# How settlement data can counterbalance male warrior elite narratives of the Bronze Age: thoughts and suggestions for future research

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# How Settlement Data Can Counterbalance Male Warrior Elite Narratives of the Bronze Age – Thoughts and Suggestions for Future Research

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***KEYWORDS:*** *settlement, gender roles, farming life*

**Abstract**

Northwest European Late Neolithic and Bronze Age societies are supposedly ruled by powerful elites who dominated critical resources and knowledge. The role of women in these societies and gender roles in general are hardly debated. I argue that this image of Late Neolithic and Bronze Age societies is distorted because the evidence for male elites is mainly based on burial evidence. In particular, from the moment onwards when weapons are presented as grave gifts to the ancestors, a neo-evolutionary interpretation of the grave goods strongly overrepresents men and their roles in society.

Moreover, if one studies settlement remains from the periods in question, hardly any evidence can be found for these male elites. Rather, when critically analysing essential tasks in farming communities, it becomes clear that female tasks must have been just as important as male tasks. Therefore, I argue that we have to place a greater focus on settlement data and apply a more holistic approach to farming life in order to create a more balanced and diverse view of gender roles in Late Neolithic and Bronze Age societies.

**Zusammenfassung**

*Die Gesellschaften des Spätneolithikums und der Bronzezeit in Nordwesteuropa werden angeblich von mächtigen Eliten beherrscht, die essentielle Ressourcen und Wissen dominierten. Die Rolle der Frauen in diesen Gesellschaften und die Geschlechterrollen im Allgemeinen werden kaum diskutiert. Ich behaupte, dass dieses Bild der Gesellschaften des Spätneolithikums und der Bronzezeit verzerrt ist, da die Belege für männliche Eliten hauptsächlich auf Bestattungsnachweisen beruhen: insbesondere ab dem Zeitpunkt, an dem Waffen als Grabbeigaben an die Vorfahren überreicht werden, werden Männer und ihre Rolle in der Gesellschaft in einer neoevolutionären Interpretation der Grabbeigaben stark überrepräsentiert.*

*Andererseits lassen sich bei der Untersuchung von Siedlungsresten aus diesen Zeiträumen kaum Belege für diese männlichen Eliten finden. Vielmehr wird bei einer kritischen Analyse wesentlicher Aufgaben in Bauerngemeinschaften klar, dass weibliche Aufgaben genauso wichtig gewesen sein müssen wie männliche Aufgaben. Daher argumentiere ich, dass wir uns stärker auf Siedlungsdaten konzentrieren und einen ganzheitlicheren Ansatz für das Leben auf einem Gehöft verfolgen müssen, um ein ausgewogeneres und vielfältigeres Bild der Geschlechterrollen in den Gesellschaften des Spätneolithikums und der Bronzezeit zu schaffen.*

## INTRODUCTION

If you mostly work on settlement Late Neolithic and Bronze Age data, it is exceedingly difficult to fit them in the warrior elite narratives that are so mainstream nowadays that hardly anyone questions them anymore. Northwest European Late Neolithic and Bronze Age societies are supposed to have been ruled by powerful elites who even were able to raise standing armies. Their main goal seems to have been to fight and concur

their enemies in search for control over scarce resources like copper, gold, tin and amber (*e.g.* Meller 2017; Bertemes *et al.* 2010). Such basically Neo-Marxist theories dominate the archaeological world since the 1970s, virtually without fundamental critique (but see Graeber and Wengrow 2021). The archaeological world seems to agree that from (at least) the Late Neolithic onwards political economies were the driving force behind everything, implicitly dividing the world into have's and have-not's, in elites and commoners, chiefs and subordinates (*e.g.* Earle 2002; 2007; Kristiansen and Larsson 2005; Kristiansen 1987; 1991). The political economy model has caused archaeologists to focus on the access to critical resources like objects, materials and knowledge (*e.g.* Kristiansen and Larsson 2005, chapter 1). As these are easier to 'read' from burial data, the latter has become the major source of research. Even more so since isotope and aDNA analyses of skeletal material provide us with an entirely new generation of data (cf. Kristiansen 2021).

Although there are attempts to counterbalance this "top-down" approach from a theoretical perspective (*e.g.* Erickson 2006; Furholt *et al.* 2020), there are few practical examples of alternative approaches. In this article I will try to use settlement data to get a more nuanced and hopefully more balanced image of the past. I will argue that a consideration of settlement evidence not only leads to a more balanced view of hierarchy and social organisation, but also makes a less skewed gender perspective possible. I base my analysis on 40 years of settlement research, excavating and studying Late Neolithic, Bronze Age, Iron Age and Roman Period settlements in the Netherlands (*e.g.* Fokkens 1998b; 1996; Arnoldussen and Fokkens 2008; Fokkens *et al.* 2019).

## THE NATURE OF SETTLEMENT DATA IN THE NETHERLANDS

Because objects and monuments are involved, burial data present a directly interpretable image of the past. In contrast, settlement data are often circumstantial: one must look at the data from different angles, and one has to be inventive to actually make the data speak. Typically, we encounter ditches, remains of farms and houses, with pottery as the main find category. Whereas underneath burial mounds the original surface is often preserved and can be sampled, in settlement research the original surface has disappeared. In the eastern, central, and southern parts of the Netherlands, cultural layers are absent, while wood, bones, seeds, etcetera, are not preserved. This is true for most of the sandy soils in northwestern Europe.

Only in special occasions also organic material is preserved, for instance in wells that were dug to extract fresh ground water. Especially in the southern Netherlands this was widespread practice since the Bronze Age. Yet, until the Roman Period these wells were generally open pits in the lower part of which people place some kind of wooden lining to prevent collapse (Fokkens *et al.* 2019). These wells contain very few finds that date to the period of use, but when they were filled after use, artifacts and eco facts became trapped; these constitute our main source of information.

Yet in the river deltas of the Meuse, Rhine, Scheldt and Vecht better preservation conditions prevailed. Especially from the northwest and west of the Netherlands we have ample evidence for (Late) Neolithic and Bronze Age settlements with sometimes excellent preservation circumstances for organic material. Here we have much more indications for agricultural practices and for artifact assemblages that can be related directly to individual farms. Several of these settlement sites have been the subject of large-scale excavations, some of these already in the nineteen sixties. Famous are the settlements of Elp (Waterbolk 1964), Dalen and Angelslo-Emmerhout (Kooi 1991; 2008) in the northeastern Netherlands; Bovenkarspel, Andijk and Hoogkarspel (Roessingh 2018) in the northwestern Netherlands, Molenaarsgraaf (Louwe Kooijmans 1974) in the central Netherlands and Oss in the south (Fokkens 1998b; Fokkens *et al.* 2019). And since the Valetta convention was ratified, many more sites have been excavated: Westfrisiaweg (Roessingh and Tol 2019), Enkhuizen (Roessingh and Lohof 2011; van der Linde and Hamburg 2014), Eigenblok (Jongste and van Wijngaarden 2002), Den Haag (Stokkel and Bulten 2017), Hattumerbroek (Hamburg *et al.* 2011), Son-en-Breugel Ekkersrijt (de Jong and Beumer 2011; de Jong and Beumer 2013) and many others (see also Fokkens *et al.* 2018). These excavations have yielded a wealth of data on settlement structure, on farm structure and development, and on economy. Most of them have been published now because of the publication rules connected to research in context of the Valetta treaty.[1]

1 These excavation reports are accessible through the Data Archiving and Networked Services (DANS) of the Royal Dutch Academy of Sciences (KNAW).

## WHAT CAN SETTLEMENT DATA TELL US

In general settlement data contains information about farms and farm structure, about settlement structure, arable land, and economy, and in favourable cases also about (differences in) material culture. Often this data is indirect but may yield far more than direct evidence. It all depends on our perspective. If we are set on finding evidence for inequality and elites to support the narratives derived from burial data, differences in the structure of houses, or in farm size or material found in them, might be interpreted as direct evidence for social inequality.

Kristiansen and Larsson, for instance, suggested that one of the houses excavated in Legård (northern Jutland) was a chiefly hall (Kristiansen and Larsson 2005). The reasoning behind this, is that their political economic view of the Nordic Bronze Age, cattle is considered 'the most costly prestige good' (Kristiansen and Larsson 2005, 278). According to Earle cattle was in the Late Bronze Age even 'produced' for long-distance trade involving metals (Earle 2002, 309). This suggests that especially chiefs and elites had access to this 'prestige good'. Kristiansen and Earle find support for this idea in the fact that in one of the sites they helped excavate in Thy, there is one large house (Legård III) with evidence for cattle stalling, while other houses in that settlement lack the same evidence. That house is subsequently indicated as the chiefly hall, and used as evidence that only chiefs owned cattle (Kristiansen and Larsson 2005).

This argument sounds plausible, but it has been criticised as selective reading of the data. According to one of its excavators, Jens Henrik Bech, the Legård III 'hall' is not as unique as suggested by Kristiansen. Referring to Bronze Age farms in Jutland, Bech and Haack Olsen state:

"*The presence of byres, therefore, does not indicate a monopolization of cattle-keeping among the larger households and higher level of Bronze Age society.*"
(Bech and Haack Olsen 2013, 19)

as suggested by Timothy Earle and Kristian Kristiansen (2010, 226). And that observation is not restricted to Jutland: we know of many more farms with stalls (Fig. 1). Actually, in the northeastern Netherlands most farms have archaeologically visible stall partitions, for instance at Elp, Emmerhout and Dalen (cf. Waterbolk 1964; Kooi 2008; Donat 2018; Assendorp 1997).

Yet, in the western, central, and southern Netherlands, or indeed in much of northwestern Europe, there is hardly any evidence for stalls. But that is no reason to assume that in those farms no livestock was stalled. We have in fact massive evidence for the opposite, for instance from West-Frisia. There none of the farms shows evidence for stalls, nor are there large differences in farm size (Roessingh 2018). The evidence comes from another source, however: all these farms (well over 100 excavated), were individually surrounded by narrow house ditches. These contained well preserved animal and organic remains. So even if none of the farms have visible remains of byres, we know that cattle was present in abundance, making up for 80 % of the animal remains (IJzereef 1981; van Amerongen 2016). Since the structure of all farms was similar, with a somewhat larger opening in the house ditch on the eastern side, suggesting an entrance for life stock, we suspect that all farmers had cattle (Roessingh 2018; van Amerongen 2016). Why are the stalls invisible to us: either because cattle was not tethered in stall boxes, or the posts for these stalls were not structural and therefore not dug in as deep as the roof supports, or the animals were tethered to horizontal poles that were fastened between the roof supports of the farm.

So, there are several arguments based on a discussion of direct evidence, to suggest that most, if not all, farmers owned and stalled cattle in their farms: not just in the Netherlands, also in northern Europe. However, I suggest we can generate additional arguments and learn much more by analysing farming life and farming practices in a more fundamental way. With that I mean that we should try to find out how farming life was constituted, and what was possible and what not in terms of sustainable farming. Could a Bronze Age community even support an army or consist of a few chiefs that possessed all cattle and ruled over many commoners and slaves?

In the following I will try to give a few examples of a more fundamental analysis of farming practices and their possibilities and impossibilities, and at the same time show that if you do so, gender roles and labour division can be discussed in a well-considered manner avoiding gender-stereotypes.

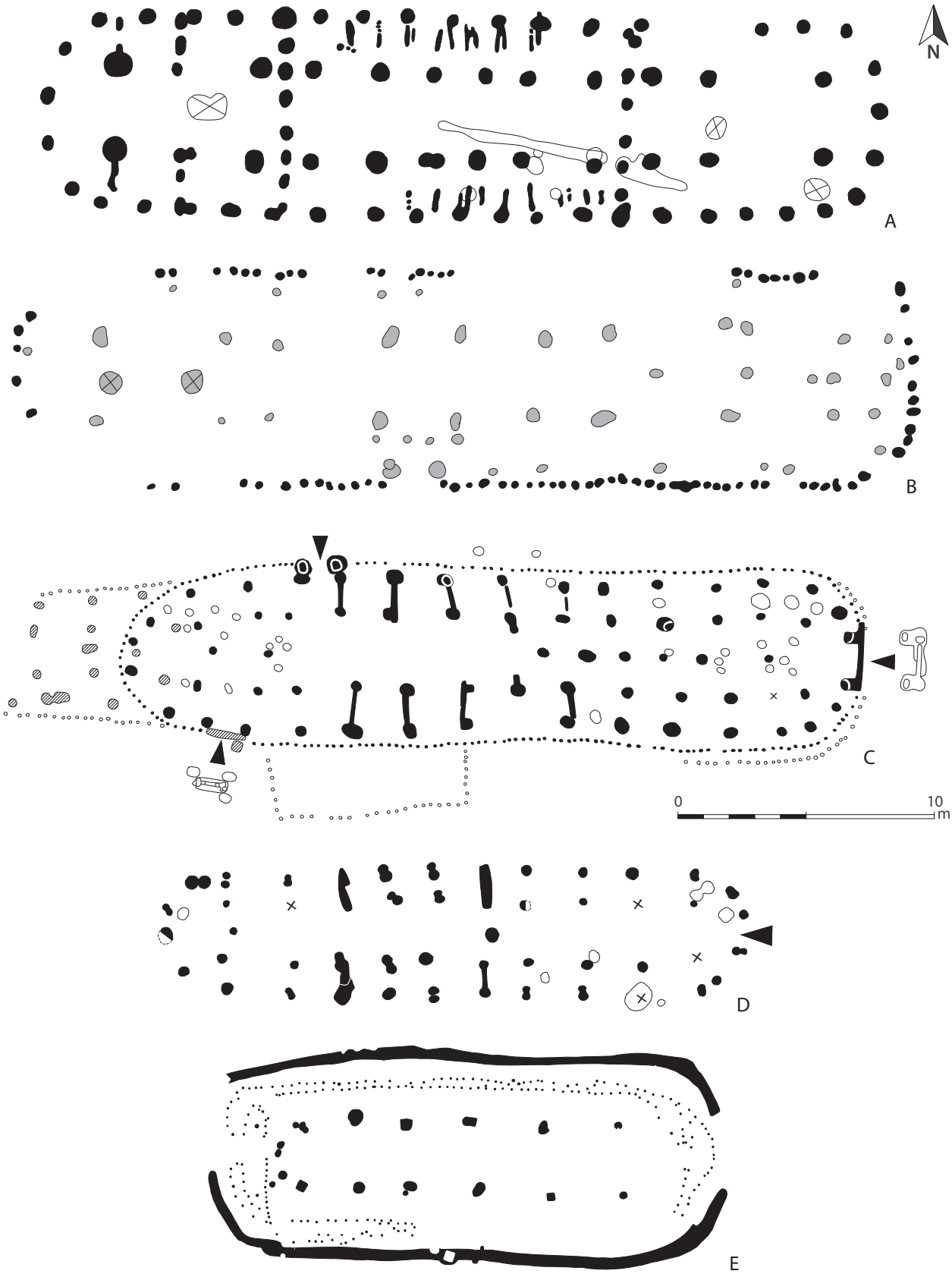


*Fig. 1. Examples of houses with visible byres: houses of type Højgård: **A** Legård III; **B** Øster Ørbaek, type Emmerhout; **C** Angelsoo-Emmerhout 32; **D** Dalen 2 (after Donat 2018, 38, 50); in comparison one of the West-Frisian houses of type Zijderveld: **E** Andijk 5 (after Roessingh 2018, 18).*

## THE REQUIREMENTS OF PLOUGH AGRICULTURE

A discussion Late Neolithic and Bronze Age farming should depart from the knowledge that we are dealing with plough agriculture. We have massive evidence for Late Neolithic plough marks, both in settlement context and in burial context (*e.g.* Thrane 1989; Isaakidou 2011). In the Netherlands, the oldest marks are found in Vlaardingen, TRB, Corded Ware and Bell Beaker context (Goossens 2008; Fokkens *et al.* 2018). This must have resulted in a major transformation of the landscape, but also of farming life itself (Fokkens 1986; 1998b). Here I will not discuss the changes that occurred around 3000 BCE but focus on some of the aspects of plough/ard agriculture.

In the first place we should realise that to plough the land, the soil needs to be free of tree stumps and stones. If not, the ard will get stuck all the time. The use of the ard therefore implies open spaces that probably were not allowed to regenerate into forest again (Fokkens 1982; Boserup 1965; Carlstein 1982; Shukurov *et al.* 2015). This is to some extent supported by evidence from burial mounds and settlements:

"*The ploughing over of settlements or the placing of settlements on ploughed areas seems just as typical as the placing of burial monuments on ploughed surfaces.*"
(Thrane 1989, 118)

Also in Bronze Age West-Frisia we have ample evidence for ploughland being built upon, and vice versa, farmsteads being converted to plough land (Roessingh 2018).

We also know that from the Late Neolithic onwards, farmed plots were not just small garden plots. We have ample evidence for plots that must have covered 1500 $m^2$ to half an hectare or more (Fokkens 1982; Knippenberg 2018; Fokkens *et al.* 2017; for more references Thrane 1989, 116). However, the limits of prehistoric arable fields have hardly been explored. Most of the evidence is based on minimum numbers due to limited excavation surfaces. At Oostwoud we tried to explore the limits of the Late Neolithic arable, and found it extended over an area of at least 350 x 100 m, although not all of it may have been in use at the same time (Fokkens *et al.* 2017).

Depending on the crop:yield ratio used, a hectare or less will feed a family of six if they were dependant on arable farming alone (Fokkens 1998a). That calculation is based on an estimate of a 1:30 crop yield factor per hectare averaged over 15 years in Butser farm experiments in unfertilized soil (Reynolds 1987; Reynolds 1992). Since we know that Bronze Age fields were fertilized (see below), this factor seems realistic. The average amount harvested per ha at Butser farm was 2.08 metric tons for emmer wheat (Reynolds 1992). For the Middle Ages 250 kg of bread grain per year per adult was considered sufficient if dependent for 100 % on grain (Slicher van Bath 1976, 76). I assume that also in Prehistory this was a valid number, which implies that for a family of four adults a yield of at least 1000 kg would be needed, if they only were fed on grain. Given the fact that their diet most was more varied, fields of 0,5–1.0 ha may have been sufficient to feed even an extended family (Fokkens 1998a; Fokkens 2003).

Since continued use of arable depletes the soil eventually, some form of manuring reduces risk of crop failure and enhances yield stability (Shukurov *et al.* 2015). This may have been done with household waste, as is suggested by the presence of ceramic pottery in arable land (*e.g.* Fokkens *et al.* 2017; Wilkinson 1982). Yet, that cannot have been sufficient. Samples of Late Neolithic and Bronze Age grain shows high levels of nitrogen, leading to the conclusion that the fields must have been heavily manured (Bakels 2019; Bogaard and Jones 2007; Kanstrup *et al.* 2014; van Amerongen 2016). The use of the ard therefore marks the beginning of a system of mixed farming: live stock was no longer just needed for food and clothing, but also became a necessary element of arable farming for drawing the plough, and for manure (Fokkens 2005a). I have stated earlier that this may have been one of the reasons for the origin of the farms that housed people and livestock under the same roof: as a practical way to collect dung, and because livestock was a crucial element for arable farming and therefore of high social value (Fokkens 1999; Fokkens 2003; Fokkens 2009; Brusgaard *et al.* 2019; see also Bakels 1997; Shukurov *et al.* 2015). Of course this implies that cattle also had economic value, and we have some evidence for long distance exchange, but in Bronze Age West-Frisia by far the majority (94,5 % of 85 samples) was local/regional (Brusgaard *et al.* 2019).

A system of mixed farming the fields implies that arable farming was impossible without livestock, especially cattle. To suggest that only the elite possessed cattle means that the system was unsustainable. To survive, every farmer needed to have and exploit cattle. A chief never could own and stall enough cattle to manure and plough the fields that were needed to also support his slaves and commoners. Nor could he summon his subordinates to produce food if they were not allowed to have cattle and work their own fields. This shows that the political economic perspective of the Bronze Age could benefit from a more holistic view of Bronze Age farming.

*Fig. 2. Farmer Bikram Daugi ploughs with his oxen as Dhansa Bhandari walks behind sowing maize seed (licenced under creative commons, source: International Wheat and Maize improvement centre; https://www.flickr.com/photos/cimmyt/28589067167 ; last access 14th December 2023).*

## SETTLEMENT DATA AND GENDER ROLES

A different perspective to farming life and settlements also may bring a more balanced view of gender roles into view. Presently the grand narrative of the Bronze Age is about male elites and warriors. Most of the arguments focus on status, power, trade, monopolisation of critical resources, *etc.* Rich female graves do exist, but are frequently interpreted as the result of 'inter-chief alliances through intermarriage with elite foreign women' (*e.g.* Frei *et al.* 2015, 5 referring to Kristiansen and Larsson 2005). Yet settlement evidence can give us other information if we are willing to read it that way. Let us take again ploughing with the ard again as an example.

Often ploughing is visualised as a two-person job: one person leads the team of draught animals, the other guides the ard and determines its angle and depth. If we consider the ard only as a means to work the field, the focus probably would be still on the male role, because men are generally visualized as guiding the ard and leading them the team of animals. But in modern day farming communities that still use the ard, yet another person is involved. In Nepal, for instance, women directly follow the plough, planting maize seeds (Fig. 2). The reason is that whereas modern ploughs turn the sods, an ard only opens the soil, and effectively creates a seed drill. Sowing in seed drills is leads to higher yields than broadcast sowing, and is more effective for weeding and harvesting (Steensberg 1979). Sowing in these drills is most efficient if that takes place shortly after ploughing, and if the seeds are somehow covered again. Therefore, in modern-day use of the ard, sowing is done by a third person (often a woman) in coordination with ploughing. It is not strange to suggest (even if that is not a particularly good argument) that also in the Late Neolithic and the Bronze Age, women were involved in ploughing and sowing. If that is true, this would mean their role was technically may be different from that of the men, but of equal importance for the outcome. In this respect, I read equality for men and women between the lines, even if their tasks may have been different. In addition, how manure and household waste was collected and brought over the fields is unknown, but I suggest a similar cooperation of genders to ensure the right outcome.

We can sum up many more tasks that would require skill and experience to conduct; what about weeding, grazing cattle, harvesting, but also deciding how much grain to store for sowing next season. If men indeed were away regularly to function as warriors, raiders, and traders on behalf of the chiefs, much of these tasks and expertise must be attributed to women. Not in the last place because if the men did not return from the battlefield, farming life and knowledge about its practicalities, would have to be continued. This suggests to me that women were perfectly capable of managing farming life on their own accord, even if additional (man)power was needed during in times of time pressure, for instance during ploughing and sowing, and during harvest.

The evidence from settlements shows that there were far more tasks that required all person power possible: in West-Frisia digging circles for storage of grain, in other areas building and rebuilding granaries, maintaining fences, digging waterholes and wells, grazing cattle, gathering winter fodder, building and maintaining houses, carts, boats, *etc.*, *etc.* Therefore, my reading of daily Bronze Age life, is that warriorhood must have been far less time-consuming than the grand narratives based on burial studies suggest. Maybe that is because in burial ritual 'normal' aspects of farming life remained invisible, while very specific qualities of personhood were enhanced in order to create valuable ancestors (Fokkens 2005b; 2012; Louwen 2021).

## TEXTILE: OTHER NECESSITIES OF DAILY LIFE

A more holistic analysis of farming life and practices can bring things to light that are otherwise neglected or reduced to 'just' economic values. An element that is often underestimated, is the production of textiles from plant fibres like nettle and flax, and from wool. Flax was produced for 'linen' and weaving in Late Neolithic Europe (Feldtkeller and Schlichterle 1987; Maier and Schlichterle 2011), while woollen garments were woven since at least the Bronze Age, especially from *c.* 1600 onwards (Haughton *et al.* 2021; Grömer and Saliari 2018). It may be considered a gender stereotype to suggest that women were producing textiles in the past. But given the craftmanship, effort, time and knowledge involved in the production of textiles I would say the opposite is true: it would be misogynistic to suggest that this was a male task. And apart from that, if men were indeed warriors most of the time, they hardly could have played a prominent role in such time-consuming tasks. For that reason, I prefer to consider women the 'main engine' of textile production, with other household members — including men — undoubtedly of importance to assist in production of fibres, and in raising, feeding and herding livestock.

I know that much of this reading between the lines, but much of the grand narratives about warrior elites are based on reading between (other) lines as well. So, I offer only an alternative view, one that can be followed up by more research in the future. Research into crafts, and craft(wo)manship, the knowledge and material needed, the time needed, *etc. etc.* is still largely still lacking. Equally research into ancient farming and farming practices, time and knowledge involved is limited. Experiments at Butser farm and Lejre in ploughing and arable farming have been executed but are not really very well documented. Time Geography, for instance as discussed by Carlstein (Carlstein 1982), has made good contributions to the analysis of time management in shifting cultivation and short fallow cultivation, but his work and that of space-time geographers in general, has had little impact or even attention in archaeological circles. Generally, Prehistoric farming and settlement have been approached from an academic (urban based) perspective that reduce farming and farmers to an almost unhuman object of economic manipulation. To counteract that, we also need a farmer perspective. A perspective that studies the social aspects of farming life and of interaction with animals (cf. Brusgaard *et al.* 2019). In that respect I'm anxious to see the results of the new ERC research that prof. Joanna Brück has started (ERC 101055195 ANSOC: Animals and Society in Bronze Age Europe).

## A NEW GENERATION OF RESEARCH QUESTIONS

With the examples given above, I hope to have demonstrated that if we really want to investigate the complexity of Late Neolithic and Bronze Age life, we need to start asking different questions. We must understand the complexity of daily life, and the social, ritual, ánd economic processes involved. If we really want to understand prehistoric societies, we need to generate holistic views of the complex ways in which daily life, ritual, and notions of the supernatural were conceived in a coherent cosmology (cf. Bradley 2005; Roberts 1996). In my view this asks for a reading between the lines of the different sets of data that we have, or rather may be for listening to the data. Too often we jump to conclusions determined by current paradigms, as

for instance is the case with discussions of social inequality and hierarchy. Using plough marks again as an example: we could register them as evidence for the intensification of arable farming. Yet in the above we have also seen that there is much more to it: the evidence shows that these ploughed lands were a subject to short fallow or crop rotation, that they were manured and that they were sown in rows instead of broad cast. This may mean that arable land and its history of cultivation and cultivators became part of a cosmology that connected the ancestors to the land as well (cf. de Coppet 1985). Ploughing and sowing thus become not just economic acts, but cosmologically loaded activities for all of its actors, including the animals, objects, and people involved. Bradley suggests that ploughing scenes as depicted in the Mont Bégo area of southern France and Bohuslän in southern Sweden are not just scenes of daily life (Bradley 2005, 86). The fact that they are depicted on rock, as well as the fact that ploughs are deposited in specific bogs, demonstrates that there was more to it than just a daily practice.

This is just one example, but it shows that a more holistic approach to data can give different insights, also with respect to gender roles. Scientific data generated from multi-proxy analyses (use-wear, isotope analysis, aDNA of bones and soil) can definitely contribute to a better understanding of the complexity daily life and of gender roles in the division of labour (*e.g.* Masclans *et al.* 2021).

## CONCLUDING REMARKS

Hopefully, I demonstrated that settlement archaeology and a more holistic approach to our data can provide more balanced images of past societies. Similarly, we must study culture change much more as a process than as a given. Many scholars now seem to accept that migration caused much of the culture change that we witness at the beginning of the Late Neolithic. And yes, I realise that aDNA research appears to support the idea of change through migration. But that explanation is too simple: aDNA research shows us outcomes of a process, but not the process itself. As Martin Furholt has recently explained, much of our understanding of these changes rely

"*on the flawed and outdated concept that archaeological classification units — usually referred to as 'archaeological cultures' — would represent distinct and clearly delineated human groups of common genetic ancestry and social identity.*" (Furholt 2021b, 482)

Furholt suggests that the innovation complex of changes could never have happened in closed homogenous communities. He therefore argues that we should envision highly socially mobile and more open heterogenous societies that stimulate and enhance innovation and change (Furholt 2021a). I fully agree. I also think that part of the explanation for more open mobile societies can be found in the new type of farming life that was the consequence of plough agriculture. This made farmsteads more place constant, produced better yield in support of more people, may even have raised the survival rate of offspring. That could be one of the reasons for higher mobility, in terms of networking and marriage alliances, but also in movement of families and people.

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