Norges miljø- og
biovitenskapelige
universitet

Master's Thesis 2024 30 ECTS
Faculty of Landscape and Society

Housework in the Longue Durée: Implications for Debates on Working Time Reduction

Ng Yan Ping Sammie

International Environmental Studies
Supervisors: Erik Gómez-Baggethun and Poul Wisborg

Acknowledgements

Writing this thesis has been deeply personal and transformative as a young woman figuring out her place in this world. I would like to thank my supervisor Erik Gómez-Baggethun for the thesis idea, which gave me the opportunity to explore three of my interests — degrowth, gender, and history — in one project. I was also lucky to have another supervisor, Poul Wisborg. Both of them have provided me extensive support and guidance throughout the research and writing process, for which I am immensely grateful for.

This being a thesis about housework, I ought to highlight the housework that made it possible. While I do most of the housework myself, I want to thank my friends for often cooking with me, which makes it less of a chore and more of a joyous activity in between the pressures of thesis-writing. That is, of course, just one way my friends, near and far, makes my life wonderful. It is also their constant cheering on, love, and emotional support that have kept me going. This thesis also reminds me how much work it took for my parents to raise me, so I thank them for that as well.

I also thank the librarians at Deichmann and NMBU for helping me to retrieve and request many hard to find books, and the staff which keep them a comfortable place to work in. Libraries are the best.

Abstract

Working Time Reduction (WTR) is increasingly studied, discussed, and implemented for its possible economic, social, and environmental benefits, along with an interest in the history of working time. Yet, unpaid work is often neglected in mainstream discussions of work, though it has generated serious study by feminist marxists, economists, and increasingly, historians. This paper aims to contribute to the gap in our understanding of the history of work and working time by examining one form of unpaid work—housework— in the longue durée. It asks what insights for WTR can be gained from observing changes in housework across five historical periods in terms of its main content (tasks), volume, and distribution, especially between genders. A literature review is conducted, drawing on research mostly from cultural anthropology, time-use studies, and women's history. Despite advances in time-saving technology, especially under industrial capitalism, housework time has not significantly reduced. This suggests that productivity gains may have gone towards raising housework standards (e.g. in quality and quantity) instead of leisure, not dissimilar to the historical trend observed for waged working time. Another observation is the unequal distribution of housework throughout history, not only in terms of gender, but also class and other axes of inequality. Possibly, socio-cultural factors may be more important than technology in influencing housework. These exploratory findings highlight the need for WTR studies and reforms to be sensitive to how housework relates to the environment and people's living standards. Further historical research is also needed to facilitate a more comprehensive understanding of housework in the longue durée.

Index of contents

1. Introduction **4**
2. Background **5**
2.1. WTR and gender 5
2.2. Feminist perspectives on working time 6
3. Theory: On the meaning of work and housework **8**
3.1. Key terms and definitions 8
3.1.1. Paid and unpaid work 8
3.1.2. Housework as indirect care activities 9
4. Methodology and analytical framework **10**
4.1. Geographical and historical scope 10
4.2. Measuring housework: categories and time-use 10
5. Results: Housework tasks, time-use, and distribution in different time periods **12**
5.1. Primitive Societies 12
5.2. Classical Antiquity 13
5.3. Middle Ages 14
5.4. Early Modernity 16
5.5. Industrial Capitalism 18
6. Discussion **22**
6.1. Changing contents and volume of housework 22
6.2. Changing and persistently uneven distribution of housework 23
6.3. Factors affecting housework and distribution 25
6.4. Limitations 26
7. Conclusion **27**
8. References **29**
Appendix I: Housework time estimates in seven studies on housework tasks **40**
Appendix II: Housework categories in source studies and their re-categorisation **44**
Appendix III: Tables for data referred to in Section 5.1.4. Early Modernity **46**
Appendix IV: Changes in time spent on housework drawing on time-use estimates from 19th century to 2000s **48**

1. Introduction

Amongst sustainability scholars, Working Time Reduction (WTR) is a topic that has gained increasing interest, proposed as a measure to improve social well-being, mitigate unemployment, and lessen environmental pressures (Hanbury et al. 2023; Kallis et al. 2013; Pullinger 2014). One aspect of the debate has paid attention to long-term trends in working time and comparison between different epochs, with studies suggesting that working time has often been shorter in the past (Gómez-Baggethun 2022; Schor 1991). These historical trends in working time indicate that, paradoxically, productivity gains due to developments in technology have often been accompanied by an increase, rather than decrease in working time (Black 1986; Gómez-Baggethun 2022; Sahlins 1972; Schor 1991). As pointed out by a long tradition of thought (e.g. Lafargue 1883), labour productivity increases due to technology could have reduced working time, but have instead gone mainly towards expanding production. It has thus been noted that the existing economic system prioritises growth over liberating people from work (Frayne 2015; Gerold et al. 2023).

However, the study of working time and WTR policies have been dominated by a focus on paid and market-oriented work, while work carried out in the household, or unpaid work, has generally been sidelined (Sirianni and Negrey 2000) and remains a major knowledge gap in historical studies on WTR (Gómez-Baggethun 2022, but see Hester and Srnicek (2024) and Schor (1991) for relevant exceptions). This gap relates to how unpaid work, predominantly carried out by women, has long been invisibilised or devalued in mainstream economic discourse (Daniels 1987; Waring 1988). In order to contribute to filling the knowledge gap on historical trends in working time, this paper sets out to examine the history of housework, defined in this paper as a subset of unpaid work (see Theory section), and consider its implications for current debates on WTR, using feminist studies as an analytical lens.

The aim of this paper is to contribute to the understanding of long-term changes in the content, magnitude, and distribution of housework and to discuss their implications for current debates on WTR, with attention to the gender division of working time. To pursue this aim, I ask the following research question (RQ):

- What are some changes in the main content (tasks), volume (time), and distribution of housework across different historical periods?

I first provide the background for this study by reviewing ongoing discussions on WTR in relation to gender and parallel developments in feminist perspectives on working time. Then, I explore theory relevant to work and housework, before outlining the methodology and analytical framework for this study. The results are then presented and discussed in terms of their implications for debates in WTR, contextual factors that affect changes in observed patterns and trends, and the overall limitations.

2. Background

2.1. WTR and gender

Debates over working time can be traced as far back as to Aristotle's (1944 [350BCE.]) emphasis on leisure and the potential of machines to relieve men of labour and eliminate slavery. They have continued to feature strongly in political, philosphical, and economic debates for centuries. Lafargue (1883) urged men not to fight for rights to work but rather the 'Right to be Lazy', Marx (1887) wrote about struggles between capitalists and workers over the length of the working day, and Gorz (1999) outlined a proposal for people to regain control over their time which includes the reduction and redistribution of work.

Recently, there is a renewed interest in working time in the face of rapid cultural, technological, and environmental change (Gómez-Baggethun 2023), with WTR advocated from a socio-environmental standpoint (Kallis et al. 2013; Pullinger 2014). WTR has been associated with both improved health outcomes, such as reduced stress and better sleep (Voglino et al. 2022), and lower environmental pressures (Knight et al. 2013). The prevailing empirical evidence corroborates the idea that WTR can have environmental benefits, with its influence most likely through stabilising consumption (Pullinger 2014). In parallel, there is also the possibility of what Knight et al. (2013) terms the compositional effect, whereby WTR, besides stabilising affluence, changes the way people consume, although empirical support for it is less strong (Pullinger 2014; Knight et al. 2013).

WTR can vary in its form, extent, and specific implementation (Hanbury et al. 2023). Significant WTR have been won from the early 19th to mid-20th century due to collective bargaining (Gómez-Baggethun, 2022). Notable legislative changes facilitating WTR have also been observed to tackle unemployment during economic crises, such as in the US during the Great Depression, and in Europe from the 1980s to the early 2000s (Zwickl et al. 2016). Prominent proposals include the six-hour work day (Hunnicutt 1992) and the four-day work week, with or without a reduction in wages (Ashford and Kallis 2013). The latter, which originated in the 50s, has received increased media and policy attention recently, and has been piloted in several countries such as Iceland (Campbell 2023).

Following the past WTR trends as described above, a more recent trend is the lowering averages of hours worked in Europe from the 1990s mostly driven by part-time employment which is disproportionately undertaken by women (Zwickl et al. 2016; Piasna and De Spiegelaere 2021). Scholars have been critical of this trend of voluntary WTR being promoted through part-time employment rather than collective WTR agreements from a gender equality perspective, as it is often taken up by those in marginalised sectors and leads to poorer career outcomes for women (Piasna and De Spiegelaere 2021). Drawing on research in France, Husson and Trillet (2015) similarly argue that voluntary WTR forces lower-income workers into poorly remunerated part-time jobs, and that such work maintains women's disproportionate undertaking of household labour and the idea that their income is additional. Another example comes from Spain, where it was found that a legislation which gave those with young children a right to seek WTR with salary reduction was predominantly used by women, leading to disadvantages in the hiring and career prospects of all women of childbearing (including those without children) (Fernández-Kranz and Rodríguez-Planas 2021). Overall, gender is increasingly discussed in WTR, with the role of unpaid work at home being a relevant, yet still relatively understudied component in empirical studies (Hanbury et al. 2023).

2.2. Feminist perspectives on working time

The feminist movement of the 1960s brought attention to the underrecognition of the work that primarily women do in the household, which is often not paid for (Sen 2019). As a response, social campaigns such as Wages for Housework arose in the 1970s, mostly in

North American and European countries (Toupin 2018), in which women called for such work to be paid for in order to not only start recognising it as work but also to question who should carry it out (Federici 1975). Unpaid work and time-use has since been the subject of a rich and growing body of literature in various fields such as household division of labour (Shelton and John 1996), feminist economics (Folbre 2009), and historical gender studies (Whittle 2019).

Studies of the household division of labour highlight how women still disproportionately undertake unpaid work at home and seek to understand the gender gap (Bianchi et al. 2000; Shelton and John 1996; Sullivan 2013). Time-use in unpaid work can be tied to gender equality through its relationship with patterns in the paid labour market and their outcomes (Sirianni and Negrey 2000), such as the impact of housework time on wages (Hersch and Stratton 2002), or differences in leisure time (Wajcman 2015). These studies often study the effects of individual characteristics such as time spent in paid work, having children, and age on housework time (Bianchi et al. 2000; Baxter 2002; Gershuny and Harms 2016). There is also an increasing number of cross-national studies of the effects of macro-level factors such as gender norms and related policies on households' time allocation (Treas and Lui 2013; Gottlieb et al. 2024).

In feminist economics, critiques have centred on how national incomes fail to account for, among other things, unpaid work, with serious implications for understanding the economy and for policy-making (Waring 1988; Folbre 2009). There have thus been attempts to value unpaid work, requiring time-use data and different imputation methods (Waring 1988; Zacharias et al. 2024). Another approach seeks to measure the 'household economy', as a corollary to the market economy as captured by GDP statistics, by including time-use and the value of unpaid work, but also other inputs like the use of domestic appliances and calculating the value-added to the economy (Ironmonger 1996).

In parallel, there has been an interest in the history of women's work, which began with early 20th century studies in the context of pre-industrial England, and picked up again from the late 1970s (Whittle 2019). Following the interest in unpaid work from the 1970s, several qualitative studies provide rich descriptions and analyses of housework, although they are

typically limited to the post-industrial period, such as from the 17th to 20th century for Britain (Robertson 1997) and 19th to 20th century in the US (Strasser 1982). More recently, there has been an interest in studying unpaid work in pre-industrial history in ways converging with household division of labour and feminist economics studies, by looking at time-use and valuation, and deploying innovative methods (Whittle 2019). Examples include the use of large historical datasets to estimate the distribution of tasks, including unpaid tasks, across society (Ogilvie 2003; Whittle 2024; Whittle and Hailwood 2020), the reconstruction of historical time-use budgets (Humphries and Thomas 2022), and the valuation of housework as a percentage of the economy prior to industrial capitalism (Humphries 2024). This paper is similarly interested in a historical perspective on unpaid work, specifically housework, and particularly one that includes different time periods over the longue durée, so as to explore possible changes and continuties (Braudel & Wallerstein, 2009) relevant to working time.

3. Theory: On the meaning of work and housework

3.1. Key terms and definitions

The first definition of work in the Cambridge Dictionary (n.d.) is "an activity, such as a job, that a person uses physical or mental effort to do, usually for money". Despite the latter specification, one of the example sentences references unpaid work - "Aileen does most of the work around the house". This dictionary definition is thus apt to open up discussions about the nuances of what constitutes work, but also what constitutes 'work around the house', or housework. In the following, I interrogate different features of work to understand what kind of work housework is, drawing from feminist studies, time-use studies, and historical gender studies.

3.1.1. Paid and unpaid work

Work is still today often defined by what is paid for or waged (Gómez-Baggethun 2022; Gorz 1999), i.e. has a monetary value which is assigned in the market and contributes to a country's GDP. This definition can be traced to earlier thought at the end of the 17th century, starting with John Locke and later picked up by Adam Smith and Karl Marx over the course of the next two centuries (Downs 2018). It distinguishes between productive work and

non-productive work, with the former contributing to the production of material goods which can be sold and the latter often being seen as services that do not create further monetary value (Downs 2018). Prior to the 17th century, such a separation between paid and unpaid work was not as relevant, as work was done within the household, and tended to be for members' subsistence, even if paid work was undertaken (Komlosy 2018).

The conceptualisation of work as only capturing what is paid for has been troubled by Marxist feminists since the 1970s, who expanded on Marx's early ideas of reproduction to show how unpaid domestic labour is important to capitalist accumulation and can lead to surplus value which is captured by capitalists (Hensman 2011). Federici (2021 [2005]) has also argued that unpaid domestic work is part of the 'patriarchy of the wage', as the reproductive (and sometimes productive) work by women would go unpaid while male workers received wages, a phenomenon that emerged during the transition to capitalism, further marginalising women socio-economically. Such unpaid work, often done by women in their gendered role as housewives, has been named variously as unpaid domestic labour, social reproduction, and housework, with varying but overlapping scopes. Fraser (2016) defines social reproduction as "activities of provisioning, care-giving and interaction that produce and maintain social bonds" (p. 101), which suggests the importance of such work at the societal level and involving emotional labour on top of tasks like house cleaning. In ecological economics, Jochimsen and Knobloch (1997) use the term caring activities to refer to the unpaid work often done by women, oriented to "the maintenance of social and physical relations" (p. 109). According to Federici's definition of (1975) housework, it includes not only physical labour, but also work that is emotional and sexual in nature. Either way, the unpaid nature of work done in the household, Federici (1975) argues, hides the work that women are often responsible for, and gives them little choice or control over their labour and their bodies.

3.1.2. Housework as indirect care activities

There has been an interest in quantifying time spent on unpaid household work by analysing time-use studies, first in the Global North context in the field of household division of labour, and soon after in international development policy for the Global South, although they have continued apace (Doucet 2022). However, there is no singular definition of unpaid work in

time-use studies that have examined the gender division of household labour (Eichler and Albanese 2007; Shelton and John 1996). In time-use studies, Sullivan (2013) suggests that it is convention and analytically valuable to distinguish between child care and housework. This distinction is also made in several historical studies of housework (Humphries 2024) or women's work (Whittle 2024).

This distinction can be linked to the study of care work, which Duffy (2011), defines as work based on relations, emotions, and the meeting of one's needs, and with nurturant care requiring the involvement of direct interaction between those receiving and giving care, and improving or developing the recipient's health and skills respectively. Housework in this context then, is non-nurturant compared to child care. In the context of international policy making, the International Labour Organization (ILO) (2018, 1) uses the term care work as including "direct, personal and relational care activities" and "indirect care activities", with housework corresponding to the latter.

4. Methodology and analytical framework

4.1. Geographical and historical scope

Based on data availability, the scope of this paper focuses on understanding housework in Western Europe but also engages with a selection of countries influenced by its culture due to settler colonisation, including the United States, Australia, and Canada. Following the periodisation adopted by Gómez-Baggethun (2022) to examine working time throughout history, information describing housework tasks, working time and its trends is collected and organised into five major time periods: Primitive Societies, Classical Antiquity, Middle Ages, Early Modernity and Industrial Capitalism.

4.2. Measuring housework: categories and time-use

In this study, I largely follow the definition of housework from Bianchi et al. (2000, 192) as the "work of providing meals, cleaning clothes, and maintaining a 'livable' home", which corresponds to unpaid, indirect care work performed in the household, as discussed in the preceding section. Direct care activities such as caring for children, elders, and the disabled at home are thus beyond the scope of this paper. Instances where the housework may be

outsourced to the market or undertaken by domestic servants are also recognized, since it affects the amount of time spent on housework, as well as how labour is distributed across society.

The boundaries of what time can be attributed to housework is arbitrary and highly contestable when applied across time-periods (Whittle 2019). For example, Bianchi et al.'s (2000) definition used for time-use studies assumes that households predominantly prepare food and maintain their clothes and living environment, but producing their own clothes and food was common in pre-industrial periods. This issue may be resolved by adopting a convention based on determining whether the item made within the household was ultimately consumed by the household itself or sold in the market. Subsistence agriculture is not included within the scope of this study, a methodological convention aligned with the United Nations' system of national accounts, which considers it to be in the 'market' (Whittle 2019). While time-use studies on unpaid work have proliferated in the late 20th century (Doucet 2022), i.e. late Industrial Capitalism, similar quality of data is not available for the earlier time periods. With these methodological limitations and data availability constraints in mind, this paper approaches the interpretation of housework's volume, i.e. time-use, before and after Industrial Capitalism both qualitatively and quantitatively.

Qualitative data throughout the five time periods listed in the preceding section were collected from studies on housework in various disciplines including but not limited to anthropology, time-use, and history and gender studies. Quantitative data is mainly obtained from time-use studies that cover different parts of the 20th century and that rely on data collection methods such as time-use diaries and surveys (Doucet 2022). Other than these recent time-use studies, estimations of time-use in previous time periods are included, though they are few and often only available for specific tasks. The data sources and methods for each study are specified in Appendix I. The quantitative findings are organised according to two categories of housework: (1) core and (2) other housework. This distinction corresponds to conventions in many time-use studies, whereby the former includes cleaning, cooking, and laundry, i.e. tasks that need to be carried out repetitively, and are distinguished from tasks like repairing which are more ad hoc in nature (Bianchi et al. 2000; Baxter 2002). The inclusion of (2) other housework also accommodates studies with

different scopes of housework tasks. For example, Baxter (2002) only includes shopping as other housework, but Hersch and Stratton (2002) includes many others, such as repairing vehicles and paying bills. The categories from the original studies and how they are transformed into the two categories (and subcategories of core housework) used in the analysis are documented in Appendix II.

5. Results: *Housework tasks, time-use, and distribution in different time periods*

5.1. Primitive Societies

For Primitive Societies with a limited exchange of goods, nearly all work may be considered housework. Besides hunting and gathering, additional tasks were identified following Waguespack (2005) as being part of the routinary housework tasks among hunter-gatherers, though not all were carried out to the same extent in the 8 groups studied. These included butchery, burden carrying, housebuilding, basketry, pottery, rope making, and hide working (Waguespack 2005). Meanwhile, examples of other housework tasks from Sahlins (1972) and Lee (1968) include nut cracking, cooking, collecting firewood and water.

Sahlins' (1972) famed thesis of 'the original affluent society' destabilised conventional conceptions of working time in the past, by concluding that Primitive Societies used less hours to satisfy their needs than contemporary technological societies. His results rested on two anthropological studies of hunter-gatherer societies carried out in the 1960s. One society was estimated to spend around 4 to 5 hours per day on getting plant and animal foods, preparing them and repairing weapons, while another spent around 2 hours per day just securing food (Sahlins 1972). For the latter community, the !Kung bushmen in the Kalahari desert, data collected for the study suggest that women would collect enough food for the household in one day for three days, spending the other time either at home or visiting (Sahlins 1972; Lee 1968). When at home, they would spend 1 to 3 hours doing housework tasks including collecting water and firewood, cooking, and cracking nuts (Sahlins 1972; Lee 1968). A review of eight hunter-gatherer communities by Waguespack (2005) shows that time spent on getting food ranged between 1 to almost 5 hours for women, and 1 and a half to 8 and a quarter hours for men.

Complementing these anthropological studies are archaeological findings, with further details on clothing production by Barber (1995). It is suggested that humans started making clothing from the middle of the Upper Palaeolithic period, with evidence for sewing and the making of string, following which the weaving of cloth using looms in the Neolithic period (Barber 1995). While precise time estimates are not available, Barber (1995) observed that households around the time of the Neolithic Age spent much time making elaborate clothes with the prevailing technology, pointing to the idea that people's conceptions of time were not as scarce as today. There is also some evidence of women weaving together around the Neolithic and early Bronze Age in Europe (Barber 1995).

5.2. Classical Antiquity

Evidence for housework can be found in descriptions from the Roman world (Clark 1981; Lovén 2019), including Roman-occupied Britain (Watts 2005). In late Republican and early Imperial Rome, Clark (1981) describes housework as including cooking, cleaning, spinning, weaving, mending, and fetching water, tasks which a housewife, or an *ancilla* (i.e. a female slave girl) may carry out. However, a housewife was also likely to have a professional trade like baking, and an *ancilla* may participate in factory work (Clark 1981). Meanwhile a wealthier woman oversaw the work in the household but also carried out clothsmaking for more symbolic reasons (Clark 1981). Similarly, a rural estate in Roman Italy between 2nd BCE. and the middle of 1st BCE. may have a *vilica,* or a female housekeeper, who oversaw the housework (Lovén 2019). Meanwhile, laundry was a specialised task carried out by professional fullers in fullonicas in Roman cities, which involved city level planning due to the heavy use of water and urine as a cleaning agent (Bradley 2002).

While textile work was often linked to Roman women in their roles as housewives and the virtue expected of them, it has been proposed that many of them likely did it in a way that produced income but were not recognised as such (Lovén 2013; 2019), suggesting then that the extent to which time spent on this task can be allocated to 'housework' may be lower.

Notably, it was suggested that by 2 BCE., there existed a market for buying clothes and textile, including lower quality clothes worn by slaves (Lovén 2019). Meanwhile, food and

alcohol could also be purchased in the market, with one example being the sale of low quality, prepared food items containing meat (Garnsey 2006). Another interesting observation by Garnsey (2006) is that the effort and time put into preparing food could serve as a marker of differentiation between social classes, as they influenced differences such as in the whiteness of bread (which became more popular from mid-2nd century), or the difference between bread and porridge.

In parallel, Watts (2005) describes how the Roman influence on and subsequent occupation of Britain from around 1st BCE. brought changes to the economy and housing, which affected housework, such as easier-to-clean floors but substantial increases in furnishing. The Roman occupation also introduced markets and shops such as those selling wine and providing laundry and fulling services, but rural families probably had limited access to these (Watts 2005). Other housework tasks carried out by women included preparing meals, making materials for clothing such as fabric and leather, carrying water, and processing grains (Watts 2005).

5.3. Middle Ages

In this time period, we get some insight into housework mostly by looking at the cases of Iceland (Jochens 1995; Smith 2020) and peasant households in England (Hanawalt 1986; Whittle 2005). In both cases, most housework tasks were often carried out by women, with the exception of fulling, which involves applying urine and hot water to homespun cloth, which was done by men in Iceland (Jochens 1995). Domestic service consisting mostly of children and young adults but also older women was also noted in rural England, with around 15% of households hiring servants (Ward 2002). The assessment of the time spent on housework is varied. While Ward (2002) suggests that much of the European women's time was spent on it due to the tediousness of the tasks, an evaluation of the situation in late mediaeval England by Hanawalt (1986) states that the growing specialization of tasks in society meant that the time spent on processing food or making household necessities from scratch could not have taken up too much time.

Cooking required collecting water and tending the fire (which in turn involved collecting firewood), but also additional tasks that overlapped but differed due to differences in diets.

For example, food preservation, including dairying and fish drying, was important in Iceland (Jochens 1995), while dairying and taking grains to the mill were additional cooking tasks in England (Hanawalt, 1986). Spinning and weaving are observed in both cases, although Icelandic households also kept their own sheep, harvested, and processed the wool (Jochens 1995). Referring to Smith's (2020) estimates, it would have taken around 260 8-hour days for one woman to spin and weave cloth to make clothes for a four member family, excluding other uses of cloth in the family such as bed linen. Laundry was noted in both cases, with laundry done weekly in Iceland (Jochens 1995). Meanwhile, Ward (2002) notes that in Europe, laundry was often done by women as servants or as their occupation, implying a kind of outsourcing. As for cleaning, it may have taken little time due to smaller houses and less elaborate furnishings (Hanawalt, 1986) although there was also a trend of larger and better furnished homes for the wealthier people in towns towards the end of the middle ages (Ward 2002).

From the late Middle Ages in England, scholars argue that much work carried out by married women was not only for domestic use, but often produced an income (Hanawalt 1986; Whittle 2005). Questioning the assumption that all households did dairying, spinning, brewing, and baking for their own consumption only, Whittle (2005) suggests that women, including female servants, in rural England from the middle of the 15th century onwards selectively carried out certain domestic tasks at a larger scale than is necessary for the household use, to generate income as a kind of 'by-employment'. Similarly in the Icelandic case, homespun was not only used within the household but an important currency and export in Iceland (Smith 2020; Jochens 1995). This difficulty extends to the following Early Modernity period.

Buying staples like ale and bread from markets was the norm in urban, as well as rural places in mediaeval England (Bennett 1986). Meanwhile, Ward (2002) notes more generally in Europe how the lack of individual cooking equipment led many households to share ovens or buy bread in the market, and cites the numerous cookshops in 12th century London and Paris which catered more to the poor than the rich (Ward 2002). According to Humphries (2024), people in Britain in the mediaeval period also paid for household services through maintenance contracts. From the later part of the mediaeval period, they also included not

only food, but increasingly higher standards for accommodation as well as laundry services (Humphries 2024).

The first household instruction text, *The Good Wife's Guide*, was published in France in the late 14th century, and touched on buying food, planning menus, gardening, and how to select and manage servants (Greco and Rose 2009 [1393]). While the text was written by someone from the upper class, it perhaps reflected to some extent the typical housekeeping skills married women in Europe were expected to have, and the fact that many of them (including those from less wealthy households) worked alongside servants (Ward 2002).

5.4. Early Modernity

A growing body of work provides a window into understanding women's work, including housework, in Early Modernity Europe (Whittle 2019), and here I review the case studies of two rural villages Germany (Ogilvie 2003) and England (Whittle 2024; Whittle and Hailwood 2020; Whittle 2019). According to Humphries (2024), the end of the 17th century marked a significant increase in consumption of goods as well as household services in Britain. However, scholars note that while women were doing more of the housework, it is unlikely that they spent most of their time doing it, and there is some variation in how it was distributed (Whittle and Hailwood 2020; Ogilvie 2003; Whittle 2024).

Ogilvie (2003) divides housework into indoor housework, outdoor housework, and lodging provision, and also identifies in other categories paid services such as laundry, tavern-keeping, and housekeeping. Meanwhile, Whittle and Hailwood (2020) include the tasks of cleaning, laundry, food and drink provision (cooking), light and fire provision, collecting water, attending guests, and other housework. They also distinguish between housework for household members and for 'other', i.e. housework that could be done for payment. These narrower definitions of housework can be linked to how, following the Middle Ages, various tasks, such as textile production and food processing, were increasingly carried out for both the household as housework and for income (Whittle 2005; Whittle 2014; Ogilvie 2003). In many cases, the same task can fulfil both, such as making butter for the home's consumption with extra for sale (Whittle 2005), making it difficult to allocate one's time to housework or market work, which may explain their exclusion from housework

in the studies. Whittle (2005) also notes in two notable literary texts of this time period, *Five Hundred Points* and *The Ballad of the Tyrannical Husband*, the idea that the housewife can either generate additional income or reduce expenditure by producing items within the household.

As the datasets in the two case studies recorded all tasks (including work tasks such as agricultural work), it is also possible to draw some inferences about how much housework may have taken up people's time, and how it was distributed between different social groups. A summary of the percentage of recorded tasks accounted for by paid and unpaid housework by different groups can be found in Appendix III (Tables A and B). Between genders, it is clear that women did more of the housework (both paid and unpaid) in both cases, although it is not certain if the performance of this work was concentrated on married women. In England, women carried out an estimated 86% of the housework and it took up 23% of their tasks (Whittle 2024). Meanwhile, in rural Germany, more than 10% of all women groups' tasks were on housework (except for independent, unmarried women), with married women spending 33% of time on housework (Ogilvie 2003). As for men, the percentage from all groups except widowed males was less than 5% (Ogilvie 2003). However, it was found that there was no concentration of housework tasks on married women compared to women of other marital status in England (Whittle 2024). It is also worth noting the involvement of young people in both cases. In England, an estimated 59% of young females' (aged 0-14) tasks were housework (Whittle 2024), while in rural Germany, 4-6% of servants were under 15 and there were a few examples of those below 15 carrying out housework like cleaning (Ogilvie 2003). One possible explanation provided by Ogilvie (2003) for housework taking up a lower than expected percentage of the tasks of married women in rural Germany (despite them spending the most of their time on it compared to other groups) is that they have access to more industry opportunities due to the prevailing guild institutions, which gives them access compared to their unmarried counterparts.

Moreover, housework was argued to be already highly commercial in England at this time (Whittle 2024; Whittle and Hailwood 2020). Whittle (2024) found that 48% of housework tasks carried out by women in England were carried out 'for other', which could be by a servant or by one for those outside of one's close family. In England, the largest proportion

of female servants' tasks recorded would be housework (38%), compared to married women (18%) (Whittle 2024). Meanwhile in rural Germany, 18% of female servants' tasks were housework (24% for those employed in urban areas), and other male and female groups also perform paid housework services to varying degrees in the form of tavern-keeping, lodging provision, laundry, and housekeeping (Appendix III, Table C) (Ogilvie 2003).

Towards the end of this time period, some time estimates of specific tasks can be derived from Robertson's (1997) study of housework in Britain starting from the mid-17th century. For fuel, it would take two to four days for three men to dig the annual supply of peat for one household, and it would take children and women a few weeks of work to spread, turn and build into stacks, before the stacks were carried home. For laundry, Robertson (1997) cites three examples of washing schedules in Britain from the 18th century. One family would do laundry every five weeks, taking four days each time, and with two extra washerwomen coming in two of the days. Another would wash every week, but with rotations on what was washed each week, while another washed for two days, once a month. All of these suggested that doing laundry was more intensive, but carried out between longer intervals than today. In 18th century England, laundry was also noted as a task that would often be the first to be outsourced for pay by households (Rolfson 2021).

One estimation of a time budget in this time-period is provided by Weatherill (1996, 143) for a household in 18th century Britain (Appendix I). It is estimated that 54 to 61 hours of work per week per household would be devoted to housework, excluding yearly tasks and tasks like making cloth, baking, and brewing.

5.5. Industrial Capitalism

Compared to previous time periods, a much larger body of literature exists for housework during Industrial Capitalism, drawing from several disciplines, most of which focuses on the figure of the married 'housewife'. The time-use data documented in Appendix I is presented in Appendix IV.

It has been suggested that it is in the early period of industrialisation that unpaid housework became the responsibility of married women as 'housewives', while their

husbands earned a 'breadwinner wage' (Humphries and Thomas 2022). This was accompanied by the ideology of separate spheres, where women were kept at home while men went out to work, and the home was seen as important to the protection of particular values given the rapid changes brought on by industrialisation (Strasser 1982). It has been observed that there was a fear of a 'domestic void' whereby women, especially middle-class women, had nothing left to do since industrialisation was increasingly displacing the production of items from households, which prompted debates on whether they should join men in their pursuits in the public sphere (Ehrenreich and English 1978). The domestic education movement in the early to mid-century promoted the status of housework through household guides and instruction manuals, and imparted related knowledge and skills through various educational institutions (Strasser 1982). It was followed by the home economics movement, which established housework as an academic discipline at the turn of the century (Strasser 1982; Ehrenreich and English 1978). These efforts were also drawing ideas about management from the industrial context and applying them in the household to promote efficiency (Strasser 1982; Ehrenreich and English 1978). However, it has been argued that a fixation on managing and constantly improving housework created a new task in itself, and the specialisation of tasks in industrial contexts is not really applicable or beneficial at the scale of the individual household (Ehrenreich and English 1978).

However, at the turn of the 20th century the figure of the 'housewife' in middle and higher class families was not someone who did all the housework, but one who managed servants who did more of the difficult and less desirable tasks, with the lower middle-class also likely to hire them (Delap 2011). In Dublin in 1911, 71% of the middle-class, 98% of the higher-class and 23% of the lower middle-class had servants. In the whole of Ireland in the same year, the majority of indoor servants (80%) were working individually, known as a 'thorough servant' (Hearn 1993). Meanwhile, a middle-class housewife in Victorian London was likely to employ at least one maid-of-all-work before hiring more help for tasks such as cooking (Draznin 2001). In the US, the employment of servants was also highly racialised, with more than half of employed African-American women working as servants from 1930 to 1940 (Stewart 2021). However, many domestic servants would leave their employment in the early 20th century, with the number of female servants nearly halving between 1931 and 1951 in England and Wales (Delap, 2011). Emigration was a big reason in Ireland (Hearn

1993) while the rise in other job opportunities was the main cause for young women in Britain (Delap 2011; Todd 2009). In parallel, the ideas of being a 'modern' housewife without servants and housework being associated with modernity and rationality gained popularity through the domestic efficiency movement (Delap 2011), while early advertisements for electrical appliances evoked the issue of a lack of servants (Strasser 1982).

Another key trend is the rapid development and uptake of technology and time-saving products for housework from the late 19th century, with early inventions like the cast-iron stove and the domestic sewing machine, and the industrialization of textile and subsequently clothing production (Cowan 1983; Strasser 1982). The collection of fuel and water (which are necessary for many other housework tasks) would be mostly reduced or entirely eliminated for most from the early 20th century onwards with the advent of piped water and electricity (Strasser 1982). The latter also made possible the development and use of many household appliances in the US and UK (Hardyment 1990). Yet, the technological impact has been argued to not be a key factor influencing housework time (Hardyment 1990; Cowan 1983; Wacjman 2015; Bose et al. 1984; Hester and Srnicek 2024). Some technologies arguably created new tasks and standards, rather than reduced time and effort, such as the vacuum cleaner for dust-free environments which was not expected before (Hardyment 1990). Another example is the cast iron stove which facilitated the preparation of more complex meals as compared to the one pot stew of the fireplace (Cowan 1983). Meanwhile, the popularity of washing machines has been argued to move tasks that had often been outsourced and increasingly commercialised using industrial technology (Arwen Palmer 1992), back into the home (Strasser 1982). In Sweden, a short-lived trend of laundry cooperatives using larger machines from the 1930s ultimately gave way to the individual household washing machine from the 50s (Arwill-Nordbladh 2013).

The earliest time-use estimate is for colliery households in 19th century Britain, which took the unemployed housewife 23 hours for core tasks (Humphries and Thomas 2022). The time spent on housework by married women was highest in 1920 for rural US, at approximately 43 hours for core housework (Gershuny and Harms 2016). After 1965, where core housework hours for married women were around 30 hours in the US, there was generally a downward trend in time spent on housework by married women (Bianchi et al.

2000). Bianchi et al. (2000) found that around half of the 12.5 decrease in hours spent by women on housework between 1965 and 1995 in the US may be explained by structural changes, in terms of higher employment, more education, fewer children and declining marriage rates. However, empirical studies have also suggested that even without the structural changes, women have reduced their housework in the latter half of the 20th century (Gershuny and Robinson 1988; Bianchi et al. 2000). A trend noted but not further explored by Bianchi et al. (2000) is that housework time has decreased more for unemployed women than employed women, which could be explained by differences in income, mirroring past trends of middle-class women outsourcing housework.

There has also been a noticeable increase in the time spent on housework by men in several European countries from the 1960s to 2000s (Hook 2006), and also between 1965 and 1995 in the US (Bianchi et al. 2000). However, the increase has not led to an equalisation in housework hours, with Bianchi et al. (2000) noting a stagnation in men's housework hours in the US from 1985. There are varying differences in housework time within couples across countries (Hook 2006), but Bianchi et al.'s (2000) estimate from the US suggests that women still spent around twice as much time as men doing housework at the end of the 20th century. Moreover, there is a continued pattern of women doing more of the core housework tasks of cooking, cleaning, and laundry, compared to the other tasks which may be more ad hoc, even as the difference in total number of hours has become more even over time (Baxter 2002; Bianchi et al. 2000). This makes a difference in the *quality* of time for both genders, given that core housework, compared to other housework like repairs, is repetitive, neverending, and less enjoyable (Wacjman 2015). In coupled households, there are suggestions that overall housework time has fallen, as women's time has decreased more than men's time has increased (Baxter 2002; Bianchi et al. 2000).

Despite the decline in availability and use of servants after the war, the demand for domestic service never completely went away, such as in the UK, but rather took another form of casual help or 'char women' which were in great numbers by the 1950s (Todd 2009; Delap 2011) and later met by a growing domestic service sector from the 1980s (Delap 2011). Anderson (1997) notes the widespread trend at the end of the 20th century to hire live-in domestic help across Europe, who are often labour migrants.

6. Discussion

6.1. Changing contents and volume of housework

While housework is always needed, tasks have been transformed, added, or eliminated in pace with cultural, economic and technological changes. In terms of long-term trends in time-use, there are large gaps in the available data, but it appears that there was a significant increase in housework time between Early Modernity and Industrial Capitalism, peaking in the early 20th century before falling. A long-term trend which can be observed is a general increase in standards in terms of housework's quality and quantity. It may have improved people's quality of life, but has also raised expectations accordingly, sometimes resulting in a drive towards superfluous and environmentally unsustainable levels of consumption. The increase in standards may also explain why housework time has not significantly reduced despite major technology gains in housework. It is also comparable to the trend of productivity gains from technology being diverted towards growth rather than leisure (Black 1986; Schor 1991), reflecting a Jevons paradox where increased efficiency in the use of resources increases overall resource use (Alcott 2005). At the individual household level, it has also been found that time spent on housework is influenced more by expenses than by income, and both have a positive correlation with housework time, i.e. spending more buying products did not reduce time spent on housework (Tanimoto 2011). The above observations can be useful in considering the varying proposals related to housework time and the relationship between housework time, paid working time, the environment, and people's well-being.

On one hand, postwork advocates call for housework time to be reduced (Schor 1991; Hester and Srnicek 2024), and housework time has been associated with negative well-being effects (Boye 2010). However, it is crucial that time liberated from housework not be simply diverted to waged work, as observed in the late 20th century trend with increasing female labour force participation. Meanwhile, if liberated housework time is used for leisure, the possible net environmental effect should be considered, as WTR studies have warned of significant rebound effects when increased leisure time is devoted to energy and resource intensive activities like air travel (Shao and Rodríguez-Labajos 2016).

On the other hand, when considered in relation to paid working time and income, increased housework time may fit into WTR's goals of promoting socio-environmental benefit. The prevailing empirical evidence corroborates the idea that WTR can have environmental benefits, with its influence most likely through stabilising consumption through reduced income ('scale effect') (Knight et al. 2013; Pullinger 2014). As housework time may make up for a lower income to deliver services for people's wellbeing (Zick et al. 2008), increasing it may facilitate reducing paid working time and its environmental benefits without compromising on people's well-being. WTR may also have what Knight et al. (2013) term a 'compositional effect', whereby environmental benefits are reaped from changing the way people consume, besides lowering their income. For example, people have more time to do the same housework and may therefore use less resource intensive but timesaving devices for, say, making their meals (Kallis et al. 2013). For example, D'Alisa and Cattaneo (2013) found that in Spain, household work (including caring for other members of family) can be more energy intensive if they are carried out through the market instead of as unpaid work at home.

However, much more empirical evidence is needed to better understand the possible socio-environmental effects of different time allocation patterns between various activities. Currently, the growing body of WTR empirical studies rarely factor in unpaid work (Hanbury et al. 2023). Therefore, building on the pioneering work of feminist economics in incorporating unpaid work into macroeconomic models (Folbre 2009), future empirical WTR studies should similarly consider unpaid work, or housework specifically.

6.2. Changing and persistently uneven distribution of housework

There is great diversity in how western societies at different times organised housework, within households but also in the wider society and economy, often reproducing inequalities. A persistent gender gap in housework time noted by time-use studies can be similarly observed in the longue durée. While this paper did not examine the effects of housework time on well-being throughout history, contemporary studies such as Glass & Fujimoto (1994) have found that housework time for both genders is positively correlated with depression.

Moreover, relating to the gap in gender division of household labour for the debate on collective versus voluntary WTR (Husson and Trillet 2015), we should be attentive to the distribution of *total* working time including time in both paid and unpaid work. For example, women's labour force participation may have been a factor in lowering housework time for the married woman in early modernity (Ogilvie 2003; Whittle and Hailwood, 2020; Whittle 2024) or in the late 20th century (Bianchi et al. 2000). While total workload for the former case is hard to ascertain, there is evidence for female employment trends in the latter period being characterised by part-time work and lowering working time average (Zwickl et al. 2016), which can distort our understanding of WTR trends. As Nørgård (2013) points out, working hours per employee may have remained similar in Nordic countries over the last three decades, but working hours per family have increased, so greater female participation in the labour force through part-time employment may actually increase overall working hours. Moreover, housework time may contribute to gendered negative well-being effects through contributing to higher total working time for women (Boye 2010).

Nonetheless, a narrow focus on gender equity of work within the household may fail to address intersectional inequalities, as reducing women face's time in unpaid housework (and caring work) may come at the expense of marginalising other women through outsourcing paid domestic work (Dengler and Strunk 2018). Indeed, domestic service has been and continues to be a marginalised occupation throughout history (Sarti 2014) and should be considered in policy and further research on WTR. As noted by Romero (1992), the study of paid domestic workers and unpaid housewives often remain disparate despite their interrelatedness. Meanwhile, household division of labour studies from the 20th century onwards rarely factor in the work time of domestic workers employed by households.

Another aspect of distribution that could be explored is whether doing housework with others can be more efficient, equitable, and also more enjoyable, even if they involve 'drudgery'. For example, we see weaving done in groups in the Primitive Societies period (Barber 1995). Meanwhile, the concentration of housework on the housewife, especially from the Industrial Capitalism period onwards, is not only inequitable (Hester and Srnicek 2024), but also isolating politically (Strasser 1982) and socially (Oakley, 1985 [1974]). Indeed, there have been many ideas and experiments which aimed to distribute housework

differently throughout history, such as collectivised housework in communitarian socialist communities, or urban housework cooperatives, often featuring communal facilities (Hayden 1982). Moreover, housework done at a larger scale beyond the family unit can also respond to the trend of increasingly small and single-person households (Hester and Srnicek 2024). The sharing of appliances may also reduce one's environmental footprint significantly, such as shared versus private laundry, with a case study in Sweden estimating 26% lower emissions for the former (Klint and Peters 2021). Besides socialising housework through shared facilities or better remunerated labour for commercialised services (Hester and Srnicek 2024), we can also consider bolder reforms, such as the Universal Civil Service (USC) proposal discussed by Gómez-Baggethun (2023), in which a part of the economy for meeting everyone's basic needs is collectivised and staffed by a civil service with a working time that is reduced over the lifespan of the service provider.

6.3. Factors affecting housework and distribution

It is also worth discussing some of the cultural, technological, and socio-economic factors and their interplay which underlie the observed trends described above, to illuminate areas for further research on how to influence the future of housework in its time, contents, and distribution. Overall, for both time and distribution, technology does not seem to be a key factor, compared to socio-economic and cultural ones.

Technology's role in reducing housework time has perhaps been limited, compared to adjacent socio-economic and cultural factors, as widely studied for the Industrial Capitalism period (Cowan 1983; Wacjman 2015; Hester and Srnicek 2024). Another historical example of this dynamic can be seen in Hayden et al.'s (2016) example of increased use of grinding tools for grains by the Natufians in the Primitive Societies period due to cultural reasons, as it initially signified higher social status, despite technically increasing the physical effort and time needed to process food. It is also worth noting that compared to the distribution of housework time, there is perhaps less contemporary research interest in factors influencing the overall demand for housework and its time (Treas and Lui 2013), although it is very relevant in a WTR context.

Meanwhile, domestic appliance technology in the Industrial Capitalism period has also been noted to cater to the social norm of individual households and families (Cowan 1983; Hester and Srnicek 2024), which emerged alongside trends at the turn of the 20th century such as the decline of servants (Hester and Srnicek 2024), and perhaps cultural influence from the domestic movement (Strasser 1982). While housework was already gendered before, these socio-cultural shifts may have further concentrated it on the individual housewife (Hester and Srnicek 2024). The gendered norm also extends to the present, with contemporary evidence from time-use studies of its importance in contributing to the gap in housework time (Baxter 2002). There have thus been more recent proposals to look at the influence of national level factors related to gender such as policies and societal norms on the gender division of paid and unpaid labour (Hook 2006; Gottlieb et al. 2024).

6.4. Limitations

By drawing on studies from various disciplines to investigate the contents, volume, and distribution of housework across time periods, this paper's contribution is limited in several ways. Given the reliance on studies that have varying research focuses, scopes, and definitions, there is a general limitation of interpreting studies in which housework is not defined by the author as it is not the main interest of the study, such as in studies of Classical Antiquity. Some valuable time-use studies were also excluded due to challenges in harmonising definitions and scopes of housework (e.g. Ramey and Francis 2009). Also, the findings may reflect biases when it comes to reflecting the distribution of housework, such as time-use studies which focus on middle-aged adults, although children and elderly may contribute significantly to housework. While this does not pose a serious challenge to the consensus that women have and continue to disproportionately carry the burden of housework, it may limit our understanding of examples from history whereby others could have also stepped up.

On the other hand, what is encouraging in view of these differences in studies from various disciplines is the converging interest on unpaid work, and as a consequence, on common units of measurement across history and how to meaningfully define it across time (Whittle 2019). Examples of the former which pertain to time include reconstructed

time-use budgets (Humphries and Thomas 2022), experimental data for spinning and weaving time (Smith 2020), and the group of early modernity studies (Ogilvie 2003; Whittle 2024; Whittle and Hailwood 2020). It is thus hopeful that with more research in the future, our understanding of historical housework time can be further enriched.

Finally, while time is an important variable in understanding changes in historical working time, it is also necessary to consider complementary qualitative methods to understand it in more diverse ways (Doucet, 2022). Given that clock-time only became increasingly widespread from the 14th century, time is not only experienced differently by a worker in pre-industrial time compared to someone today (Ellul 1964; Negrey 2012), but also for someone doing housework at home. Besides the experience of time, there may also be differences in work intensity (e.g. cooking over a fireplace versus using the microwave), and both remind us of the limits to which working time can be compared across varying time periods, production systems, and technologies (Gómez-Baggethun 2022).

7. Conclusion

Recognising that unpaid work is often neglected in mainstream discussions of work, this research is an explorative inquiry into the changing role and nature of specifically housework in the longue durée. Referring to studies from various disciplines, I have sought to describe housework's contents, volume, and distribution across five historical periods in the Western context, focusing on the unpaid form, but also with some attention to its paid form.

The broad trends in housework's contents and time-use identified here adds to ongoing debates in WTR, especially in relation to gender. The difficulty in reducing housework time significantly despite productivity gains due to technology, perhaps parallels the dynamics of ever-expanding work under capitalism to feed growth, facilitated by efficiency. Yet, looking to the future, there is potential for housework to be less resource intensive than market work in meeting people's needs, but the dynamics between housework time, paid working time, the environment, and people's well-being need to be better understood. In terms of distribution, the history of housework reveals persistent inequalities in housework along

gender and class, and should not be neglected in WTR discussions. Historical examples also hint at the possibilities of organising and sharing housework outside of the household.

A brief discussion of factors affecting housework suggests the need to emphasise cultural and social aspects. Finally, the need for more research from different disciplines and fields to understand housework in the longue durée, such as to better quantify and value working time historically, is discussed in the context of this study's limitations.

Overall, the findings highlight that in the pursuit of a future of work that is more equitable, in a way that meets their needs, and that does not come at the expense of the environment (Gómez-Baggethun 2022), housework should be recognised, valued, and accounted for (Waring 1988). There is a critical and overdue need to incorporate unpaid work such as housework into WTR studies and analyses.

8. References

Aristotle (1944 [350 BCE.]) *Politics*, H Rackham (trans). Cambridge: MA: Harvard University Press.

Alcott B (2005) Jevons' paradox. *Ecological Economics* **54**(1), 9–21. https://doi.org/10.1016/j.ecolecon.2005.03.020

Anderson B (1997) Servants and slaves: Europe's domestic workers. *Race & Class* **39**(1), 37-49. https://doi.org/10.1177/030639689703900104

Arwen Palmer M (1992) Women, work and technology: The steam laundry industry in the United States and Great Britain, 1880-1920. PhD Dissertation, Department of History, Case Western Reserve University.

Arwill-Nordbladh E (2013) Ethical practice and material ethics: Domestic technology and Swedish modernity in the early twentieth century, exemplified from the life of Hanna Rydh. In Spencer-Wood SM (ed), *Historical and Archaeological Perspectives on Gender Transformations: From Private to Public.* New York: Springer, 275–303.

Ashford NA and Kallis G (2013) *A four-day workweek: A policy for Improving Employment and Environmental Conditions in Europe*. *The European Financial Review* April–May 2013, 53-58.

Barber EJW (1995) *Women's Work: The First 20,000 years - Women, Cloth, and Society in Early Times*. New York: W.W. Norton & Company.

Baxter J (2002) Patterns of change and stability in the gender division of household labour in Australia, 1986–1997. *Journal of Sociology* **38**(4), 399–424. https://doi.org/10.1177/144078302128756750

Bennett JM (1986) The village ale-wife: Women and brewing in fourteenth-century England. In Hanawalt BA (ed), *Women and Work in Preindustrial Europe*. Bloomington, IN: Indiana University Press, 20–36.

Bianchi SM, Milkie MA, Sayer LC and Robinson JP (2000) Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, **79**(1), 191–228. https://doi.org/10.1093/sf/79.1.191

Black B (1986) *The Abolition of Work and Other Essays*. Port Townsend, WA: Loompanics Unlimited.

Bose CE, Bereano PL and Malloy M (1984) Household technology and the social construction of housework. *Technology and Culture* **25**(1), 53–82. https://doi.org/10.2307/3104669

Bradley M (2002) 'It all comes out in the wash': Looking harder at the Roman fullonica. *Journal of Roman Archaeology* **15**, 20–44. https://doi.org/10.1017/S1047759400013829

Braudel F and Wallerstein I (2009) History and the social sciences: The longue durée. *Review (Fernand Braudel Center)* **32**(2), 171–203. https://www.jstor.org/stable/40647704

Boye K (2010) Time spent working. *European Societies* **12**(3), 419–442. https://doi.org/10.1080/14616691003716928

Cambridge Dictionary (n.d.). Work. Available at https://dictionary.cambridge.org/dictionary/english/work (accessed 13 May 2024).

Campbell TT (2023) The four-day work week: A chronological, systematic review of the academic literature. *Management Review Quarterly*. https://doi.org/10.1007/s11301-023-00347-3

Clark G (1981). Roman women. *Greece & Rome* **28**(2), 193–212. https://www.jstor.org/stable/642866

Cowan RS (1983). *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*. New York: Basic Books.

Daniels AK (1987) Invisible work. *Social Problems* **34**(5), 403–415. https://doi.org/10.2307/800538

D'Alisa G and Cattaneo C (2013) Household work and energy consumption: A degrowth perspective. Catalonia's case study. *Journal of Cleaner Production* **38**, 71–79. https://doi.org/10.1016/j.jclepro.2011.11.058

Delap L (2011) Housework, housewives, and domestic workers: Twentieth-century dilemmas of domesticity. *Home Cultures* **8**(2), 189–209. https://doi.org/10.2752/175174211X12961586699801

Dengler C and Strunk B (2018) The monetized economy versus care and the environment: Degrowth perspectives on reconciling an antagonism. *Feminist Economics* **24**(3), 160–183. https://doi.org/10.1080/13545701.2017.1383620

Doucet A (2022) “Time is not time is not time”: A feminist ecological approach to clock time, process time, and care responsibilities. *Time & Society* **32**(4), 434–460. https://doi.org/10.1177/0961463X221133894

Downs LL (2018) Conclusion: Can we construct a holistic approach to women’s labor history over the longue durée? In Sarti R, Bellavitis A, and Martini M (eds), *What is Work?: Gender at the Crossroads of Home, Family, and Business from the Early Modern Era to the Present*. New York, Oxford: Berghahn Books, 349–367.

Draznin Y (2001) *Victorian London’s Middle-class Housewife: What She Did All Day*. Westport, CT: Greenwood Press.

Duffy M (2011) *Making Care count: A Century of Gender, Race, and Paid Care Work*. New Brunswick, NJ: Rutgers University Press.

Ehrenreich B and English D (1978) *For Her Own Good: 150 Years of the Experts’ Advice to Women*, 1st edn. New York: Anchor Press.

Eichler M and Albanese P (2007) What Is household work? A critique of assumptions underlying empirical studies of housework and an alternative Approach. *Cahiers Canadiens de Sociologie* [The Canadian Journal of Sociology] **32**(2), 227–258. https://doi.org/10.2307/20460633

Ellul J (1964) *The Technological Society,* J Wilkinson (trans). New York: Vintage books.

Federici S (1975) *Wages Against Housework*. Bristol, UK: Falling Wall Press for the Power of Women Collective.

Federici S (2021 [2005]) *Caliban and the Witch: Women, the Body and Primitive Accumulation*. London: Penguin Classics.

Fernández-Kranz D and Rodríguez-Planas N (2021) Too family friendly? The consequences of parent part-time working rights. IZA Discussion Paper No. 14548, IZA Institute of Labor Economics. Available at https://doi.org/10.1016/j.jpubeco.2021.104407 (accessed 13 May 2024).

Folbre N (2009) Time use and living standards. *Social Indicators Research*, **93**(1), 77–83.

https://www.jstor.org/stable/27734898

Fraser N (2016) Contradictions of capital and care. *New Left Review* 100, 99–117.

Frayne D (2015) *The Refusal of Work: The Theory and Practice of Resistance to Work*. London: Zed Books.

Garnsey P (2006) *Food and Society in Classical Antiquity*. Cambridge: Cambridge University Press.

Gerold S, Hoffmann, M and Aigner E (2023) Towards a critical understanding of work in ecological economics: A postwork perspective. *Ecological Economics*, ***212***, 107935.

Gershuny J and Harms TA (2016) Housework now takes *much* less time: 85 years of US rural women's time use. *Social Forces* **95**(2), 503–524. https://doi.org/10.1093/sf/sow073

Gershuny J and Robinson JP (1988) Historical changes in the household division of labor. *Demography* **25**(4), 537–552. https://doi.org/10.2307/2061320

Glass J and Fujimoto T (1994) Housework, paid work, and depression among husbands and wives. *Journal of Health and Social Behavior* **35**(2), 179–191. https://doi.org/10.2307/2137364

Gómez-Baggethun E (2022) Rethinking work for a just and sustainable future. *Ecological Economics* **200**, 107506. https://doi.org/10.1016/j.ecolecon.2022.107506

Gómez-Baggethun E (2023) Work and needs in a finite planet: Reflections from ecological economics. In Villamayor-Tomas S and Muradian R (eds), *The Barcelona School of Ecological Economics and Political Ecology: A Companion in Honour of Joan Martinez-Alier*. Cham: Springer, 357–366.

Gorz A (1999) *Reclaiming Work: Beyond the Wage-based Society*. Cambridge: Polity Press.

Gottlieb C, Doss C, Gollin D, and Poschke M (2024) The gender division of work across countries. IZA Discussion Paper No. 16896, IZA Institute of Labor Economics. Available at https://doi.org/10.2139/ssrn.4786066 (accessed 13 May 2024).

Greco GL and Rose CM (trans) (2019 [1393]) *The Good Wife's Guide: Le Ménagier de Paris: A Medieval Household Book*. Ithaca and London: Cornell University Press.

Hanawalt B (1986) 1. Peasant women's contribution to the home economy in late medieval England.

In *Women and Work in Preindustrial Europe*. Bloomington, IN: Indiana University Press, 3–19.

Hanbury H, Illien P, Ming E, Moser S, Bader C and Neubert S (2023) Working less for more? A systematic review of the social, economic, and ecological effects of working time reduction policies in the global North. *Sustainability: Science, Practice and Policy* **19**(1), 2222595. https://doi.org/10.1080/15487733.2023.2222595

Hardyment C (1990) *From Mangle to Microwave: The Mechanization of Household Work*. Cambridge: Polity.

Hayden B, Nixon-Darcus L and Absekk L (2016) Our 'daily bread'?: The origins of grinding grains and breadmaking. In Steel L and Zinn K (eds), *Exploring the Materiality of Food 'Stuffs'.* London: Routledge, 57–78.

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

Hearn M (1993) *Below Stairs: Domestic Service Remembered in Dublin and Beyond, 1880–1922*. Dublin: Lilliput Press.

Hensman R (2011) Revisiting the domestic-labour debate: An Indian perspective. *Historical Materialism* **19**(3), 3–28. https://doi.org/10.1163/156920611X592850

Hersch J and Stratton LS (2002) Housework and wages. *The Journal of Human Resources* **37**(1), 217. https://doi.org/10.2307/3069609

Hester H and Srnicek N (2024) *After Work: A History of the Home and the Fight for Free Time*. London, New York: Verso Books.

Hook JL (2006) Care in context: Men's unpaid Work in 20 Countries, 1965–2003. *American Sociological Review* **71**(4), 639–660. https://doi.org/10.1177/000312240607100406

Humphries J (2024) Careworn: The economic history of caring labor. *The Journal of Economic History*, 1–33. https://doi.org/10.1017/S0022050724000147

Humphries J and Thomas R (2022) 'The best job in the world': Breadwinning and the capture of household labor in nineteenth and early twentieth-century British coalmining. *Feminist*

Economics **29**(1), 97–140. https://doi.org/10.1080/13545701.2022.2128198

Hunnicutt BK (1992) Kellogg's six-hour day: A capitalist vision of liberation through managed work reduction. *The Business History Review* **66**(3), 475–522. https://doi.org/10.2307/3116979

Husson M and Trillet S (2015) Liberation through vacation, Ghamsharick E and Berg S (trans). *Jacobin*, 1 June. Available at https://jacobin.com/2015/06/35-hour-workweek-france-vacation (accessed 5 May 2024).

International Labour Organization (ILO) (2018) Executive Summary: Care Work and Care Jobs for the Future of Decent Work. Available at: https://www.ilo.org/global/publications/books/WCMS_633166/lang--en/index.htm (accessed 5 May 2024).

Ironmonger D (1996) Counting outputs, capital inputs and caring labor: Estimating gross household product. *Feminist Economics* **2**(3), 37–64. https://doi.org/10.1080/13545709610001707756

Jochens J (1995) *Women in Old Norse Society*. New York, London: Cornell University Press.

Jochimsen M and Knobloch U (1997) Making the hidden visible: The importance of caring activities and their principles for any economy. *Ecological Economics* **20**(2), 107–112. https://doi.org/10.1016/S0921-8009(95)00099-2

Kallis G, Kalush M, O.'Flynn H, Rossiter J, and Ashford N (2013) "Friday off": Reducing working hours in Europe. *Sustainability* **5**(4), 1545–1567. https://doi.org/10.3390/su5041545

Klint E and Peters G (2021) Sharing is caring—The importance of capital goods when assessing environmental impacts from private and shared laundry systems in Sweden. *The International Journal of Life Cycle Assessment* **26**(6), 1085–1099. https://doi.org/10.1007/s11367-021-01890-5

Knight KW, Rosa, EA, and Schor, JB (2013) Could working less reduce pressures on the environment? A cross-national panel analysis of OECD countries, 1970–2007. *Global Environmental Change* **23**(4), 691–700. https://doi.org/10.1016/j.gloenvcha.2013.02.017

Komlosy A (2018) *Work: The Last 1,000 Years*, Watson JK and Balhorn L (trans). London, New York:

Verso.

Lafargue P (1883) *The Right To Be Lazy*. Chicago: C.H. Kerr & Company

Lee RB (1968) What hunters do for a living, or, how to make out on scarce resources. In Lee RB and DeVore I (eds), *Man The Hunter: The First Intensive Survey of a Single, Crucial Stage of Human Development: Man's Once Universal Hunting Way of Life*, 1st edn. Chicago: Aldine Publishing Company.

Lovén LL (2013) Female work and identity in Roman textile production and trade: A methodological discussion. In Gleba M and Pásztókai-Szeőke J (eds), *Making Textiles in Pre-Roman and Roman Times: People, Places, Identities*. United Kingdom: Oxbow Books.

Lovén LL (2019) 3. The Invisible Women of Roman Agrarian Work and Economy. In Rantala J (ed), *Gender, Memory, and Identity in the Roman World*. Amsterdam: Amsterdam University Press, 89–104.

Marx K (1887) *Capital: Volume I*, Engels F (ed), Moore S and Aveling E (trans), 1st English edn. Moscow: Progress Publishers.

Negrey C (2012) *Work Time: Conflict, Control and Change*. Malden, MA, Cambridge, UK: Polity Press.

Nørgård JS (2013) Happy degrowth through more amateur economy. *Journal of Cleaner Production* **38**, 61–70. https://doi.org/10.1016/j.jclepro.2011.12.006

Oakley A (1985 [1974]) *The Sociology of Housework*. Oxford: Basil Blackwell.

Ogilvie SC (2003) *A Bitter Living: Women, Markets, and Social Capital in Early Modern Germany*. New York: Oxford University Press.

Piasna A and De Spiegelaere S (2021) Working time reduction, work-life balance and gender equality. *Dynamiques Régionales* [Regional Dynamics] **10**(1), 19–42. https://www.cairn.info/revue-dynamiques-regionales-2021-1-page-19.htm

Pullinger M (2014) Working time reduction policy in a sustainable economy: Criteria and options for its design. *Ecological Economics* **103**, 11–19. https://doi.org/10.1016/j.ecolecon.2014.04.009

Ramey VA and Francis N (2009) A century of work and leisure. *American Economic Journal:*

Macroeconomics **1**(2), 189–224. https://doi.org/10.1257/mac.1.2.189

Robertson UA (1997) *The Illustrated History of the Housewife, 1650–1959*. New York: St. Martin's Press.

Rolfson TG (2021) Women and the Labour of Laundry in the English Eighteenth Century. Master Dissertation, Department of History & Classics, University of Alberta, Edmonton.

Romero M (1992) *Maid in the U.S.A*. London and New York: Routledge.

Sahlins MD (1972) *Stone Age Economics*. Chicago and New York: Aldine-Atherton, Inc.

Sarti R (2014) Historians, social scientists, servants, and domestic workers: Fifty years of research on domestic and care Work. *International Review of Social History* **59**(2), 279–314. https://doi.org/10.1017/S0020859014000169

Schor JB (1991) *The Overworked American: The Unexpected Decline of Leisure*. New York: Basic Books.

Sen S (2019) The problem of reproduction: waged and unwaged domestic work. In Chakraborty A, Chakrabarti A, Dasgupta B and Sen S (eds), *'Capital' in the East: Reflections on Marx*. Singapore: Springer, 173–193.

Shao QL and Rodríguez-Labajos B (2016) Does decreasing working time reduce environmental pressures? New evidence based on dynamic panel approach. *Journal of cleaner production*, **125**, 227-235.

Shelton BA and John D (1996) The division of household labor. *Annual Review of Sociology* **22**(1), 299–322. https://doi.org/10.1146/annurev.soc.22.1.299

Sirianni C and Negrey C (2000) Working time as gendered time. *Feminist Economics* **6**(1), 59–76. https://doi.org/10.1080/135457000337679

Smith MH (2020) *The Valkyries' Loom: The Archaeology of Cloth Production and Female Power in the North Atlantic*. Gainesville, FL: University Press of Florida.

Stewart CA (2021) Household accounts: Black domestic workers in southern white spaces during the Great Depression. *Journal of American History* **108**(3), 492–520.

https://doi.org/10.1093/jahist/jaab230

Strasser S (1982) *Never Done: A History of American Housework,* 1st edn. New York: Pantheon Books.

Sullivan O (2013) What do we learn about gender by analyzing housework separately from child care? Some considerations from time-use evidence. *Journal of Family Theory & Review* **5**(2), 72–84. https://doi.org/10.1111/jftr.12007

Tanimoto M (2011) The role of housework in everyday life: Another aspect of consumption in modern Japan. In Francks P and Hunter J (eds), *The Historical Consumer: Consumption and Everyday Life in Japan, 1850-2000*. London: Palgrave Macmillan. https://doi.org/10.1057/9780230367340.0009

Todd S (2009) Domestic service and class relations in Britain 1900–1950. *Past & Present* **203**(1), 181–204. https://doi.org/10.1093/pastj/gtp014

Toupin L (2018) *Wages for Housework: A History of an International Feminist Movement, 1972–77*, Roth K (trans), 1st English edn. Vancouver: UBC Press; London: Pluto Press.

Treas J and Lui J (2013) Studying housework across nations. *Journal of Family Theory & Review* **5**(2), 135–149. https://doi.org/10.1111/jftr.12006

Voglino G, Savatteri A, Gualano MR, Catozzi D, Rousset S, Boietti E, Bert F and Siliquini R (2022) How the reduction of working hours could influence health outcomes: A systematic review of published studies. *BMJ Open* **12**(4), e051131. https://doi.org/10.1136/bmjopen-2021-051131

Waguespack NM (2005) The organization of male and female labor in foraging societies: Implications for early Paleoindian archaeology. *American Anthropologist* **107**(4), 666–676. https://doi.org/10.1525/aa.2005.107.4.666

Wajcman J (2015) *Pressed for Time: The Acceleration of Life in Digital Capitalism.* Chicago, London: University of Chicago Press.

Ward JC (2016) *Women in Medieval Europe, 1200-1500*. Abingdon, UK: Routledge.

Waring M (1988) *If Women Counted: A New Feminist Economics*. New York: Harper & Row.

Watts D (2005) *Boudicca's Heirs: Women in Early Britain*. London: Routledge.

Weatherill L (1996) *Consumer Behaviour and Material Culture in Britain: 1660–1760*, 2nd edn. London and New York: Routledge.

Whittle J (2005) Housewives and servants in rural England, 1440–1650: Evidence of women's work from probate documents. *Transactions of the Royal Historical Society* **15**, 51–74. https://doi.org/10.1017/S0080440105000332

Whittle J (2014) Enterprising widows and active wives: Women's unpaid work in the household economy of early modern England. *The History of the Family* **19**(3), 283–300. https://doi.org/10.1080/1081602X.2014.892022

Whittle J (2019) A critique of approaches to 'Domestic Work': Women, work and the pre-Industrial Economy. *Past & Present* **243**(1), 35–70. https://doi.org/10.1093/pastj/gtz002

Whittle J (2024) Putting women back into the early modern economy: Work, occupations, and economic development. *The Economic History Review*. https://doi.org/10.1111/ehr.13323

Whittle J and Hailwood M (2020) The gender division of labour in early modern England. *The Economic History Review* **73**(1), 3–32. https://doi.org/10.1111/ehr.12821

Zacharias A, Rios-Avila F, Folbre N and Masterson T (2024) *Integrating nonmarket consumption into the Bureau of Labor Statistics Consumer Expenditure Survey*. Levy Economics Institute of Bard College.

Zick CD, Bryant WK and Srisukhumbowornchai S (2008) Does housework matter anymore? The shifting impact of housework on economic inequality. *Review of Economics of the Household* **6**(1), 1–28. https://doi.org/10.1007/s11150-007-9020-3

Zuzanek J and Smale BJA (1997) More work—less leisure? Changing allocations of time in Canada, 1981 to 1992. *Loisir et Société* [Society and Leisure] **20**(1), 73–105. https://doi.org/10.1080/07053436.1997.10715538

Zwickl K, Disslbacher F and Stagl S (2016) Work-sharing for a sustainable economy. *Ecological Economics* **121**, 246–253. https://doi.org/10.1016/j.ecolecon.2015.06.009

Appendix I: Housework time estimates in seven studies on housework tasks

Source	Sample Size	Country	Context	Year	Food Preparation (hrs/wk)	Laundry (hrs/wk)	Cleaning (hrs/wk)	Other Housework (hrs/wk)	Total Core (hrs/wk) (Food Preparation + Laundry + Cleaning)	Total (hrs/wk) (Core + Other Housework)	Data Source
Weatherill (1996)	-	England	Household	18th Century	21 to 28 - preparation of meals	4 (+2 days a year)	14 (+2 days per year)	Shopping -12 days a year Keeping Fire in - 7 per week 8 - Getting Food and Water (+ 2 days per year to preserve food)	54-61 hours core housework (excluding yearly tasks)		
Humphries and Thomas (2022)	-	England	Colliery Households	19th Century	11 **	5 **	7*	Shopping - 4 Servicing coal fires - 5	23	32	
Gershuny & Harms (2016)* **		US	Rural Married Women	1920s	-	-	-	Heating, Water, Yard Work - 1.98 Shopping - 2.68	43.2	47.86	
		US	Rural Married Women	1975	-	-	-	Heating, Water, Yard Work - 0.7 Shopping - 9.1	24.3	34.1	
		US	Rural Married Women	2000s	-	-	-	Heating, Water, Yard Work - 0.47 Shopping - 9.3	15.75	25.05	
Bianchi et al. (2000)	N = 452	United States	Aged 25-64 Married Women	1965	15.7	6.6	8.1	Other housework^ - 3.6	30.4	34	Time-use Diary

	N = 416	United States	Aged 25-64 Married Men	1965	1.3	0.1	0.4	Other housework^ - 2.9	4.7	7.6	
	N = 722	United States	Aged 25-64 Married Women	1975	11.8	3.8	7.3	Other housework^ - 3.1	22.9	26.1	
	N = 678	United States	Aged 25-64 Married Men	1975	1.3	0.1	0.4	Other housework^ - 4.9	1.9	6.7	
	N = 1175	United States	Aged 25-64 Married Women	1985	10.1	2.7	5.6	Other housework^ -3.5	18.4	21.9	
	N = 1041	United States	Aged 25-64 Married Men	1985	2.3	0.3	1.4	Other housework^ - 6.4	4.0	10.4	
	N = 296	United States	Married Women	1995	6.2	2.4	7.1	Other housework^ 3.7	19.4	23.1	
	N = 211	United States	Married Men	1995	1.6	0.3	1.9	Other housework^ 6.7	10.4	17.1	
Zuzanek an Smale (1997)	N = 2685 (total)	Canada	Employed Female aged 20-64	1981	7.19	5.73		Shopping and Errands - 5.09 Others - 1.93	12.92	19.94	TIme-us e Survey
			Employed Male aged 20-64	1981	2.49	4.2		Shopping and Errands - 3.48 Others - 2.47	6.69	12.64	
	N = 9946 (total)		Employed Female aged 20-64	1986	7.07	6.13		Shopping and Errands - 6.93 Others - 0.79	13.2	20.92	
			Employed Male	1986	1.66	4.24		Shopping and Errands - 4.85	5.9	11.44	

			aged 20-64					Others - 0.69			
	N = 9815 (total)		Employed Female aged 20-64	1992	7.04	7.22		Shopping and Errands - 5.48 Others - 1.49	14.26	21.23	
			Employed Male aged 20-64	1992	2.30	4.43		Shopping and Errands - 3.75 Others - 1.87	6.73	12.35	
Hersch and Stratton (2002)	N=2247	United States	Employed, Aged 18-65 Married Women	1987-1988 And 1992-94	12.62	3.96	6.09	Shopping - 2.47 Outdoor and Maintenance - 1.53 Auto repair - 0.17 Bills - 1.47 Driving others - 1.52	22.67	29.83	TIme-use Survey
	N= 2495		Employed, Aged 18-65 Married Men	1987-1988 And 1992-94	4.52	0.77	1.87	Shopping - 1.44 Outdoor and Maintenance - 4.96 Auto repair - 1.66 Bills - 1.34 Driving others - 1.11	7.16	17.67	
	N=521		Employed, Aged 18-65 Never-Married Women	1987-1988 And 1992-94	8.57	2.6	3.99	Shopping - 2.04 Outdoor and Maintenance - 1.32 Auto repair - 0.6 Bills - 1.49 Driving others - 0.56	15.16	21.17	
	N= 641		Employed, Aged 18-65 Never-Married Men	1987-1988 And 1992-94	6.2	1.55	2.55	Shopping - 1.65 Outdoor and Maintenance - 2.46 Auto repair - 1.34 Bills - 1.51 Driving others - 0.56	10.3	17.83	
Baxter (2002)	N = 471	Australia 2	Employed Married/ Cohabiting Men between 18 and 54	1986	7	3		Shopping - 1	10	11	Time-Survey

	N = 618		Employed Married/ Cohabiting Men between 18 and 54	1993	6	3	Shopping - 1	9	10	
	N = 545		Employed Married/ Cohabiting Men between 18 and 54	1997	5	3	Shopping - 1	8	9	
	N = 325		Employed Married/ Cohabiting Women between 18 and 54	1986	14	10	Shopping - 2	24	26	
	N = 546		Employed Married/ Cohabiting Women between 18 and 54	1993	16	12	Shopping - 3	28	31	
	N = 572		Employed Married/ Cohabiting Women between 18 and 54	1997	10	8	Shopping - 2	18	20	

*Includes turning out rooms, general cleaning and swilling and chalking pavements, but excluding colliery disamenities.

**Similarly, additional time spent on laundry, meals related to colliery shifts are excluded.

***Minutes for Household accounts, which are part of 'Other housework' are excluded as exact minutes for all three time periods are not available.

^Other housework includes: (1) Outdoor chores, (2) Repairs, (3) Gardens and animal care and (4) Bills, other financial

Appendix II: Housework categories in source studies and their re-categorisation

	Original Categories	Transformed Categories
Gershuny and Harms (2016)	Household Accounts	Excluded due to lack of precise data for all three time periods. Less than 10 minutes per day throughout the time period.
	Cooking, clearing, cleaning	Grouped together as Core Housework
	Laundry	
	Mending, Knitting, Sewing	
	Heating, Water, Yard Work	Other (retaining original titles)
	Shopping	
Humphries and Thomas (2022)	Cooking	Cooking
	Laundry	Laundry
	General Cleaning	Cleaning
	Swilling and chalking pavements	
	Turning out rooms	
	Servicing Coal fires	Other (retaining original titles)
	Shopping	
	Bathing	Excluded from scope of this paper's definition of housework
Hersch and Stratton (2002)	Meals	Cooking
	Dishes	
	Cleaning	Cleaning
	Laundry	Laundry
	Shopping	Other (retaining original titles)
	Outdoor and Maintenance	
	Auto-repair	
	Bills	
	Driving Others	
Bianchi et al. (2000)	Cooking meals	Cooking
	Meal cleanup	

	Housecleaning	Cleaning
	Laundry and Ironing	Laundry
	Outdoor chores	Other (grouped together)
	Repairs	
	Garden and animal care	
	Bills, other financial	
	Car maintenance	
Baxter (2002)	Preparing meals and cleaning up after meals	Cooking
	Cleaning the house and washing	Laundry and Cleaning
	Grocery shopping	Other (retaining original title)
Zuzanek and Smale (1997)	Meal preparation, Cleaning Dishes	Cooking
	House cleanup and maintenance	Laundry and Cleaning
	Shopping and errands	Other (retaining original title)

Appendix III: Tables for data referred to in Section 5.1.4. Early Modernity

Table A: Table showing percentage of time spent on housework in early modernity

	Ogilvie (2003)			Whittle (2019)	
	% on housework within household (both paid and unpaid)*	% on housework within household*	Total number of tasks recorded	% on housework (both paid and unpaid)	Total number of tasks recorded
Married Female	33%	27%	397	18.1%	535
Female Offspring	13%	12%	136		
Female Servants	18%	18%	107	30.7%	137
Widowed Women	20%	11%	174		
Independent Unmarried Women	7%	5%	126		
Married Men	6%	2%	1401		
Male Offspring	4%	3%	212		
Male Servants	1%	1%	217	5.7%	263
Widowed Men	17%	17%	18		
Independent Unmarried Men	0%	0%	26		

Sources: Ogilvie (2003) and Whittle (2019)

*For Ogilvie (2003), the percentages were by including lodging provision as are paid for household services, alongside laundry housekeeping and tavern keeping. For servants, all the work they do is paid, but they are also accounted for as done for within the household.

Table B: Table showing percentage of tasks spent on housework (both paid and unpaid) in England

Comparison of % of work in Housework* By Marital Status (Women)	
Never Married	23.6%
Married	18.3%
Widowed	10.7%
Comparison of % of work in Housework* between Female and Male Servants	
Female Servant	37.5%
Male Servant	5.2%

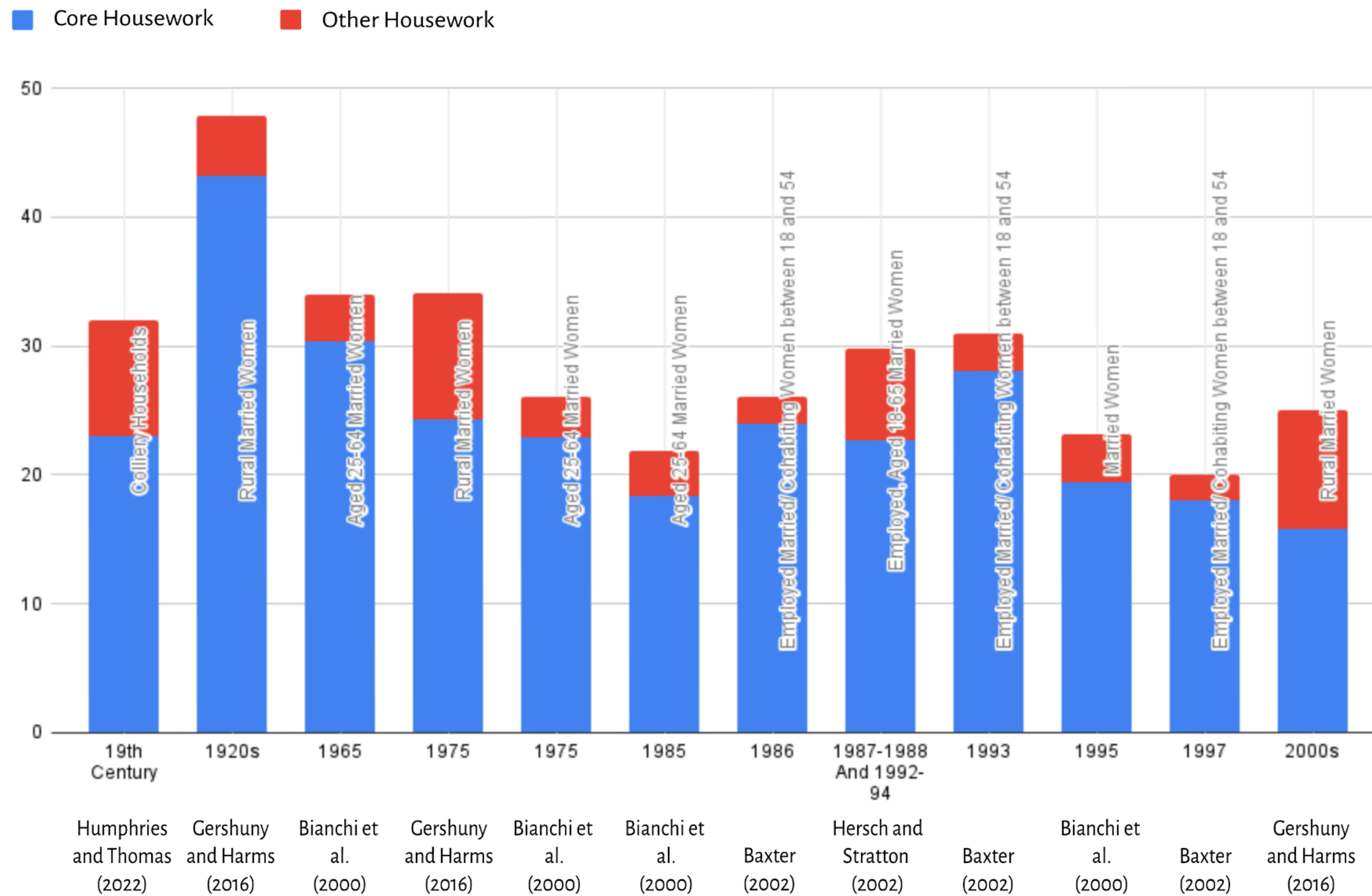
Source: Whittle (2024)

Table C: Percentage of tasks allocated to paid housework in rural Germany

Group	Total Percentage (Included Tasks)
Widowed Female	9% (Tavern-Keeping, Lodging Provision, Laundry, Housekeeping)
Married Female	6% (Tavern-Keeping, Lodging Provision)
Female Offspring	1% (Housekeeping)
Independent Unmarried Women	2% (Laundry, Lodging Provision)
Married Male	4% (Tavern-Keeping)
Male Offspring	1% (Tavern-Keeping)

Source: Ogilvie (2003

Appendix IV: Changes in time spent on housework drawing on time-use estimates from 19th century to 2000s



Sources: Humphries and Thomas (2022), Gershuny and Harms (2016), Bianchi et al. (2000), Baxter (2002), and Hersch and Stratton (2002)

Norges miljø- og biovitenskapelige universitet
Noregs miljø- og biovitskapelege universitet
Norwegian University of Life Sciences

Postboks 5003
NO-1432 Ås
Norway