantities with one in particular, located near the Agora and with access to three shops, containing 133 weights which would have been enough for two or three looms.⁴⁴ Several houses had rooms with direct access to the street, either to be used as shops or workshops, with three of them found to be involved in baking or cooking on a larger scale. These indications of increased household productivity in Olynthus imply that it dealt with the distribution of exceptional wealth and would have relied heavily on slave labor. Archaeologists note that although its material record represents an ancient city-state at the height of its development in the fifth century (it will be later razed by conflict and left nearly intact in 348 BC) this should be read relative to the larger range of evidence of sites in Northern Greece that locate skilled work within the household however not in this singular capacity of wealth.⁴⁵

Archaeologists are increasingly attempting to situate the labor carried out by slaves within the household, which would have frequently transgressed the typical boundaries identified to the isolated areas where men, women, and children would have retired to sleep at night.⁴⁵ Increased pressures placed on the agrarian economy during the expansion of city-states and its rigid form of land tenure led to the proliferation of slavery that subjected both inhabitants of the city and foreigners. Given that citizenship and land ownership were closely associated, inhabitants left dispossessed by seasons of drought or belonging to a foreign city-state, sought to carry out skilled work in order to secure shelter, which is the only precarious assurance that slavery provided. The concentration of land held by the nobility, particularly in cities like Athens, gradually led the peasantry to occupy smaller portions of the larger region of Attica that have only recently been subject to excavations.⁴⁷ Poor harvest seasons and a steady increase in population strained the capacities of material self-sufficiency and led to imports of grain from neighboring city-states. As a result, peasants would fall into positions of debt and have their land withdrawn. Land reforms were introduced in the mid-sixth century BC,

42 David M. Robinson, “Excavations at Olynthus,” *The American Scholar* 1, no. 1 (1932).

43 Nicholas Cahill, *Household and City Organization at Olynthus* (New Haven: Yale University Press, 2002), 239.

44 *Ibid.*, 251.

45 *Ibid.*, 252.

46 *Ibid.*, 256.

47 *Ibid.*, 11-12, 278.

48 Maurice Godelier, *The Mental and the Material: Thought Economy and Society*, trans. Martin Thom (London: Verso Books, 2012), 212-214. In addition Pomeroy, *Xenophon, Oeconomicus: A Social and Historical Commentary*, 319-321.

49 Godelier, *The Mental and the Material*, 217-218.

50 Ibid., 214.

51 Westgate, "The Greek House and the Ideology of Citizenship," 214.

52 Ruth Westgate, "Space and Social Complexity in Greece," 60.

53 Giorgio Agamben, *The Kingdom and the Glory: For a Theological Genealogy of Economy and Government*, trans. Lorenzo Chiesa with Matteo Mandarini (Stanford, CA: Stanford University Press, 2020), 24.

otherwise known as Solon's reforms, which included returning dispossessed land to their owners and codifying laws to extend participation within the political domain beyond the nobility. In Solon's expanded notion of citizenship, land ownership was positioned as the hinge to these reforms and served as a useful metric for asserting governance over a larger community. The tensions that arose in the fourth century BC around the struggle for political equality directly pressured issues of land tenure, where accommodating an expanding community also meant expanding the material basis of production.⁴⁸ On this matter, Maurice Godelier notes that, "Political relations function as the relations of production because they give access to two essential means: land and labor."⁴⁹ The concentration of land and property, as in Olynthus, is therefore a direct reflection of transferable wealth. Godelier concludes that the structural issue over property relations is the main reason why "the conflict between rich and poor citizens would almost entirely prevail over that between free men and slaves," leading to the long-term reproduction of these exploitative relations.⁵⁰

The emergence of multi-roomed houses centered on a courtyard, as noted by Westgate and Cahill, appears to reflect an increasing complexity of activities of social exchange occurring on the exterior and interior of the household as communities began to consolidate and the courtyard became linked to the development of ideals of citizenship. The adherence of the citizen group to the compact form of the *oikos* of the Classical period and its controlled entry from the street indicates an aspiration to be part of a governing body that is decentralized and convenes in the form of an assembly government. Within this governing body, however, archaeologists have recorded a variety of household sizes and conditions of wealth within their interior, as is the case at Olynthus. Westgate notes that "not all planned cities were democracies, and conversely that there is no evidence for an egalitarian housing policy in the most radical democracy of all, Athens."⁵¹ She cites that the courtyard type for example is less prevalent in Crete where the autonomy of the household was lessened by a communal provision of food. As city-states emerged, domestic spaces were also reorganized alongside new territorial arrangements. Major temples and rural sanctuaries appeared in the eighth century, helping integrate the *polis* and its villages, or *demes*, into unified entities with defined borders. As Westgate concludes, "There seems to be a trend toward a more formal division of space in this period, clarifying the boundaries between urban and non-urban, sacred and profane..."⁵²

In the opposed yet interdependent relation between *oikos* and *polis*, there is the reoccurring image of the household as a *polis* in miniature, with the analogy of a successful household compared to a well-run *polis* running through Xenophon's writings. Their merging together increased from the fourth century BC onward in which the term *oikonomia* is used to indicate management more broadly and is applied interchangeably to describe the administration of the *polis* and *oikos*; as a result, Aristotle's distinction of their difference becomes less readable. This leads the *oikos* not only to be identified as a *polis* on a small scale but more importantly the *polis* itself as a large house and politics as a mutual economy. Giorgio Agamben notes, "The modern metaphor of the political community as a 'house' - 'the house of Europe' - here finds its archetype" and will return, in the study of classical sources, throughout the Italian Renaissance.⁵³

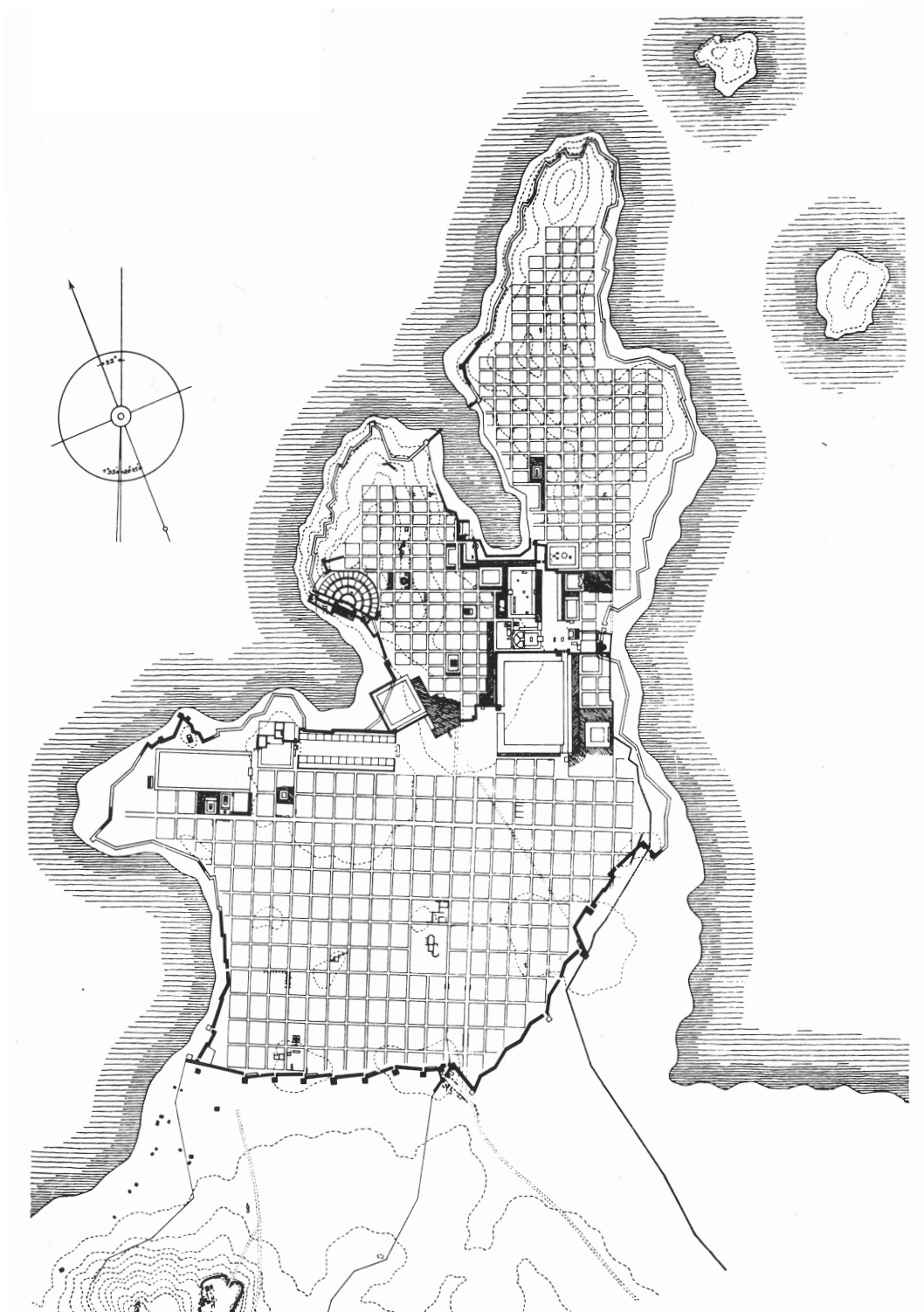


Fig. 3

Plan of Miletus

From Hoepfner and Schwandner, *Haus und Stadt im klassischen Griechenland*, (München: Deutscher Kunstverlag, 1994), 9.

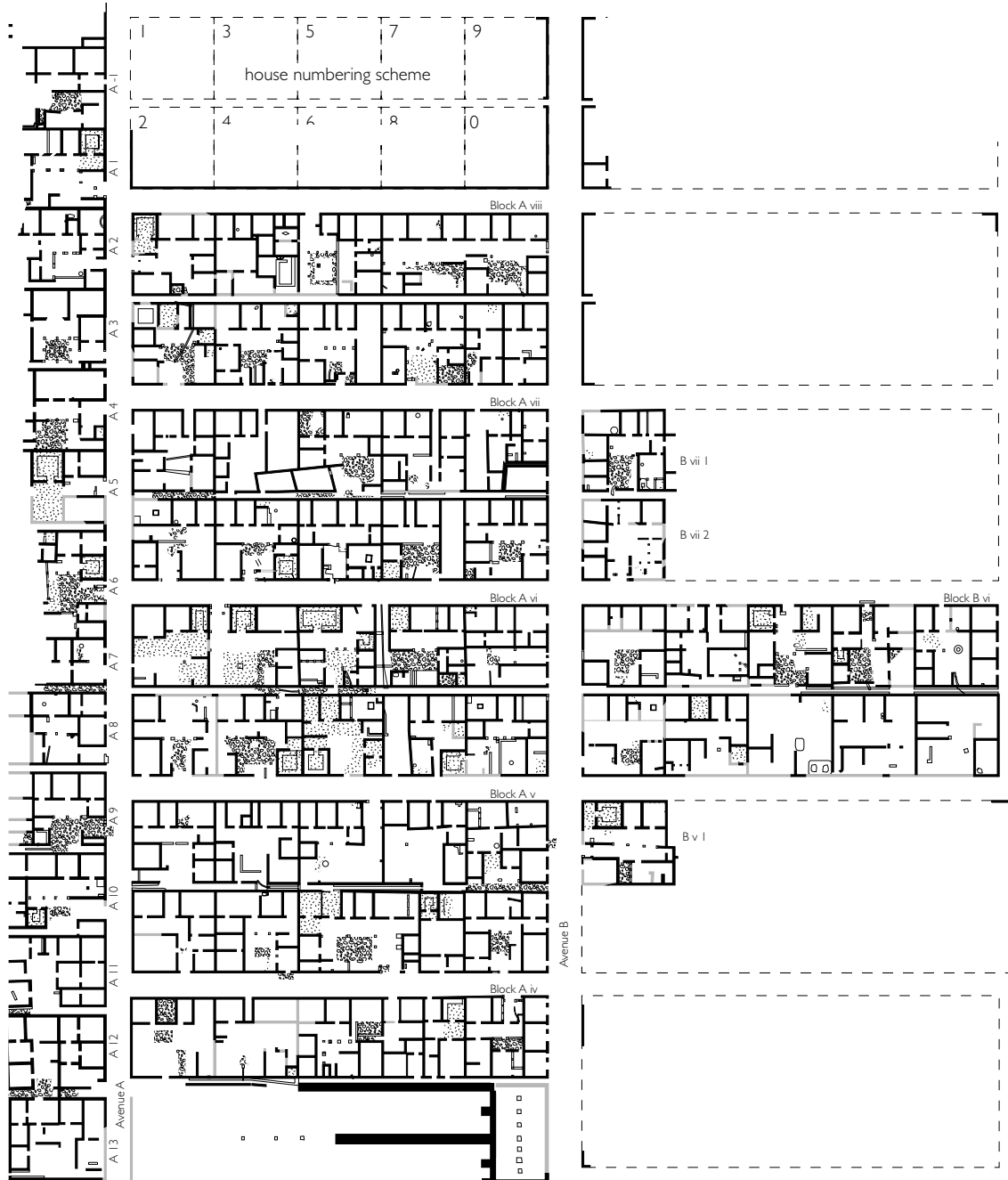


Fig. 4

Plan of Olynthus, Eastern Hill, Blocks A iv-B ix and Row A

From Nicholas Cahill, *Household and City Organization at Olynthus*, (New Haven: Yale University Press, 2002), 28.

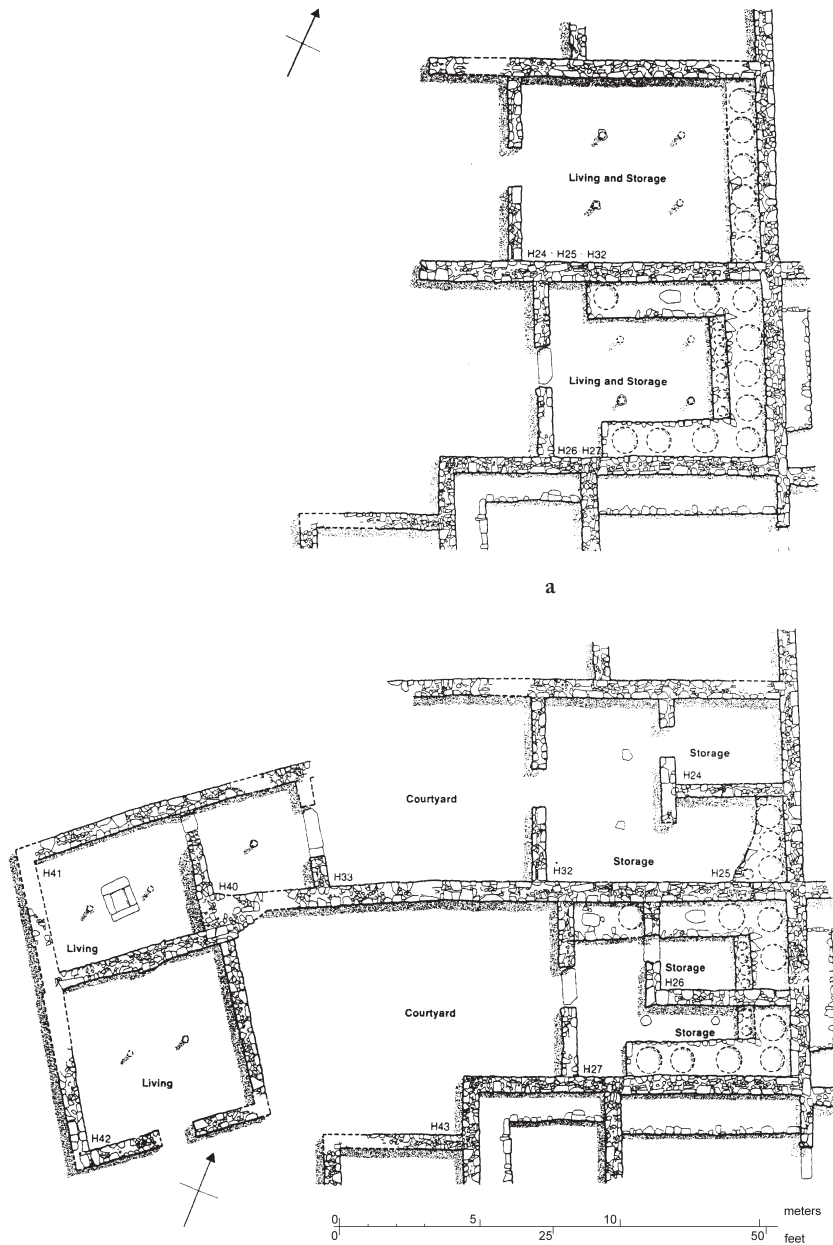


Fig. 5

Plan of Zagora, development of units from phase 1 ca. late eighth century B.C. to phase 2 775-725 B.C.
 From Ruth Westgate, "Space and Social Complexity in Greece from the Early Iron Age to the Classical Period." *Hesperia: The Journal of the American School of Classical Studies at Athens* 84, no.1 (2015): 55.

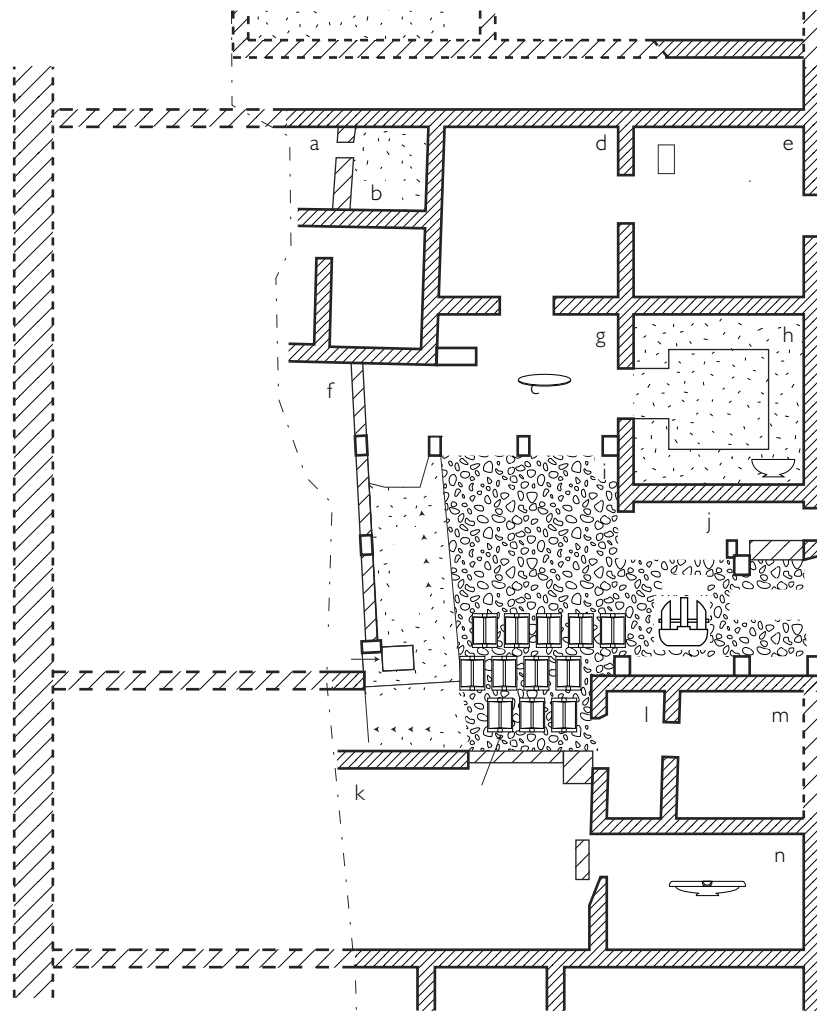


Fig. 6

Plan of Olynthus, Eastern Hill, Blocks A iv-B ix and Row A

From Nicholas Cahill, *Household and City Organization at Olynthus*, (New Haven: Yale University Press, 2002), 242.

PART II

LANGUAGE

Where The Stress Falls¹

If the classical treatises on household management were to a degree estranged from the domestic practices they addressed, their reemergence in cycles throughout the Middle Ages, primarily through monastic manuscripts, would reach a definitive reformulation in the work of humanist figures of the fifteenth century concerned with the social nature of domesticity. Leon Battista Alberti's *I libri della famiglia* (1440) and *De Re Aedificatoria Libri Decem* (1452) elaborate on these concerns with a close attention to language and its material counterpart in the form of a dialogue between the male members of his family in the first instance and in the Vitruvian tradition of an architectural treatise in the second. Alberti's approach to architectural and domestic theory relies entirely on the use of descriptions rather than visual representations which he cautioned as misleading at a time that narrowly preceded the use of the printing press. This choice also reflects the belief in a direct correspondence between language and order, words and the world they described.² Assigning a word or altering one would have also meant a change in material reality. The act of naming in this case becomes synonymous to ordering and will contribute to the invention of the room as a space associated to a specific purpose.³ An appropriateness of distribution extends beyond objects to rooms themselves with an increasing need to abide by a gradient leading from the public facing areas of the household, where guests could be received, to the furthestmost areas that provided the head of the household with the opportunity to seclude himself from the house and city itself.⁴

The gradual return to prominence of cities from the twelfth century onwards marked a shift in the organization of social and economic life with renewed ideals of representative forms of governance. These were rooted in the rejection of the increased pressures imparted onto communities by feudalist modes of production which were then worsened by a steep decline in the population as a result of the beginning of the plague in 1346. This was accompanied by a renewed interest in the classical notions of private and public virtue being closely connected. The aspirations towards virtuous governance and its defects are seen depicted in a series of frescoes by Ambrogio Lorenzetti titled *The Allegory of Good and Bad Government* (1339) (Fig. 7). Commissioned by the nine council members of the Republic of Siena, three panels surround the space of the grand hall in which they deliberated on matters concerning the city and the countryside which are seen as joined by fortified walls. This enduring economic relationship had persisted, with dominant city-states of the High Middle Ages, like Siena and Florence, seeking to expand their territory in order to increase the means of accumulating resources.⁵ Religious power is notably absent, with no church in view, which indicates a shift toward secular governance. The remains of feudal towers appear in the background as part of a declining order, which had been overtaken by the increasing influence of guilds, both of merchants and craftsmen. These are depicted throughout as engaged in various forms of exchange taking place on the ground floor of medieval townhouses in which the boundary between interior and exterior appears flexible. The scene of a small school under one of the porticoes, removed from the typical

1 Reference to Susan Sontag, *Where the Stress Falls* (New York: Farrar, Straus and Giroux, 2001). In a conversation with Michael Silverblatt, Sontag describes the choice of the word stress in the sense of where it falls in a line of poetry or rather "where the emphasis falls." Silverblatt, Michael. "Susan Sontag" Produced by Radio KCRW. Bookworm. November 27, 2003. Radio, 23:30 min.

2 "Between the marks and words, there is no difference between what is seen and what is read, between observing and relating... Things and words are strictly interwoven." In Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, trans. Alan Sheridan (New York: Vintage Books, 1994), 35.

3 Mark Wigley, "Untitled: The Housing of Gender," in *Sexuality and Space*, ed. Beatriz Colomina (New York: Princeton Architectural Press, 1992), 343.

4 Peter Thornton, *The Italian Renaissance Interior, 1400-1600* (New York: Harry N. Abrams, 1991), 302.

5 Quentin Skinner, "Ambrogio Lorenzetti and the Portrayal of Virtuous Government," in *Visions of Politics* (Cambridge: Cambridge University Press, 2002), 39-92.

6 Caspar Pearson, *Humanism and the Urban World: Leon Battista Alberti and the Renaissance City* (University Park: Pennsylvania State University Press, 2011), 47-48, 56-67.

7 Ibid., 4-17.

8 Leon Battista Alberti, *The Albertis of Florence: Leon Battista Alberti's Della Famiglia*, trans. Guido A. Guarino (Lewisburg: Bucknell University Press, 1971), 174-179.

9 Ibid., 174.

spaces of medieval religiosity, indicates an increasing spread of literacy and education in arithmetics useful to commonplace trade activities. Significant are the increasing number of openings towards the exterior which would have been unusual for medieval structures. These features are thought to have been exaggerated to demonstrate a growing interest in establishing connections between domestic interiors and the public domain. An example of this can be seen in the restructuring of the medieval facade of Palazzo Sansedoni during the same year the frescoes were painted. Positioned as one of the main frontages over Piazza del Campo, the city's main civic arena, it was redesigned according to a structured order of sequential openings. As cities systematized land use into allotments, townhouses became more regular, their forms increasingly reflecting both written laws and customary practices. These structures served as antecedents to the *palazzo*, commissioned by the wealthy ruling class, which would become the primary means by which domestic space will be drawn and rationalized a priori through a series of projected decisions.⁶

The development of sequences for both the separation and connection of gendered divisions becomes evident in a grammar of domestic space where each room acquires functions and social meanings. Alberti uses the term *masserizia* to describe household management on behalf of the *massaio*, exclusively the paterfamilia, in the third volume of *I libri della famiglia* titled *Liber Tertius Familie: Economicus* which draws directly from Xenophon's *Oeconomicus*. While Xenophon provided a model externally reliant on agricultural production, Alberti opposes classical notions of moderation to Florentine households that are increasingly consumed by the wealth of objects that proliferated at the time and the demand for their storage, display, and organization. There is a reoccurring discussion of the terms for various rooms and activities, suggesting that the ordering of language and space are intimately connected practices, whether in the keeping of accounts, the giving of instructions, or the maintenance of family records.⁷ This approach marks a significant departure from medieval practices, where patterns of use tended to be more fluid.

The elderly Giannozzo guides the dialogue in the third volume of *I libri della famiglia* by procuring advice to the younger Lionardo. He urges that management "consists in properly using things no less than in preserving them," and explains to Lionardo that that three things are available to him as possessions are, "...the soul, the body and time."⁸ Here he implies a subject — his body and his soul — which notably excludes the world of objects. The third possession, time, accounts for a significant shift in consciousness in which it is no longer a river through which everything flows, but an instrument available to him and as a result his duty to distribute it accordingly. Gianozzo expands on this reflection, "If you were in a little boat moving along with the current on our river, the Arno, and your hands and face were covered with mud as is the case at times with fishermen, would not all that water be yours for you to use for washing and cleaning yourself? Is it not so? Would it still be yours if you do not use it?...Time is lost, therefore, when not put to use. It will belong only to those who know how to make use of it."⁹



Fig. 7

The Effects of Good Government in the City
From Ambrogio Lorenzetti, The Allegory of Good and Bad Government, 1338-1340. Fresco. Palazzo Pubblico, Siena.



The meticulous recording of wealth is described by Giannozzo who states “let expenditures be equal, to or less than, your income.”¹⁰ He also discourages his wife from becoming involved in his private affairs, suggesting that the street and *piazza* are the site of men’s private and public affairs. This overlap reflects oppositely in the woman’s case, where her private affairs do not only concern herself or the household she is entrusted with but the susceptibility of both to the reputation of the family and her children.¹¹ Alberti, like Xenophon, situates gender to the extent that it transfers its effect onto those who occupy the wrong place as seen in Gianozzo’s admission:

Since I often had to go out among the people to take care of weightier matters, and since it seemed to me that to take care of domestic affairs was a burdensome task, I decided to share these burdens. I kept for myself the tasks of going out among men and earning money outside the home and left to my wife the care of lesser domestic matters. That is what I did, for to tell the truth, it would not be very honorable for my wife to deal with men in public, in the streets, and it would seem shameful to me to stay at home with the women when I should be out engaging in manly affairs among men ...¹²

A passage which recalls Xenophon’s description of those who labor in ‘mechanical arts.’ Alberti’s discussion of private buildings directly references ancient precedent in the fifth volume of *De Re Aedificatoria*,

I recall reading in the historian Aemilius Probo that it was the custom in Greece for women not be admitted to table, except for meals with relatives, and the custom too for certain parts of the house, where the women resided, to be out of bounds to all but closest kin...The matron should be accommodated most effectively where she could monitor what everyone in the house was doing. But in each case we should abide by whatever may be the ancestral custom.¹³

Imparting the authority of the argument onto ancient sources he continues with specific prescriptions:

The husband and wife must have separate bedrooms, not only to ensure that the husband not be disturbed by his wife, when she is about to give birth or is ill, but also to allow them, even in the summer, an uninterrupted night’s sleep, whenever they wish. Each room should have its own door and in addition a common side door, to enable them to seek each other’s company unnoticed... Guests should be accommodated in a section of the house adjoining the vestibule, where they are more accessible to visitors and less of a disturbance for the rest of the family.¹⁴

Alberti’s depiction of marriage is at once a relation that is privatized and rendered as an economic partnership. Whereas in antiquity friendship was differentiated from marriage as a virtuous relation of exchange, the merging of both will serve as precedent to the development of the family as a unit. While in Xenophon the *oikos* is the spatial condition of possibility for marriage, in Alberti it is the further privatization of its relations into enclosed rooms.

10 Alberti, *The Albertis of Florence*, 253.

11 Sandra Weddle, “Women’s Place in the Family and the Convent: A Reconsideration of Public and Private in Renaissance Florence,” *Journal of Architectural Education* 55, no. 2 (2001): 64-66, 69.

12 Alberti, *The Albertis of Florence*, 215.

13 Neil Leach, R. Tavernor, and J. Rykwert, *Leon Battista Alberti: On the Art of Building in Ten Books* (Cambridge, Mass.; London: MIT Press, 1988), 149.

14 Ibid.

15 Alberti, *The Albertis of Florence*, 214.

16 Leach, Tavernor, and Rykwert, *Leon Battista Alberti: On the Art of Building in Ten Books*, 322.

17 Ibid., 8.

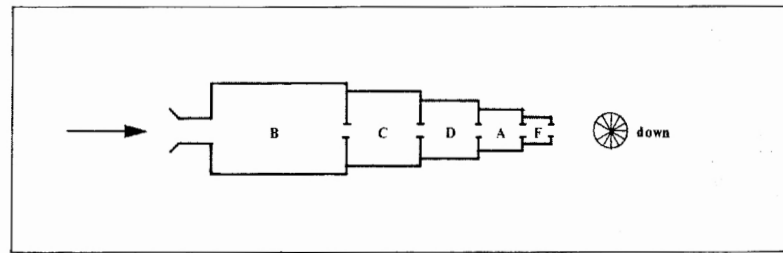
18 Ugo Dotti, "V. 'I libri della famiglia' di Leon Battista Alberti: verso la società del privato," in *La rivoluzione incompiuta* (Torino: Nino Aragno Editore, 2011), 55. Translation by author.

The concern with women's mobility in antiquity resurfaces glaringly in *I libri della famiglia* which signals a regression from the freedoms women possessed throughout the Middle Ages, as evidenced in Lorezetti's frescoes where they appear to be engaged in a variety of activities and public displays. To this end Alberti uses the analogy of a spider's web to convey the relative center of the household and the monitoring of its extents. "You have seen how the spider arranges the threads of his web in rays, so that each one of them, no matter how long, finds its beginning, its root, its point of origin in the center, where that most industrious animal dwells."¹⁵ The paradox of place remains, where the head of the household cannot occupy its center because that would effectively leave him out of place and compromised in virtue. Alberti adopts a heightened sense of Xenophon's visual exercises of looking, monitoring and tending to possessions.

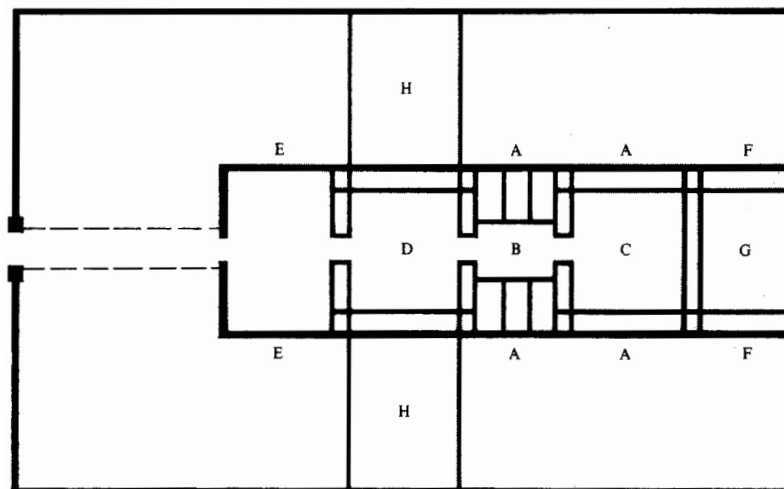
Peter Thornton's analysis of Renaissance interiors reveals that the *piano nobile* above the ground floor typically contained distinct spatial sequences for men and women, though separation varied significantly. Circulation and access become synonymous to divisions of hierarchies of status where the concern with controlling movement reflects the emergence of the concept of an organism that requires careful articulation (Fig.8). This would be possible through the development of the *anticamera* system which provided a transition between the larger hall or parlors and bedchambers. The *studiolo* situates private writing in a space beyond marriage and the household itself. A direct consequence of this is the use of first-person memoirs as a means to construct a material record of the *paterfamilias* and their lineage. As a result, the closed room contributes to the development of individual subjectivity and attitudes of detachment toward the body. The porosity of surfaces of the home and the body are now intelligible, with waste being channeled away from walls to ensure their integrity and the encouragement of the use of white linen to make soot, sweat, and dirt easily identifiable.

Returning to Anne Carson's observations, a crisis of contact would have surely been heightened by anxieties of contamination rooted in the plague and the proximity of life in cities. Alberti writes, "although the sweat or breath is itself not the least bit bad, it may be infected by the odor of the garments, and smell foul."¹⁶ As with virtue in Xenophon, visible cleanliness becomes the mark of inner cleanliness. Analogies between the building, house and the body are subject to similar schemes of order where, "compartmention (compartmentalization) is the process of dividing up the site into smaller units, so that the building may be considered as being made of close-fitting smaller buildings, joined together like members of the whole body."¹⁷ Alberti externalizes the conditioning of surfaces, in their ornamentation and structure, to the facade of private buildings which act as intermediaries between the public domain and an increasingly privatized interior. The attention drawn to individuating patterns of habitation and their distribution across a gradient within the household will serve as precedent to the development of the apartment and the gradual reduction of the extended family. On the permanence of the family Alberti foresees that "the riches, adding up, constitute a family axis that can very well challenge the centuries."¹⁸ The stress placed on the domestic matters of the household and their ability to endure crises of public governance signals the retreat of its caretakers, women, into the private.

MECHANICAL SYMPHONY



- A** Bedchamber (camera)
- B** Main Hall (sala)
- C** Dining Parlor (salotto)
- D** Antechamber (anticamera)
- E** Closet (studio)



- A** Owner's Residence
- B** Main Hall
- C** Private Courtyard
- D** Main Courtyard
- E** Service Areas
- F** Women's Quarters
- G** Women's Courtyard
- H** Garden Outbuildings

Fig. 8

The principle of an apartment (Top), The principle applied to an entire building (Bottom)
 From Peter Thornton, *The Italian Renaissance Interior, 1400-1600* (New York: Harry N. Abrams, 1991), 302.



Fig. 9

Setting Out Embroidery Patterns, Alessandro Paganino, *Il Buratto, Libro de recami*, Venice, 1521
From Peter Thornton, *The Italian Renaissance Interior, 1400-1600* (New York: Harry N. Abrams, 1991), 81.

PART III
HABITS

Mechanics of Reform

“I shall be employed about things, not words!”¹

Household management remained suspended in ambivalence between an art and a systematic set of practices until the late eighteenth century when it is deliberately conceived as an emerging science that was capable of merging the spheres of politics and economy. The work of Mary Wollstonecraft is implicated in this effort with the publication of *A Vindication of the Rights of Woman* in 1792 listed by an early reviewer as a work of political economy. The use of this term to describe an emerging “science of politics and finance”² was broadly associated with the development of commercial modernity and “the relationship between mankind and things, its ability to labor to acquire them.”³ Catherine Packham addresses Wollstonecraft’s feminist critique of commercial modernity through her “persistent engagement, over the course of her career, with the emergent discourse of political economy, whose means of understanding and modeling human nature and human behavior, as well as the relation of individuals to society and morality, was becoming increasingly influential in the last decade of the eighteenth century.”³ Using a variety of literary instruments, ranging from fiction to political theory and children’s literature, Wollstonecraft draws attention to domestic habits and their correlation to both the comforts and vices of the population, positioning them as a necessary measurement of the emerging “science of public happiness.”⁴

The less apparent but continuous invocation of the domestic sphere in the economy, which maintained an *oikos*-derived prefix as *oeconomy* throughout the nineteenth century, is present in both Wollstonecraft and her contemporaries.⁵ Packham points to the first chapter of Adam Smith’s *An Inquiry into the Nature and Causes of The Wealth of Nations* in which he refers to the “accommodation of the most common artificer or day-laborer in a civilized and thriving country” and the invisible measures and motions that make possible their material wealth.⁶ The long, distant and varied path of the production of a woolen coat, which is at once the joint labor of the shepherd that clips the wool, the spinner that sorts it and the loom of its weaver are central to the division of labor at the base of commercial society which is brought to normalcy in the form of material conveniences.

Wollstonecraft therefore offers a critique of a domestic order that exhibits “signs of a discourse taking a strange turn, becoming immired with the physical objects of leisured domesticity, so that the forms of independent, private virtue which civic humanist thought prized and exhorted almost physically impeded within the confines of the home.”⁷ For Wollstonecraft the domestic sphere is where the limits of progress are most evident, both in the lack of women’s authority over the material conditions of their existence and their inability to transgress into the public realm in instances other than simple cultures of display and decorum. These two paradigms will effectively become the fundamental disparities contested by feminist reformers of the nineteenth century.

1 Mary Wollstonecraft, *A Vindication of the Rights of Woman: With Strictures on Political and Moral Subjects*, Cambridge Library Collection - British & Irish History, 17th & 18th Centuries (Cambridge: Cambridge University Press, 2010), 14.

2 Catherine Packham, “Domesticity, Objects and Idleness: Mary Wollstonecraft and Political Economy,” *Women’s Writing* 19, no. 4 (2012): 544.

3 Ibid., 546.

4 Catherine Packham, *Mary Wollstonecraft and Political Economy* (Oxford: Oxford University Press, 2017), 3. Packham accounts that this emerging science recognizes “economic concerns, but these were located within a broader field of political, moral, psychological, and historical study.”

5 Packham, “Domesticity, Objects and Idleness,” 546.

6 Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. R. H. Campbell and A.S. Skinner, vol. 1 (Oxford: Oxford University Press, 1976), 22-23.

7 Packham, “Domesticity, Objects and Idleness,” 546.

8 Smith, *Wealth of Nations*, 156.

9 Packham, *Mary Wollstonecraft and Political Economy*, 9.

10 Ibid., 156-157, 174.

11 Adam Smith, *The Theory of Moral Sentiments*, ed. D. D. Raphael and A. L. Macfie (Oxford: Oxford University Press, 1976), 180.

12 Packham, *Mary Wollstonecraft and Political Economy*, 171.

13 Wollstonecraft, *A Vindication of the Rights of Woman*, 250.

14 Ibid., 171.

The influence of classical notions of household management can be seen in a separate passage by Smith who describes a domestic scene in which a person enters a room to find all the chairs in disorder at its center. Angry with their servant's negligence, they proceed to align the chairs with their backs to the wall creating a "superior conveniency in leaving the floor free and disengaged."⁸ This differs from Xenophon's choreography of objects given that the labor needed to sustain order is made visible, undoubtedly since that it appears to be the head of household who carries it out. However, the motivating principle is to express that among the increasing disarray of objects it is the convenience of their arrangement which "bestows upon it the whole of its propriety and beauty"⁹ and that the increased amount of idle time proportioned by industrial conveniences can in turn be spent ordering others.

Wollstonecraft is quick to oppose an endless engagement with objects, that goes from their acquisition to their arrangement, acknowledging the burden of housework within a larger appeal to extend the rights of women into the political sphere. While Smith describes idleness as an opportunity for increased productivity, Wollstonecraft warns of the "corrupting effects of property, cycles of consumption and the increasing 'objectification' of the household and the relations that constitute it" which "renders the mind entirely inactive" and turns "whole knots of men into machines."⁹ Pointing to an intensified relation between subject and object, the household remained at the root of the exchange of looking and being looked at and contributes to intensifying "pathologies of recognition and distinction," which are also acknowledged by Smith in the following passage:¹⁰

The elegance of his dress, of his equipage, of his house and household furniture, are objects which, from his infancy, he has been accustomed to have some anxiety about. The turn of mind which this habit naturally forms, follows him when he comes to think of the improvement of land.¹¹

Wollstonecraft rejects the notion of an impartial spectator within this visual economy given that external sentiments and prejudices are constantly brought into the home and manifest in superficial displays of appearances.¹² As a result, the reform of domestic habits through a process of rationalizing the social features prominently in Wollstonecraft who in addressing women states that:

...they pursue a plan of conduct, and not waste their time in following the fashionable vagaries of dress, the management of their household and children need not shut them out from literature, or prevent their attaching themselves to a science, with that steady eye which strengthens the mind, or practicing one of the fine arts that cultivate the taste.¹³

She continues by noting that the science of household economy "requires more understanding and perseverance than we are willing to allow," foreshadowing a field of inquiry that requires methodical study.¹⁴

Wollstonecraft's observations on the culture of wealth manifest through descriptions of homes in Northern Europe in a series of travel letters, through which she expresses a distaste for superficial displays of convenience.¹⁵ Her accounts confront domestic spaces to societal conditions, from the 'wretched hut' to the "comfortable farmhouse" and empty mansions. In Denmark she notes how "large square wooden houses offend the eye" given the commercial aspirations of their proprietors, revealing her early opposition to the separation of political, economic, and aesthetic values.¹⁶ The dominance of property extends to literary representations, where cottages and cabins are frequently invoked to represent the ideal social unit of the household and domestic comfort against the increasing urban alienation of industry.

In a series of children's literature instructively titled *Original Stories from Real Life; with Conversations Calculated to Regulate the Affections, and Form the Mind to Truth and Goodness* Wollstonecraft introduces the figure of the governess or maternal teacher, Mrs. Mason, who is depicted in a series of five domestic scenes etched by William Blake. The third plate (Fig. 9) illustrates the modesty of cottage domesticity, with Mrs. Mason and the two younger girls she is responsible for listening attentively to the cautionary tales of the life of a sailor, Jack, who receives them as guests. Despite stories of wreckage and exile, to which the children and his family react in distress, Jack asserts in the alluring comfort of domestic life that they are now indeed "very happy." Alternatively, the sixth plate (Fig. 10) illustrates a scene in which Mrs. Mason and the children visit a family who is struggling financially with the father, who is out of work, sitting formlessly and hunched over in despair. The scene is intended to instruct financial diligence and selflessness with a caption that reads "*Oeconomy* and self-denial are necessary in every station, to enable us to be generous."¹⁷ Material wealth is evidenced in the contrast between the disordered attic and the comforts of decorative miscellanea appended to the walls in the first scene. In response to these inequalities, Wollstonecraft states that the "remedies to the ills of commercial society lay not in institutional reform or government action but in the collective effects of individual moral reform" pointing to the inadequacy of the institutions to address the dominance of the order of property.¹⁸ On this matter of reform, *A Vindication of the Rights of Woman* poses a critical question to readers — given that habits are enmeshed in the material and social conditions of the household, what is needed to facilitate a process of domestic reform or revolution under the constraints of industrial capitalism?

In *The Grand Domestic Revolution* (1982) Dolores Hayden elaborates on the complexity of this question which will be undertaken by feminists influenced by early reform movements through a series of different approaches to the state, its institutions and industries of production and consumption. Hayden clarifies, however, that despite their different political engagements "most feminists wished to increase women's rights in the home and simultaneously bring homelike nurturing into public life."¹⁹ To this aim, Wollstonecraft's use of different mediums of writing served as an early point of opposition to the science of wealth that political economy would eventually become.²⁰ This paired with the institutionalization of political and economic discussions on household management will eventually contribute to the sedimentation of divisions between the private and public spheres.

15 Mary Wollstonecraft, *Letters Written During a Short Residence in Sweden, Norway, and Denmark* (London: J. Johnson, 1796).

16 Packham, *Mary Wollstonecraft and Political Economy*, 5.

17 Mary Wollstonecraft, *Original Stories with Five Illustrations by William Blake*, with an introduction by E. V. Lucas (London: Henry Frowde, 1906), 36.

18 Packham, *Mary Wollstonecraft and Political Economy*, 4.

19 Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities* (Cambridge: MIT Press, 1982), 5.

20 Packham, "Domesticity, Objects and Idleness," 549.

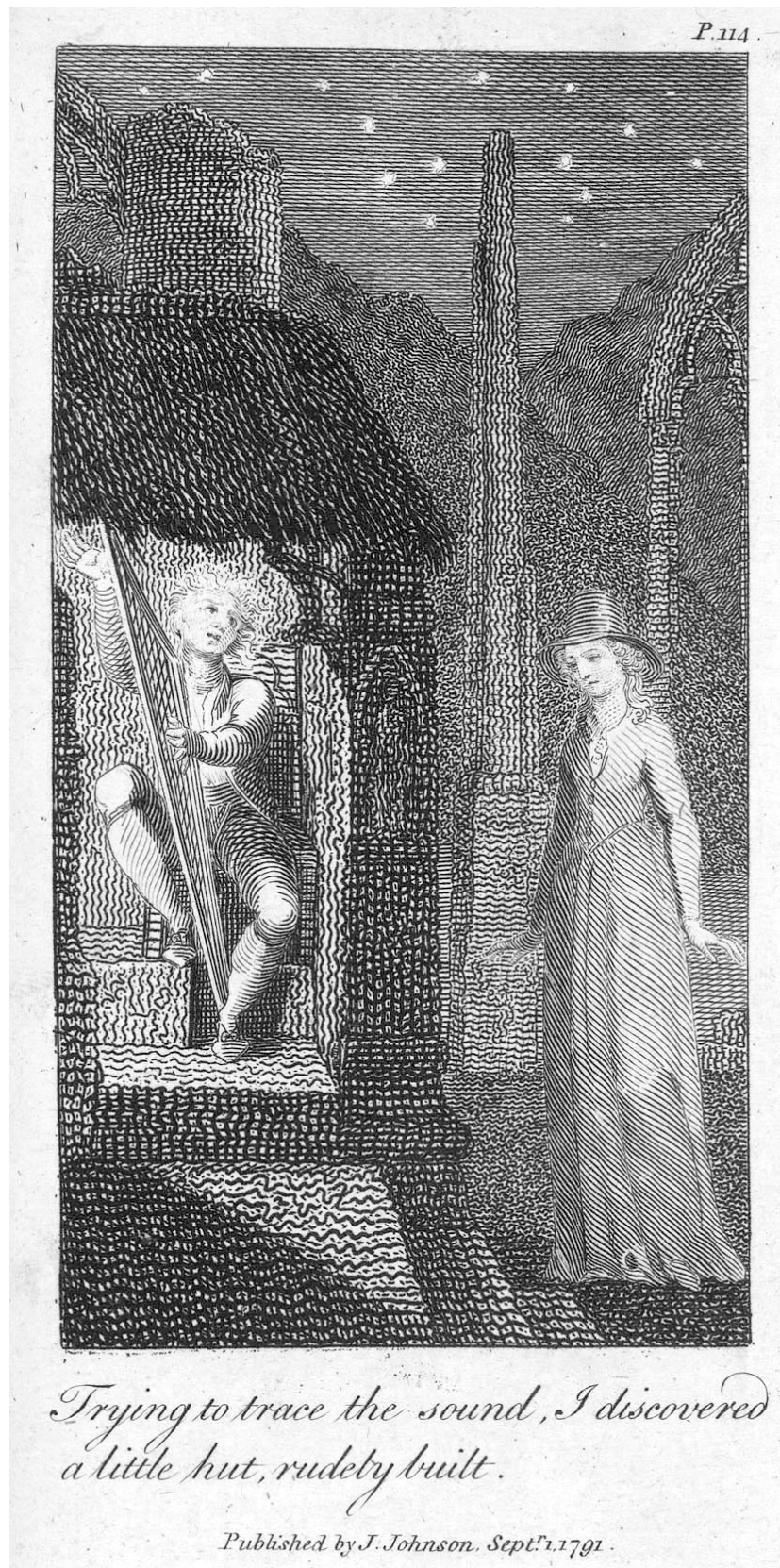


Fig. 10

William Blake, "Trying to trace the sound, I discovered a little hut, rudely built"
From Mary Wollstonecraft's *Original Stories from Real Life* (London: Joseph Johnson, 1791), 56.

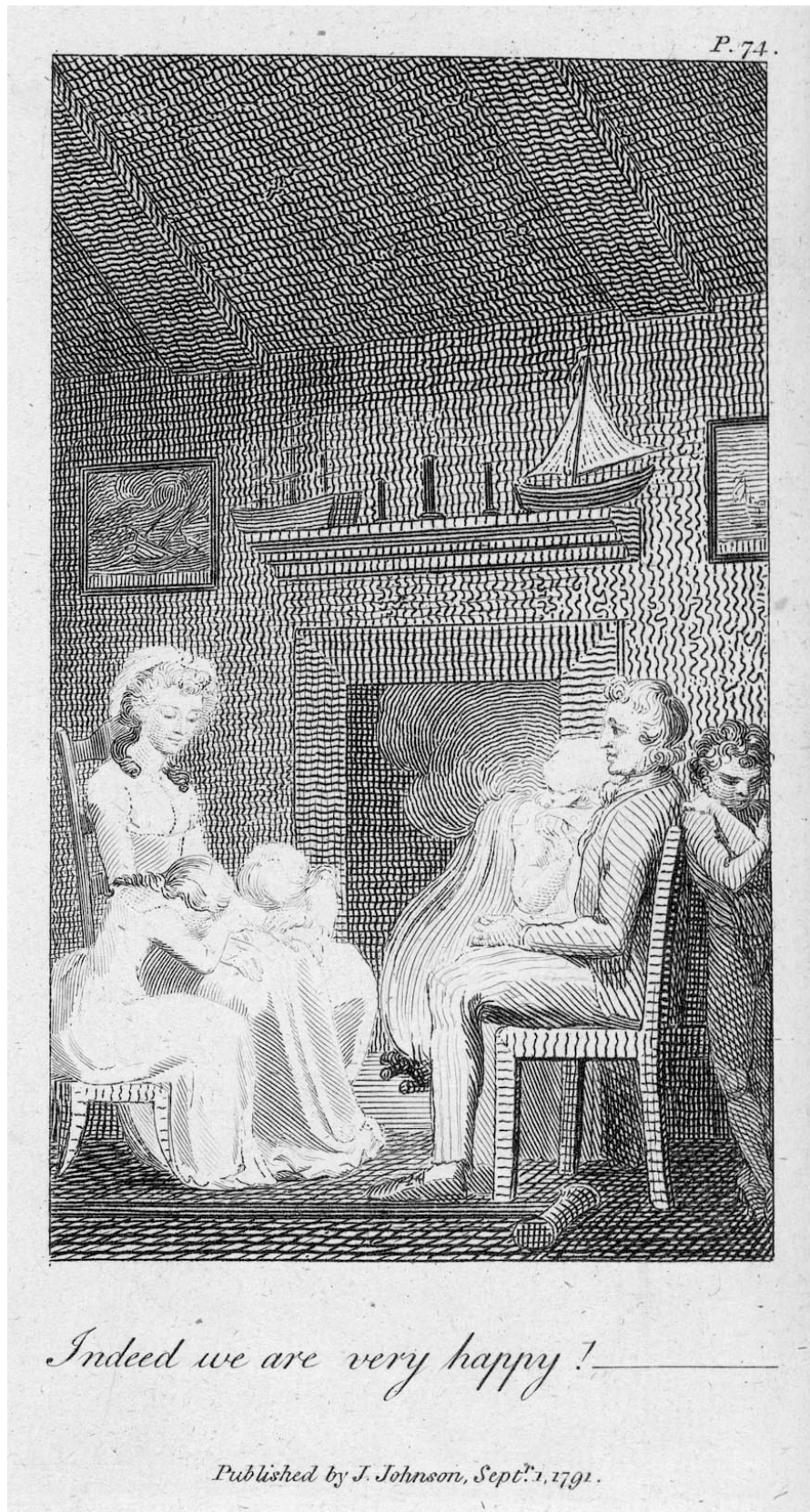


Fig. 11

William Blake, "Indeed we are very happy!"

From Mary Wollstonecraft's *Original Stories from Real Life* (London: Joseph Johnson, 1791), 36.

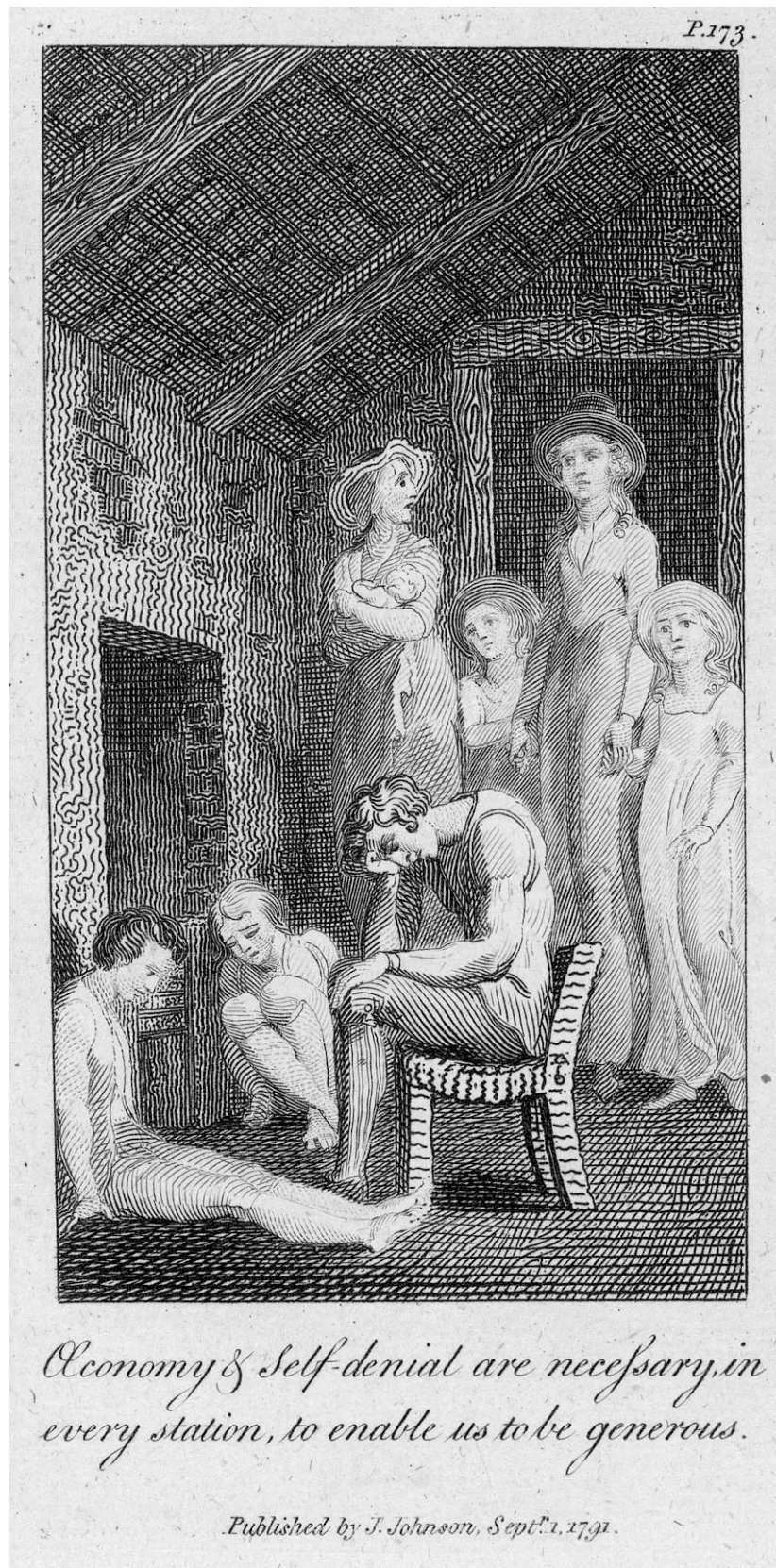


Fig. 12

William Blake, "Economy and self-denial are necessary"

From Mary Wollstonecraft's *Original Stories from Real Life* (London: Joseph Johnson, 1791), 86.

Environmental Systems of Order

The amount of treatises produced on household management increased significantly throughout the nineteenth century due to the proliferation of publishing enterprises and networks of distribution across cosmopolitan centers. With this came the decreasing singularity of works as they became diffused and engage with similar moral subjects in different contexts. They continued to be authored and circulated amongst men of the ruling political class until a definitive break occurred in the mid-nineteenth century as women participated in revolutionary movements aimed toward representative governments, the abolition of slavery and political rights. Furthering their concerns to address issues of suffrage and economic representation, women attended meetings at societies of political economy and convened in international congresses that raised awareness of claims to rights while presenting amendments to constitutions that would guarantee them.²¹ Lady manuals, conduct books, housewifery treatises, handbooks, lady's companions, domestic miscellanies and directories played a fundamental role in the process of reform of the domestic economy and amount to a non-exhaustive list of literature produced on the topic.

Early American movements of liberation between 1820 and 1850, which culminated in the outbreak of the Civil War in 1861, gave rise to a period of reconstruction aimed at an expanding domestic economy in which the "social, economic, and personal issues come alive within the reform cosmology. It constituted a broad sacralization of the world, where sacred and profane were a piece."²² The influence of early Puritan households of the seventeenth century contributes to this process of sacralization of the home along with the emerging analogy of women as home ministers who acted as skilled professionals educated in the economic rationalization of the home.²³ These principles of attributing authority to women became the primary motivators of the work of educators such as Catharine E. Beecher and her sister Harriet Beecher Stowe.²⁴

Catharine Beecher's published material on household management revolves around two works titled *Treatise on Domestic Economy, for the Use of Young Ladies at Home and at School* (1842) and *The American Woman's Home* (1869). They serve as an indicator of a progressive ordering of a series of devices aimed at facilitating the maintenance of the home which includes "earth closets" for managing waste, ventilation flutes and heating systems as well as modular storage and furniture. Central to both treatises is the dominant role of women within the private sphere of the home which manifests spatially in the form of a chimney or hearth that articulates the environmental flows of water, heat, air and waste (Fig. 13, 15). Alongside the control of material conditions, Beecher notes in *The American Woman's Home* that the shaping of habits and temperment is equally significant in order to obtain economic justice in domestic affairs:

There is no one thing more necessary to a housekeeper in performing her varied duties than a habit of system and order; and yet, the peculiarly desultory nature of women's pursuits, and the embarrassments resulting from the state of domestic service in this country, render it very difficult to form such a habit.²⁵

21 The first international congress on women's rights convenes in parallel to the 1878 International Exposition in Paris, while in the same year the amendment for women's suffrage is written by Susan B Anthony in the United States.

22 Robert H. Abzug, *Cosmos Crumbling: American Reform and the Religious Imagination* (New York: Oxford University Press, 1994), 4.

23 Diana Strazdes, "Catharine Beecher and the American Woman's Puritan Home," *The New England Quarterly* 82, no.3 (2009): 452.

24 Author of the leading work of abolitionist literature leading up to the Civil War. Harriet Beecher Stowe, *Uncle Tom's Cabin; or, Life Among the Lowly* (Boston: John P. Jewett & Company, 1852).

25 Catharine E. Beecher and Harriet Beecher Stowe, *The American Woman's Home: Or, Principles of Domestic Science; Being a Guide to the Formation and Maintenance of Economical, Healthful, Beautiful, and Christian Homes* (New York: J.B. Ford and Company, 1869), 222.

26 Strazdes, "Catharine Beecher and the American Woman's Puritan Home," 453.

27 Beecher and Stowe, *The American Woman's Home*, 222.

28 Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities* (Cambridge: MIT Press, 1981), 55.

29 Catharine Beecher, *Letters to the People on Health and Happiness*. (New York: Arno Press, 1972), 186. Second quotation "jack of all trades" attributed to Melusina Fay Pierce in Hayden, *The Grand Domestic Revolution*, 16.

30 Hayden, *The Grand Domestic Revolution*, 1981), 5.

The model cottages ideated by Beecher consisted of symmetrical fronts, steep roofs, and modest rooms arranged around a central chimney. The entry area was reduced to a transitional space and the main rooms consisted of a parlor on one side and a dwelling room on the other, which served as the centers of daily activities. The compact layout sought an efficient use of space with the modest entry limiting elaborate receptions of guests, reflecting the Puritan tendency toward familiar rather than formal socializing.²⁶ Specialized rooms like formal dining spaces and vestibules are notably absent, instead replaced by multi-purpose areas that combine different activities of exchange. By situating cooking and living spaces in adjacency Beecher's plans attribute to domestic work the same importance as other social activities of production, while discouraging formal receiving spaces and separate servants' quarters which unnecessarily reinforced social distinctions. Relating to the material conditions necessary for control of the work of reproduction, Beecher elaborates on the intensifying drudgery of the "ten thousand little disconnected items" that are to be managed within the household (Chapter XVI):

A woman who attempts to carry out any plans of system, order, and economy, and who has her feelings and habits conformed to certain rules, is constantly liable to have her plans crossed, and her taste violated, by the inexperience or inattention of those about her. And no housekeeper, whatever may be her habits, can escape the frequent recurrence of negligence or mistake, which interferes with her plans. It is probable that there is no class of persons in the world that have such incessant trials of temper, and temptations to be fretful, as American housekeepers. For a housekeeper's business is not, like the other sex, limited to a particular department, for which previous preparation is made. It consists of ten thousand little disconnected items, which can never be so systematically arranged that there is no daily jostling somewhere.²⁷

Notwithstanding Beecher's sympathies towards the burdens of housework, she held distinctive views on the assertion of women's dominance over the private sphere and their exclusion from engaging in politics and industry that ultimately heightened gendered differences within the household.²⁸ In her *Letter to the People on Health and Happiness* she expands on the multitude of roles women are to undertake as "wife, mother, educator, nurse and housekeeper" by stating that "all the responsibilities in regards to health, morals and manners rest upon female teachers" which both marks a definitive break with patriarchal dominance over the domestic economy while also pointing at an increasingly laborious task to be assumed by women as a sort of "jack of all trades".²⁹ Although Beecher saw the increasing education of middle-class white women in household management as crucial to leveling class divisions, issues of race are often set aside to secondary arguments relating to the disuse of household servants. Faced with this ambivalence, Dolores Hayden notes that material feminists, such as the Beecher sisters, "sought remuneration and honor for woman's traditional sphere of work while conceding that some women might wish to do other kinds of work. They were not prepared to let men argue that a woman's quality would ultimately rest on her ability to undertake man's work in a factory or an office, nor were they prepared to describe the state as an agency of their liberation."³⁰

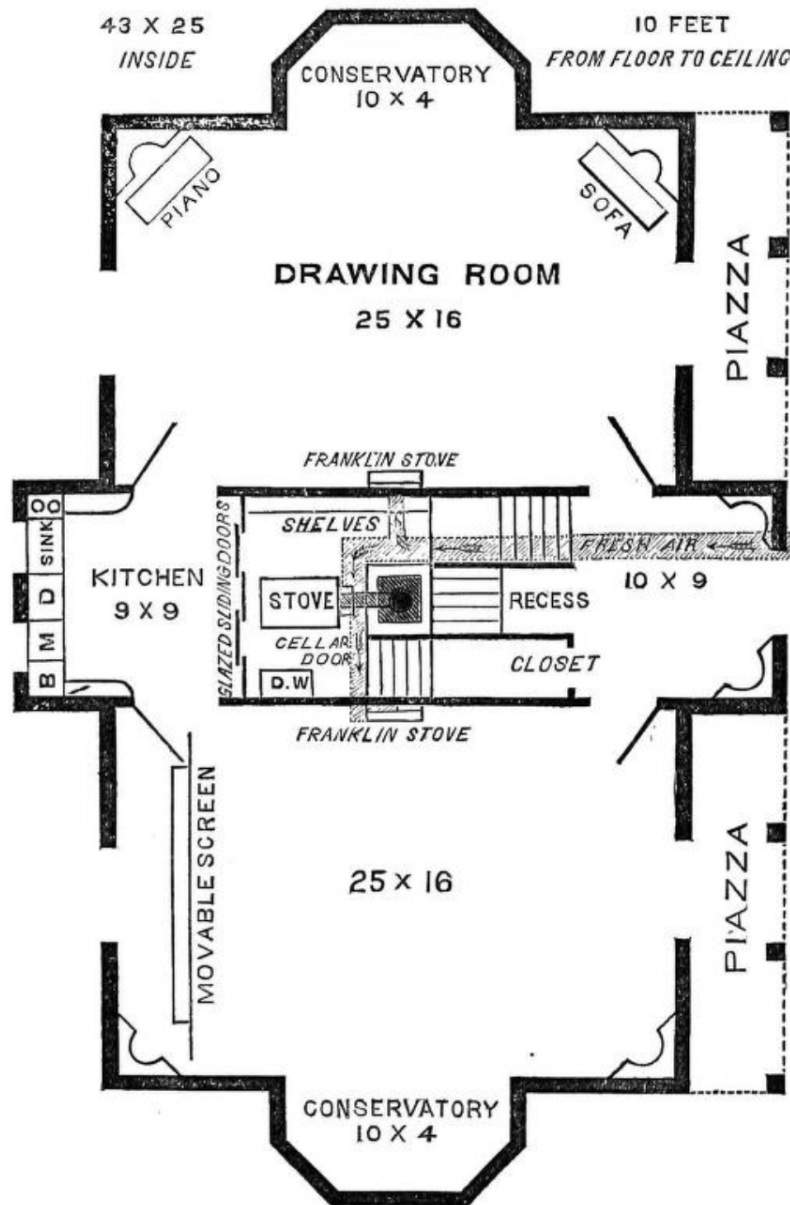


Fig. 13

A Model Cottage

From Catharine Beecher's *The American Woman's Home; Or, Principles of Domestic Science* (New York: J.B. Ford and Company, 1869),

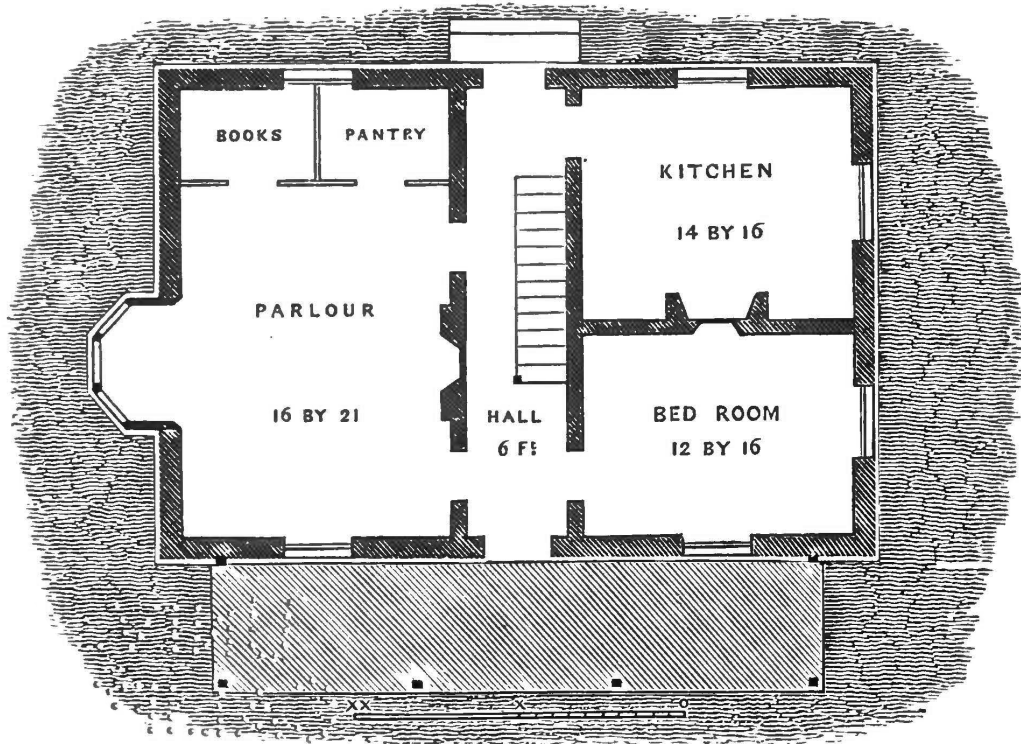


Fig. 14

A Suburban Cottage for a Small Family

From Andrew Jackson Downing, "A Suburban Cottage for a Small Family," from *Cottage Residences; or, A Series of Designs for Rural Cottages and Cottage-Villas, and Their Gardens and Grounds*, 1842, 27.

The radicality of Beecher's centrifugal designs is further evidenced when confronted with architectural treatises of her contemporaries, such as Andrew Jackson Downing's *Cottage Residences; or, A Series of Designs for Rural Cottages and Cottage-Villas* published in 1842.³¹ The manual outlines a series of dwellings ranging from larger suburban villas in Gothic and Italian styles to modest country houses. A comparable proposal to Beecher's models is the design of *A Suburban Cottage for a Small Family* (Fig. 14) which presents two notable differences. Downing's proposal hinges on the singular axis of the entrance hall, hinting at the traditional significance of social reception, while Beecher's plan integrates two main axes relating to the primary activities of reproduction between the entry area — kitchen and the two 'drawing' or living rooms.³² The isolation of the kitchen, and therefore also of the housewife, in Jackson's proposal is prescribed in the following passage:

This simple cottage will be suitable for a small family, when the mistress wishes to have the management of domestic affairs directly under her own personal care and supervision. In such a case it is indispensable to have a kitchen on the same floor with the living-room, though, if possible, not opening directly into it ...³³

Beecher's reformulation of housework is traced within a larger framework by Dolores Hayden in *Redesigning the American Dream* (1984), which outlines three general strategies of domestic reform in America's Progressive Era that will influence subsequent twentieth-century reformers, such as Ellen Richards and Christine Frederick.³⁴ The first being the "haven" strategy, as proposed by Beecher, where the quotidian aspects of domestic life were sacralized and rendered efficient under the authority of women. The second being an industrial strategy, which Hayden notes is best articulated by the German Marxist August Bebel in *Women Under Socialism* (1883), which aimed to completely shift household work into the Taylorist factory, "abolishing women's domestic sphere entirely."³⁵ The treatment of the kitchen, as in Beecher and Downing, proves to be a useful marker of the hierarchies of reproductive labor within the household as Bebel suggests in his observations which call for the institutionalization of the kitchen:

The small private kitchen is, just like the workshop of the small master mechanic, a transition stage, an arrangement by which time, power and material are senselessly squandered and wasted in the future the domestic kitchen is rendered wholly superfluous by all the central institutions for the preparation of food ...³⁶

The third strategy, on the other hand, was the neighborhood socialization of housework by means of communitarian reformers, such as the kitchenless households of Melusina Fay Pierce (Fig. 16-17.) Despite these different strategies, material feminists of the twentieth century would come to argue for the economic recognition of housework by combining the woman question and the labor question to become the issue of 'woman's work'.³⁷ Ellen S. Richards will approach the complexities of this question by attempting "to introduce home economics (or domestic economy) into academic debates and public policy as an 'economics of consumption' on an equal plane with the economics of production."³⁸

31 A. J. Downing, *Cottage Residences; or, A Series of Designs for Rural Cottages and Cottage-Villas, and Their Gardens and Grounds* (New York: Wiley and Putnam, 1842).

32 Ibid., 28-30.

33 Ibid., 29.

34 Dolores Hayden, *Redesigning the American Dream: The Future of Housing, Work, and Family Life* (New York: W.W. Norton, 1984), 69-75.

35 Ibid., 70.

36 August Bebel, *Women Under Socialism*, tr. Daniel De Leon (1883; New York: Schocken, 1971), 338-39.

37 Hayden, *Redesigning the American Dream*, 69.

38 Ibid., 74.

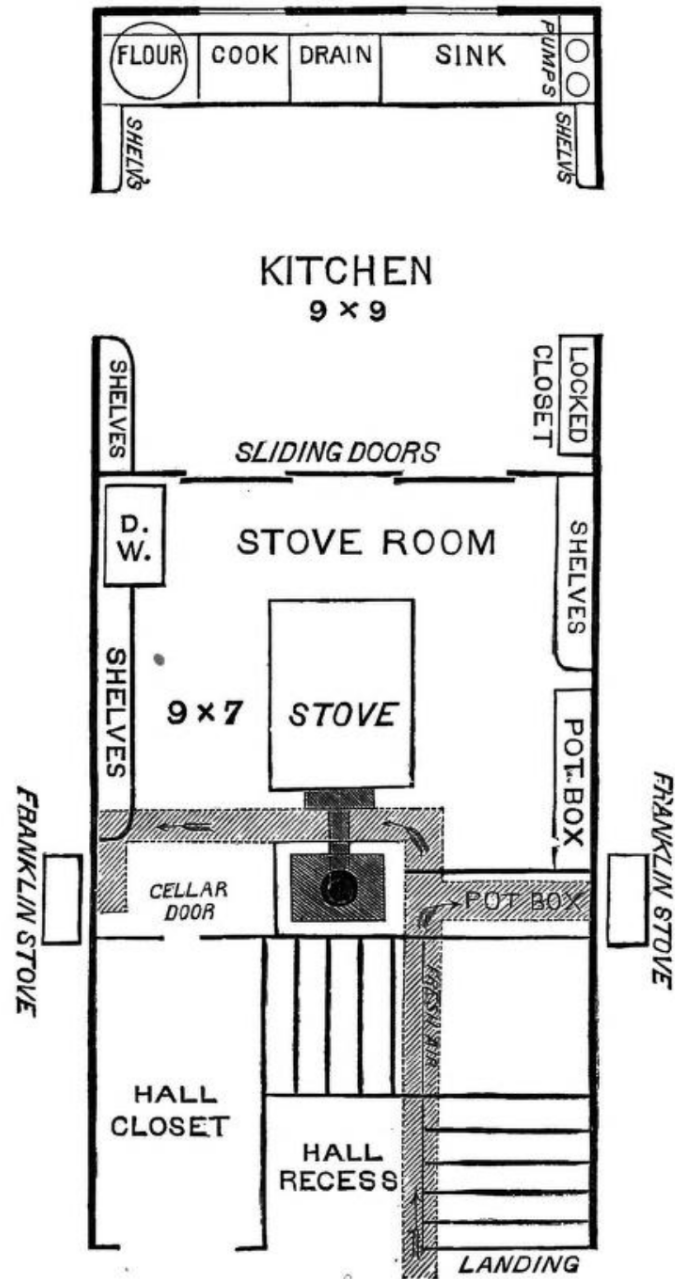


Fig. 15

A Model Kitchen Area

From Catharine Beecher's *The American Woman's Home: Or, Principles of Domestic Science* (New York: J.B. Ford and Company, 1869),

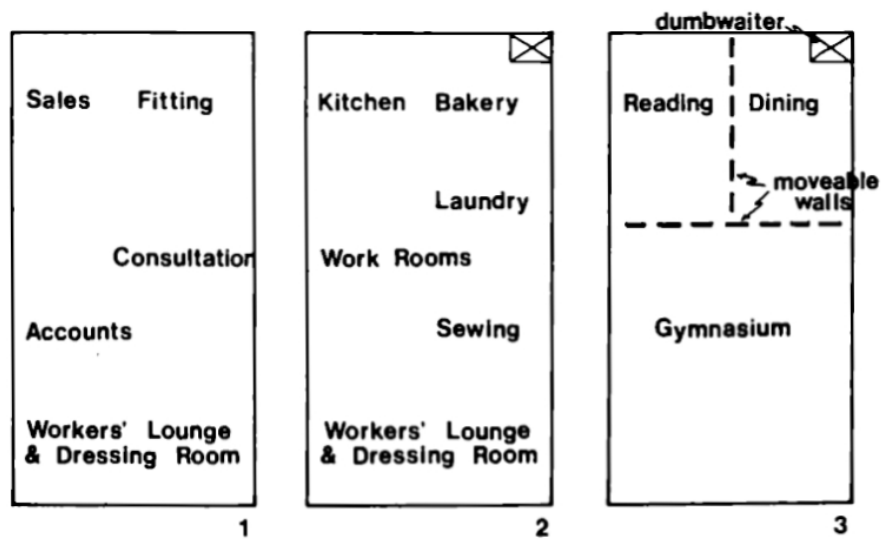


Fig. 16

Diagrammatic plan of headquarters for a cooperative housekeeping society, based on descriptions of Melusina Fay Pierce
From Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities*
(Cambridge: MIT Press, 1981), 70.

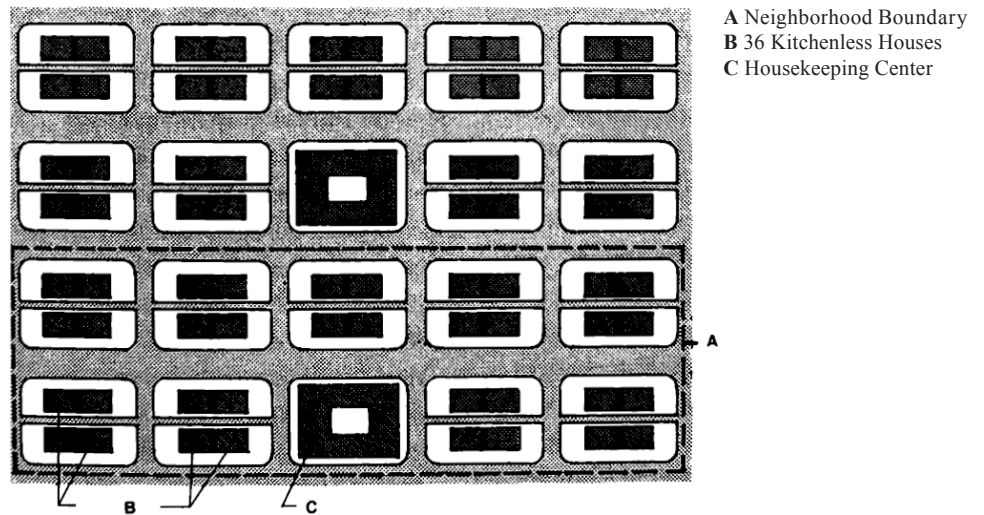


Fig. 17

Diagrammatic plan of cooperative residential neighborhood, drawn by Paul Johnson, based on descriptions of Melusina Fay Pierce
From Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities*
(Cambridge: MIT Press, 1981), 701



Fig. 18

Cornell Professor and junior home economics student demonstrate how a family of five apportioned its annual income, 1960.
From Division of Rare & Manuscript Collections of Home Economics, Cornell University Library.

The Bureau of Home Economics

39 Maria Mies, *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour* (London: Zed Books, 1986), 74-81.

40 This is definitively marked by the publication of the *A Theory of Consumption* by Hazel Kyrk in 1927.

41 Ellen H. S. Richards, *Food Materials and Their Adulterations* (Boston: Home Science Publishing Co., 1898), 29. In addition, Ellen H. S. Richards, *Euthenics: The Science of Controllable Environment* (Boston: Whitcomb & Barrows, 1910).

42 Nancy Tomes, "The Private Side of Public Health: Sanitary Science, Domestic Hygiene, and the Germ Theory, 1870-1900," *Bulletin of the History of Medicine* 64, no. 4 (1990): 509.

43 David Philippy, "Ellen Richards's Home Economics Movement and the Birth of the Economics of Consumption," *Journal of the History of Economic Thought* 43, no. 3 (2021): 379, 390-391.

44 Barbara Richardson, "Ellen Swallow Richards: 'Humanistic Oekologist,' 'Applied Sociologist,' and the Founding of Sociology," *The American Sociologist* 33, no. 3 (2002): 27.

45 Ellen H. S. Richards, "Science for Housekeepers—No 1. Domestic Economy," *The New England Farmer*, March 3, 1883.

46 Ellen H. S. Richards and Marion Talbot, eds., *Home Sanitation: A Manual for Housekeepers* (Boston: Ticknor, 1887). Quotation cited from Ellen H. S. Richards, *The Cost of Living as Modified by Sanitary Science* (New York: J. Wiley & Sons, 1899), 5.

The contemporary notion of housework and its relation to consumption is constructed in the last three decades of the nineteenth century during which processes of institutionalization govern both home economics and social transformations. This includes the unionization of the working class struggle along with the creation of the family wage, as well as the expulsion of women from industry and waged labor and the definitive 'housewifization' of middle-class women.³⁹ As a result, the home economics movement, initiated by means of the Lake Placid conferences in Upstate New York (1899-1908), emerged in response to the changing environment of the domestic economy, initially focusing on sanitation and nutrition before becoming what its practitioners eventually termed as 'the science of consumption' by the early twentieth century.⁴⁰

The evolution of this movement reflects broader changes in American society and economic thought, particularly regarding consumption patterns and women's roles in academic institutions. In the 1870s and 1880s, sanitarians or public health reformers, such as Ellen S. Richards, began warning about health dangers posed by domestic plumbing, sewer gas, and other household conditions.⁴¹ This contributed to the circulation of sanitary information through advice manuals, magazines, newspapers, and health department communications which provided detailed instructions on proper ventilation, plumbing maintenance, disinfection procedures, and general housekeeping practices aimed at maintaining cleanliness within the home. This literature, embedded in the institutions that produced them, targeted middle-class women through the popularization of "germ theory" which intensified preoccupations with domestic hygiene.⁴²

A significant aspect of the movement's development involved debates about its academic identity and classification.⁴³ The choice of the name 'home economics' was deliberate, emphasizing the field's connection to the domestic and political domains of household management in antiquity while arguing that political economists had narrowed the field's scope by "excluding reproductive labor and focusing solely on the production of wealth."⁴⁴ In response to these inadequacies, Richards formulates the term *oekology* to describe the broad set of social relations of production within the household that are inevitably linked to external environmental systems. This terminology, which served as an early precedent to broader environmental concerns brought on by commercial modernity, would later be rid of its *oikos*-derived prefix to become ecology.⁴⁵

Though primarily trained as a chemist, Richards acts as a transitional figure between the natural and social sciences by anticipating later developments in environmental sociology and feminist theory. In 1883, she published her first article on domestic economy in the *New England Farmer*, marking the beginning of her transition from sanitary concerns towards the systematic rationalization of the household economy.⁴⁵ These aims are initially developed in *Home Sanitation: A Manual for Housekeepers* (1887) and subsequent publications through which she elaborates on the household as effectively "the unit of social progress...[in which] the home is the nursery of the citizen."⁴⁶

In 1893 Richards staged a prototype of the Rumford Kitchen at the World's Columbian Exposition in Chicago (Fig.19), which aimed to provide the necessary services to feed a conventional neighborhood through the creation of a laboratory "designed to extract the maximum amount of nutrition from food substances and the maximum heat from fuel."⁴⁷ As a communitarian experiment, Richards sought to socialize domestic work while implementing measures of scientific precision. The National Household Economics Association was founded in parallel to the exhibition with identical aims. Members convened to recognize that American households were undergoing significant changes due to industrialization, with the replacement of manual labor by industrial mechanization and the majority of domestic goods being manufactured externally. Richards, as anticipated by Wollstonecraft, observed the intensity of this transformation, noting that homes had effectively shifted from centers of production to centers of consumption. This change necessitated new approaches to household management and consumer education that challenged women's domestic roles as being merely biological, instead analyzing them within an economic framework that sought to resist the continued subordination of unpaid reproductive labor.⁴⁸ In the introduction to *The Problem with Work* Kathy Weeks addresses the claims of women's access to waged labor:

Feminism has its own tendencies toward the mystification and moralization of work and has reproduced its own version of this famed ethic. Consider two of the dominant feminist remedies for the gender divisions and hierarchies of waged and unwaged work. One strategy, popular with at least some feminists of both the first and second waves, is to more or less accept the lesser value accorded to unwaged domestic labor and seek to secure women's equal access to waged work. Waged work would be women's ticket out of culturally mandated domesticity.⁴⁹

Academic studies, like waged labor, provided an alternative for women to transgress the private domain of the home. The American Home Economics Association gradually implemented courses in elementary schools and universities beginning in 1909. Two crucial pieces of federal legislation also provided increasing institutional support by means of the Smith-Lever Act (1914), which sought to spread the knowledge of home economics to rural populations, and the Smith-Hughes Act (1917), which promoted vocational education in agriculture and home economics.⁵⁰ Women's colleges went so far as to house female students in practice apartments which developed methods in the childrearing of 'institutional babies,' otherwise known as courses in "mothercraft" (Fig. 20).⁵¹ At Cornell University practice babies were all named Denny Domecon for "domestic economy," during the period of care within the homes before being placed with an adoptive family.⁵² The staged home therefore became a laboratory where scientific principles could be measured and tested against a set of institutional standards, with expanding studies on sanitation contributing to public measures of disease prevention. Notions of dirt and pollution, therefore, remain pervasive in the history of the domestic economy which Richards affirms by stating that "dirt means disease, therefore the warfare with dirt is incessant," to which sanitary science was developed to combat against.⁵³

47 Hayden, *The Grand Domestic Revolution*, 151.

48 Ibid., 152-153.

49 Kathy Weeks, *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries* (Durham: Duke University Press, 2011), 12.

50 Philippy, "Ellen Richards's Home Economics Movement," 389.

51 Jessaca B. Leinaweaver, "Practice Mothers," *Signs* 38, no. 2 (2013): 405.

52 "The Making of a Home: Cornell Girls Study for Their Big Job," *Life*, April 7, 1952.

53 Ellen H. S. Richards, *The Cost of Living as Modified by Sanitary Science* (New York: J. Wiley & Sons, 1899), 106.

54 Philippy, "Ellen Richards's Home Economics Movement," 379.

55 Hayden, *The Grand Domestic Revolution*, 152. Quotation sourced Mary Hinman Abel, "Cooperative Housekeeping," *House Beautiful*, 13 (April 1903), 363.

56 Christine Frederick, *Household Engineering: Scientific Management in the Home* (Chicago: American School of Home Economics, 1919), 23-24.

57 Hayden, *The Grand Domestic Revolution*, 285.

58 Weeks, *The Problem with Work*, 158-159.

59 Mies, *Patriarchy and Accumulation on a World Scale*, 74-81.

60 Hayden, *The Grand Domestic Revolution*, 285.

61 Ibid., 23, 285-286.

The Bureau of Home Economics, established in 1923 as a part of the Department of Agriculture, laid the theoretical foundations for studying consumption according to social factors in consumer choice that go beyond mere utility. Initially focusing on rural populations, the Bureau's scope gradually expanded to include the urban middle class by acting as an intermediary between producers and consumers.⁵⁴ From home manager to 'Mrs. Consumer', Hayden notes that the housewife becomes the first and foremost consumer in commercial society in citing the home economist, Mary Hinman Abel:

... instead of fifty incompetent buyers at retail, one efficient buyer at wholesale; a chef....a master of his art, and also of the new knowledge of nutrition now available; one kitchen fire instead of fifty; ...the peripatetic housemaid and all other workers responsible to a bureau; the house heated from a central station, where a competent engineer shall extract from each pound of coal all the heat it should yield.⁵⁵

The focus on housewives and the proper implementation of technologies available to them is fundamentally developed by Christine Frederick in *Household Engineering: Scientific Management in the Home* (1920) which, influenced by the Taylorist scientific management of factories, introduces a series of movement diagrams that illustrate the proper ordering of household equipment within the reduced space of a standardized kitchen.⁵⁶ Through principles of motion and time efficiency the housewife was expected to manage "her own labors scientifically, serving as executive and worker simultaneously."⁵⁷ (Fig. 21-21) As a result, Kathy Weeks notes that the family is seen as taking on an increasingly "industrial tone" with a "Taylorized feel," given that "parents are subject to 'deskilling' with children forced onto a 'childcare conveyor belt'; domestic tasks are increasingly 'outsourced' and 'family-generated entertainment' is now replaced by television and other commodities."⁵⁸ Although the household could not be managed like a factory, given that women were both the manager and executor, precise analysis was still mandated by enthusiasts like Frederick. The professionalization of domestic work also introduced issues of class that material feminists left unresolved in their demands addressed to institutions and the state, given that the emancipation of middle-class white women also required subjecting other minorities to the task of housework with low-paying wages.⁴⁹

Hayden notes that the subsequent publication of *Selling Mrs. Consumer* (1929) by Frederick, who would continue to work with enterprises to develop advertising techniques targeted at housewives, "was the final corruption of the home economics, representing not women's interests but businesses' interests in manipulating women, their homes and their families."⁴⁷ By 1930 the unit of measurement of women's work became tied to their capacity for consumption rather than reproductive labor itself. This confirmation of the tendency to 'housewifization' despite efforts of resistance, was rendered definitive by campaigns encouraging suburban and male home ownership during the interwar period, particularly Herbert Hoover's National Conference on Home Building and Home Ownership which irreversibly mobilized the sprawl of suburban single-family houses into the private market under low mortgage rates.⁵¹



Fig. 19

The Rumford or New England Kitchen; Public kitchen demonstrating scientific cooking methods and nutritional education.
From Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities* by, 1981.

HOME ECONOMICS CONTINUED



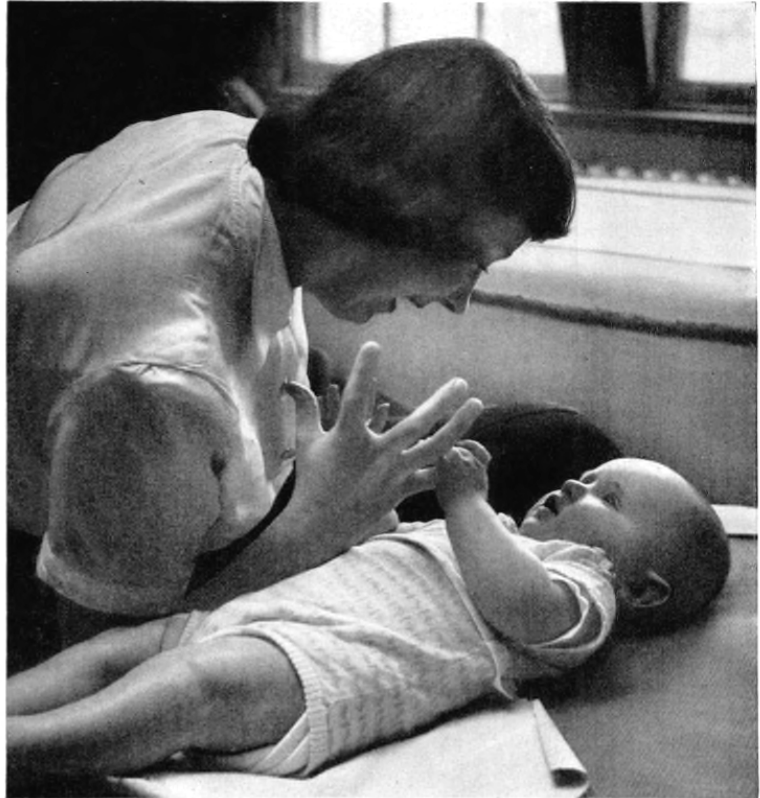
BATHING the baby, Betty Ann uses three or four inches of water heated to 96°–105°, holds baby firmly.



DRESSING him, she holds shirt off face to prevent smothered feeling, keeps his fingers from catching.



FEEDING should be done with no outsiders near. Betty Ann holds Denny snugly, keeps bottle tipped.



IN PLAY PERIOD Betty Ann talks to Denny in modulated tones, mentions his name frequently so

that he will get used to it and avoids baby talk. She encourages him to smile and to reply to her orally.

Mothering Denny Domecon

Each of Cornell's two practice apartments is equipped with a real baby. The 5-month-old boy shown here was lent to the college by a welfare agency and since his name was not given out the girls christened him Denny Domecon (for domestic economy). To most of the girls, who have never been held responsible for a child, the job of mother is the most bewildering of any in the apartment—although most of them had

learned to handle older children in college nursery school courses (*opposite page*). It is also the most satisfying job, and not too worrisome since if anything goes wrong the apartment supervisor is always at hand. Betty Ann Jacques, who took care of Denny for one week, found she had no trouble getting sitters because the other girls loved to play with him. Her only worry was that he was getting far too much feminine attention.



STRAINING FOOD, Betty Ann grinds carrots. Canned food is used if extra cost is worth time saved.



WASHING TOYS is daily task as baby puts them in mouth. She washes hands before handling baby.

Fig. 20

Mothering Denny Domecon, Cornell student practicing infant care in the Home Economics program
From Nina Leen, "The Making of a Home: Cornell Girls Study for Their Big Job," *Life*, April 7, 1952.

A MECHANICAL SYMPHONY

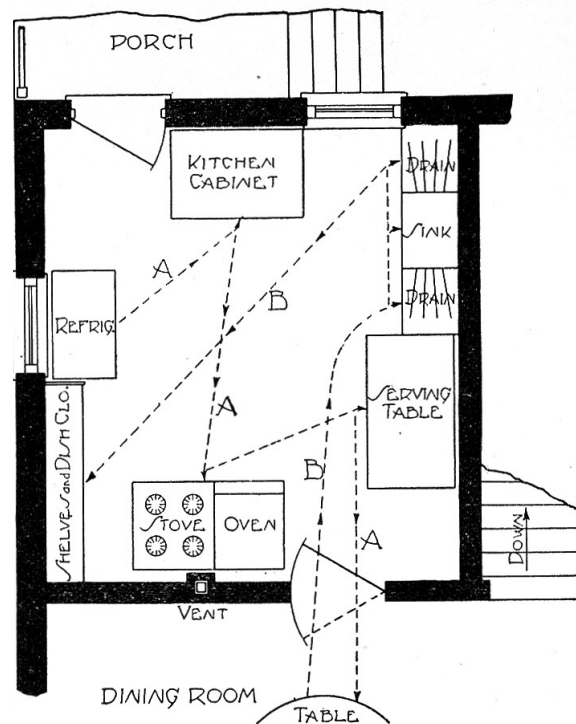
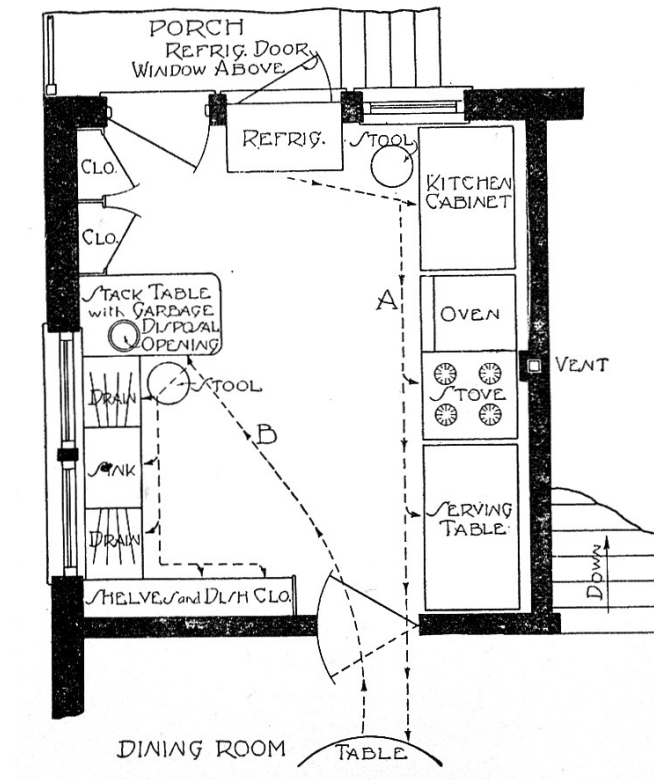


Fig. 21

The Labor Saving Kitchen: Efficient Group of Kitchen Equipment (Top) Badly Grouped Kitchen Equipment (Bottom)
 From Christine Frederick, *Household Engineering: Scientific Management in the Home* (Chicago: American School of Home Economics, 1919), 22-23.

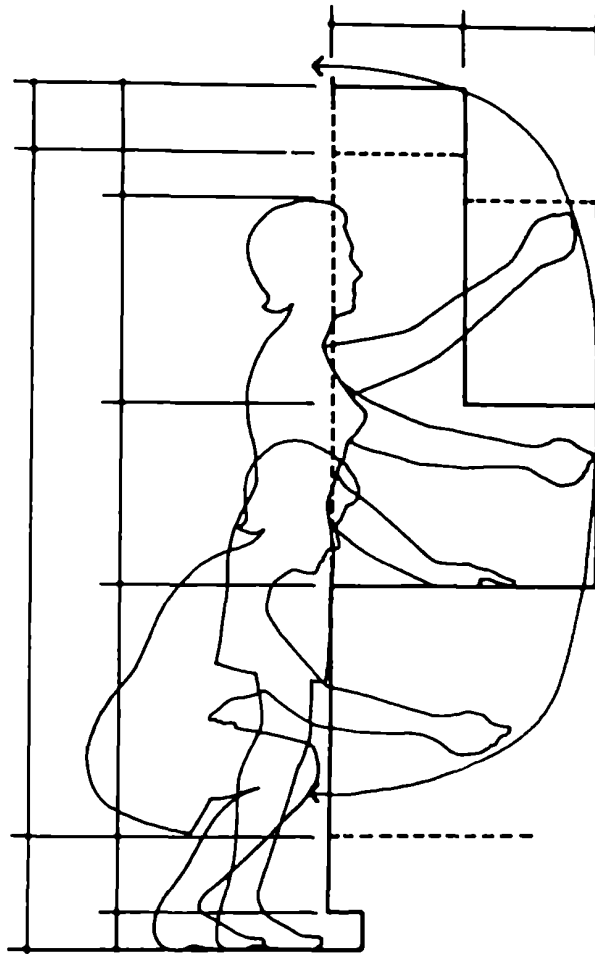


Fig. 22

Study of Women's Movement in the Kitchen

From Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities*, (Cambridge: MIT Press, 1981), 280.

Conclusion

In *Mechanization Takes Command*, the historian Sigfried Gideon dedicates a chapter to the study of the process by which “Mechanization Encounters the Household.” He states that when considering the ordering of the domestic economy:

One must not confuse the organization of the work process with the use of mechanized tools. Organization of the work process, it should be stressed, was underway before mechanized tools became available. These were not universal even in households of 1940. Household planning, then, began before household mechanization. As they arose the mechanical aids found a ready place within the science of housekeeping.¹

Gideon makes an important distinction — although manual labor consisting of repeated motions of the body aided by tools has existed since antiquity, and is often referred to as mechanical in nature as in Xenophon’s accounts, it is the proliferation of labor-aiding instruments that accompanies and facilitates the emergence of a domestic science in the mid-nineteenth century. These instrumental tools, which Gideon enumerates from dishwashing devices to ice boxes and hand-spun egg beaters, directly affected the measurability of labor by effectively assuming its capacity to reduce it and modifying its quality by converting it into live labor, where the “product is inseparable from the producer.”² The economist Christian Marazzi points to the contradiction that “in this way, live labor becomes less and less material in the mechanical-executive sense and more and more relational and communicative.”³ Rather than reducing the amount of time spent by women on housework the effect was rather the opposite by augmenting the standards of domestic order through institutionalized mandates of well-being. The capacity of domestic science therefore to examine the invisible, polluted air particles and germs included, is strictly tied to notions of hygiene and order to which Mary Douglas concludes:

... dirt is essentially disorder. There is no such thing as absolute dirt: it exists in the eye of the beholder ... Dirt offends against order. Eliminating it is not a negative movement, but a positive effort to organize the environment.⁴

Household management therefore, since antiquity, functions as an explanatory or communicative tool that organizes and seeks to preserve the social relations of production within the environment of the household. Material feminists, concerned with the imbalanced effects of the material conditions of labor and consumption, assumed positions that both advocated for the economic recognition of domestic work through a living wage while also calling for a sense of reciprocity between household members in the assumption of these tasks. Fernanda Canales states that by “demanding balance and parity over the goal for power, they [reformers] spoke of mutualism, interactions, reciprocal adaptations, and cooperation, anticipating principals of coevolution...”⁵ Marazzi nevertheless points to

1 Sigfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History* (New York: Oxford University Press, 1948), 516-518.

2 Christian Marazzi, *Capital and Affects: The Politics of the Language Economy*, trans. Giuseppina Mecchia (Los Angeles: Semiotext(e), 2011), 81. Marazzi defines live labor as achieving its own realization within itself” and “characterizes all forms of personal service.”

3 Ibid., 75.

4 Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London: Routledge & Kegan Paul, 1966), 2.

6 Christian Marazzi, *Capital and Affects: The Politics of the Language Economy*, trans. Giuseppina Mecchia (Los Angeles: Semiotext(e), 2011), 80.

7 Ibid.,

8 Marianne A. Ferber and Julie A. Nelson, "Introduction," in *Beyond Economic Man: Feminist Theory and Economics*, ed. Marianne A. Ferber and Julie A. Nelson (Chicago: University of Chicago Press, 1993).

9 Marazzi, *Capital and Affects*, 85.

10 Catherine Packham, "Domesticity, Objects and Idleness: Mary Wollstonecraft and Political Economy," *Women's Writing* 19, no. 4 (2012): 552. "Let there be then no coercion established in society, and the common law of gravity prevailing, the sexes will fall into their proper places." In Mary Wollstonecraft, *A Vindication of the Rights of Woman: With Strictures on Political and Moral Subjects*, Cambridge Library Collection - British & Irish History, 17th & 18th Centuries (Cambridge: Cambridge University Press, 2010), 9.

the negative effects brought on by the professionalization of housework and the difficulty of measuring labor given that it is often carried out in different intensities. He notes that:

The salarization of domestic labor - labor performed by household aids and by service workers outside it - has altered neither the sexual nor racial division of labor, but it has created a hierarchy within domestic labor itself.⁶

According to Marazzi, these relational hierarchies of power are precisely what economic theory, like domestic science, has sought to eliminate, through the introduction of objective scientific principles. He notes that Adam Smith is the first who understood the "subjective difference between those who work and those who give orders" or rather those who command labor and those who are compelled to it.⁷ This question of moral subjectivities, that dominated early eighteenth-century notions of political economy, gradually transitioned out to form modern economic theory. Mary Wollstonecraft foresaw this process with a mixed degree of concern and optimism that ultimately the potential to reform individual habits would prevail over the the inadequacy of institutions. As feminist economists of the late twentieth century point out, however, contemporary economics has consistently applied models of market exchange to the domestic economy of a family unit in a series of choice-making scenarios that often overlook skewed relations of power.⁸

Reflecting beyond material and labor towards contemporary possibilities of reform, Marazzi optimistically turns to the historical function of language within the domestic economy, as it has consistently relied on signs, representations, and classifications in its ordering. Language, he notes, acts as a potential point of feminist resistance by displaying

... a peculiar feature that distinguishes it from formal rights: while it is also public and universal in nature (like constitutional rights) language is never detached from people. It always transcends the reality of personal power relations; it is an immanent resource that can be tapped into every time one needs to redefine one's identity and difference with respect to the other that gives orders.⁹

If domestic labor is increasingly becoming less of a physical effort but rather one that exerts mental effects that originate in the demands of a socio-cultural context, then an awareness of the studied units of measurement of household management — material and labor, language and habits — poses an opportunity to challenge the inherent constraints of the domestic economy. Mary Wollstonecraft imagines such a scenario by turning to "the science of motion of objects to suggest that, were we to remove their constraints, women would observe the same laws as other empirical objects and simply 'fall', as though with gravity into their natural place," an unwinding-like movement characterized by some sort of grace.¹⁰

ANNEXE

PART I
MATERIAL AND LABOR

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Fig. 10 Blake, William. “Trying to trace the sound, I discovered a little hut, rudely built.” Object 5 (Bentley 514.5). Etching and engraving. In *Original Stories from Real Life*, by Mary Wollstonecraft. London: Joseph Johnson, 1791. Second state. 14.0 x 6.6 cm. E. Dwight Church Collection.

Fig. 11 Blake, William. “Indeed we are very happy!” Object 3 (Bentley 514.3). Etching and engraving. In *Original Stories from Real Life*, by Mary Wollstonecraft. London: Joseph Johnson, 1791. Second state. 14.0 x 6.6 cm. E. Dwight Church Collection.

Fig. 12 Blake, William. “Economy and self-denial are necessary” Object 6 (Bentley 514.6). Etching and engraving. In *Original Stories from Real Life*, by Mary Wollstonecraft. London: Joseph Johnson, 1791. Second state. 14.0 x 6.6 cm. E. Dwight Church Collection.

FIGURES

Fig. 13 Beecher, Catharine. "A Model Cottage." In *The American Woman's Home: Or, Principles of Domestic Science*, 26. New York: J.B. Ford and Company, 1869.

Fig. 14 Downing, Andrew Jackson. "A Suburban Cottage for a Small Family." In *Cottage Residences; or, A Series of Designs for Rural Cottages and Cottage-Villas, and Their Gardens and Grounds*, 27. New York: Wiley and Putnam, 1842.

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Fig. 18 Unattributed photographer. "Cornell Professor and junior home economics student demonstrate how a family of five apportioned its annual income," 1960. Home Economics Archive: Research, Tradition and History (HEARTH), Division of Rare & Manuscript Collections, Cornell University Library.

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Collective énoncé team

Collective Rampart, Jean Richter

Gay Apocalypse, François Mégret

Mechanical Symphony, Paulina Ornella Beron

Murder on the Floorplan, Léo Perrin-Livenais

Peasant-Mania, Julia Maraj

Speculative Coastlines, Emile Iacopo Jourcin & Melina Schechinger

The Architecture of the Superblock, Michelle Mortensen

The Boundaries of Labor, Lea Marzinzik

Typological Mestizaje, María Ruiz Medina

Work It Home, Emilie Hamel

