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19 MOBILITY, KINSHIP, AND MARRIAGE IN INDO-EUROPEAN SOCIETY*

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19.1 Introduction

The purpose of this chapter is to explore one area in which comparative linguistic data can play a role in interpreting late Neolithic and early Bronze Age genetic and archaeological data from western Eurasia. The sharp rise in available samples of ancient DNA enables the establishment of kinship relations between individuals in prehistoric graveyards. It also makes it possible to establish where their ancestors came from. The analysis of strontium, oxygen, carbon, and lead isotopes in the tooth enamel of these same individuals provides information about movements during their lives. When these techniques are combined, we obtain a much better idea about who moved where and when in prehistory. Being able to establish the diet of prehistoric individuals and which diseases they may have suffered from allows archaeologists to set up hypotheses as to why some of the population movements that can be observed in the archaeological data might have taken place. Linguistics can offer a valuable contribution to the discussion of why people moved by shedding light on factors other than diet or disease; it may, for example, help to explain cases in which males appear to have migrated differently from females. In order to understand how, this chapter will take a closer look at the linguistic evidence for kinship relations and the role of gender and age in Indo-European society. At the end of the chapter, hypotheses about mobility, kinship, and marriage in early Indo-European society as based on the linguistic data will be compared to the findings of recent research into ancient DNA and isotope analysis.

* This paper would not have existed without the many fruitful discussions I had about its contents with Sasha Lubotsky. Together, we prepared and presented parts of it at the 23rd Annual Meeting of the European Association of Archaeologists in Maastricht in September 2017 and at the conference “When Archaeology Meets Linguistics and Genetics” in Gothenburg in May 2018. Any remaining errors in the paper are mine. While this paper awaited publication, Birgit Olsen (2019, 2020, and this volume) published and submitted a number of papers about some of the same topics that are discussed here. I recommend consulting these papers, which often contain additional information and sometimes slightly different interpretations.

19.2 Migration and the Spread of Indo-European Languages

Recent progress in the study of ancient DNA has had serious consequences for the questions surrounding the spread of Indo-European language across western and central Eurasia. There is now a broad consensus that the ancestor of the Indo-European languages was spoken in or along the borders of the Pontic–Caspian steppe. The spread of DNA from the Pontic–Caspian steppe to the west in the fourth millennium BCE has repeatedly and convincingly been linked to the first stages of the Indo-Europeanization of Europe. It is of great importance that the late Neolithic and Bronze Age migrations that are thought to have brought Indo-European languages from the Pontic–Caspian steppe into Central Europe are clearly visible in paternally inherited ancient Y-DNA, but not so much in maternally inherited mitochondrial DNA. This male-biased spread probably points to “ongoing male migration from the steppe over multiple generations” (Goldberg et al. 2017).¹ This is not to say that the spread of Indo-European languages did not also involve diffusion and acculturation, but the genetic data suggest that migration played a crucial role.

In the east, the situation appears to be similar. It is likely that the initial spread of Indo-European languages to the Kazakh steppe was also fueled by migration, while the subsequent southward spread of Indo-Iranian into Central Asia involved more gradual movement and diffusion (Mallory 1998). Loanwords from the language of the people from the Bactria–Margiana Archaeological Complex (BMAC) into Indo-Iranian

¹ In other geographic areas, the sex bias is less pronounced. Ancient DNA taken from individuals in Corded Ware graves in present day Poland, the Czech Republic, and the Baltic states shows greater maternal genetic affinity with the Pontic–Caspian steppe than that of individuals from present-day Germany (Juras et al. 2018). To my knowledge, there is presently no evidence for a sex bias in the eastward migrations from the Pontic–Caspian steppe by the ancestors of speakers of the Tocharian and Indo-Iranian languages.

testify to the interactions of speakers of Indo-Iranian before the Aryans moved across the Hindu Kush into the Indian subcontinent (Lubotsky 2001). One component of the ancient DNA collected from individuals from the Indus valley who were most probably speakers of early Indo-Aryan stems from the steppes (Damgaard et al. 2018; Narasimhan et al. 2019), so here, too, language spread was at least partly caused by human migration.

19.3 Proto-Indo-European² Society Was Patrilocal and Patrilineal

Ancient Indo-European societies were patrilocal without exception and patrilineal as a rule. There is ample linguistic evidence that this was also the case for the speakers of Proto-Indo-European. Women married into the family of their husband, leaving the family of their parents. The following linguistic features point to a patrilocal and patrilineal society:³

- PIE kinship terms differentiate the family of the husband (and son) much more than that of the wife:
 - **suekuro-* ‘father of the husband’
 - **suekruh₂-* ‘mother of the husband’
 - **dh₂eiuer-* ‘(younger) brother of the husband’
 - **Hienh₂ter-* ‘wife of the husband’s brother’
 - **ǵh₂ōu-* ‘(unmarried) sister of the husband’⁴
- There is no comparable terminology for the family of the wife.⁵
- There was a common term for ‘widow’, PIE **h₁uid^hh₁-*(*eu*)-*h₂-*, but not ‘widower’, suggesting a special status for women who

² Proto-Indo-European (PIE) and Indo-European are used here in the meaning ‘of people speaking an Indo-European language’. Obviously, not all speakers of Indo-European must have shared a common subset of genetic or cultural characteristics, and the genetic and cultural characteristics of certain speakers of Indo-European may well have been shared by speakers of other languages. On the other hand, for a language to keep functioning as a single entity over a longer period, all its speakers must be connected through communication, and linguistic innovations must be able to reach all speakers. The more economic, cultural, and religious features shared by the speakers of a particular language, the more likely it is that they will maintain communication. The vocabulary of a (proto-)language will therefore normally reflect a society in which the speakers shared economic, cultural, and religious habits and were probably genetically related.

³ The Indo-European kinship system has been argued to be of the so-called Omaha III type (Friedrich 1966, 1980; Gates 1971). Although some characteristics of the Omaha III system can be reconstructed for Proto-Indo-European, other features that characterize Omaha III cannot (Szemerényi 1977: 174–183; Hettrich 1985: 457–458).

⁴ Based on the Hesychian gloss γελαιρος ὁ ἀδελφοῦ γυνή. Φρυγιστὶ ‘brother’s wife. In Phrygian,’ Benveniste (1969: 251) has suggested that the Proto-Indo-European term may have been reciprocal for the husband’s sister and the brother’s wife.

⁵ Hettrich (1985) has argued that the restriction of the words for parents-in-law to those on the husband’s side in Balto-Slavic, Greek, Indo-Iranian, and Armenian is a secondary development and that these words originally also applied to the parents of the wife. There is little support for this claim in the data.

lost their husband, but not for husbands who lost their wife. This is probably due to the exceptional legal status of the widow, who no longer had a man to act on her behalf. The word for widow derives from a PIE adjective **h₁uid^hh₁-* ‘bereft’ (Beekes 1992), which was originally a compound **dui-d^hh₁-* ‘put apart, separated’. This adjective is perhaps preserved in Greek ἡῖθεος ‘unmarried youth’, if this Greek word is not a back-formation from the feminine form (Beekes 2010: 512). There is no linguistic evidence for levirate, the practice by which a widow marries a male member of her late husband’s family, typically his brother (PIE **dh₂eiuer-*), but the existence of levirate in several ancient Indo-European societies (Zimmer 2003: 121, Olsen 2019: 155) suggests that it may have been inherited.

- It is possible that it was customary for a widower to marry the sister of his late wife. This is suggested by Greek μητρικά, Armenian *mawru* ‘stepmother’, which originally meant ‘mother’s sister’ in view of the cognate Old English *modrige* ‘mother’s sister’ and the morphologically parallel Sanskrit *pitṛvyā-* ‘father’s brother’.⁶ It is unclear, however, whether the mother’s sister only took care of the children of her late sister, or it was also customary for her to have children fathered by the husband of her late sister.
- The verb ‘to wed’, PIE **ued^h-*, also meant ‘to lead’, which is usually interpreted as indicating that the groom led the bride away from her home and family. This is confirmed by the use of unrelated verbs meaning ‘to lead’, like Latin *dūcere* (*uxorem*) and Greek ἄγω (*γυναικά*), in this way. The bride was given (PIE **deh₃-*) to the groom by her father.
- When a marriage was agreed on, a bride-price, PIE **h₁ued-no-*, was paid to the family of the bride to compensate for the loss of her services (Mallory & Adams 1997: 82–83).
- PIE **pot-i-* ‘husband’ also meant ‘master’. The husband acted on behalf of the entire family; cf. Latin *potis* ‘able, possible’, *suo-pie* ‘by one’s own’, Lithuanian *pàts* ‘self’. Benveniste (1969: 90) argued that the oldest meaning of the word **pot-i-* was ‘self’. There is a derived feminine form PIE **pot-nih₂* ‘mistress’ (Sanskrit *pātmī-*, *viś-pātmī-*, Greek *πότινα*, *δέσ-ποινα*, Lithuanian *viėš-patni*), that was formed by analogy with the word **h₂reh₁ǵ-nih₂* ‘wife of the chief’ within core Indo-European. In Indo-Iranian, **pot-nih₂* also means ‘wife’; cf. Sanskrit *sapātmī-*, Avestan *ha-pāθnī-* ‘concubine’, lit. ‘co-wife’, but this is probably an inner-Indo-Iranian innovation. Lithuanian *pati* ‘wife’ likewise arose in post-PIE times.
- The PIE feminine motion suffix **-ih₂* originally indicated appurtenance; cf. the same PIE element **-ih₂* in Sanskrit *devī* ‘goddess’ and the Latin genitive singular *deī* ‘of the god’.
- Indo-European names of females are usually derived from the names of males: from the name of the father before marriage, and that of the husband after marriage.
- In Ancient Greek, women were usually addressed with ὦ γυναῖκα ‘o woman!’, while men were addressed by their name (Wackernagel 1912: 25–26).

Further evidence for patrilocal and patrilineality can be found in the textual evidence of ancient Indo-European societies, e.g. the widespread existence of special regulations for

⁶ A new word for ‘brother’s son’, Sanskrit *bhrāṭṛvyā-*, Avestan *brātruiia-*, was formed with the same suffix in Indo-Iranian. Its formation can be understood if one takes into account that if X is the brother of the father (*pitṛvyā-*) of Y, then Y is the son of the brother (*bhrāṭṛvyā-*) of X.

the situation in which a man dies without leaving a male heir (see Zimmer 2003: 121–122).

19.4 The Stranger/Guest and Marriage

In Sanskrit, we find the word *arí-*, translated as ‘stranger, guest, enemy’. The *arí-* was a stranger belonging to Vedic culture and speaking the Vedic language. It has therefore been suggested that *arí-* referred to strangers who (or whose family members) were suitable candidates for marriage in Indo-European society (Benveniste 1969: 100, 372–373). This is supported by the fact

Whether or not the speakers of Proto-Indo-European practiced polygamy is difficult to establish. The existence of co-wives in Indo-European society is perhaps suggested by the fact that Middle Irish *airech* ‘concubine’ and Avestan *pairikā-* ‘demonic courtesan’⁷ could reflect an inherited Proto-Indo-European word (Mallory & Adams 2006: 208).

Apart from the limitation of marriage to a person from within one’s own community, other kinship-related customs have been reconstructed for Proto-Indo-European. Two hypotheses about Indo-European kinship relations are based on the remarkable fact that the words for grandfather and maternal uncle derive from the same root, and the fact that there appears to have been one Indo-European word denoting both the grandson and the sister’s son (nephew):

grandfather	maternal uncle	grandson	sister’s son
Hitt. <i>ḫuḫḫa-</i> , CLuw. <i>ḫūḫa</i> , Lyc. <i>χυγα-</i> , Lat. <i>avus</i> , Arm. <i>haw</i> , Goth. <i>awo</i> ‘grandmother’	Lat. <i>avunculus</i> , OIr. <i>amnair</i> , OHG <i>ōheim</i> , OE <i>eam</i> , Lith. <i>avýnas</i> , Ru. <i>uj</i> , ?Gr. μήτρως	OE <i>nefa</i> , Alb. <i>nip</i> , Skt. <i>nápāt-</i> , Av. <i>napā-</i> , Lat. <i>nepōs</i> , OLith. <i>nepuotis</i>	OE <i>nefa</i> , Alb. <i>nip</i> , OIr. <i>nia</i> , MW <i>ney</i> , ORu. <i>netii</i>

that the Vedic deity *Aryaman*, whose name is a derivative from *arí-*, was the patron of marriage. Another derivative from *arí-* is *ārya-* ‘member of one of the three upper castes of Vedic society’ (opposed to *dāsá-*, *dāsa-* ‘stranger, slave, enemy’). The Iranian equivalent of *ārya-* is an ethnonym referring to the Iranians themselves, e.g., in the name of the Alans < **arya-*, an Iranian people. The Indo-Iranian term and concept are most probably of Indo-European origin, because we find similar words in Hittite *arā-* ‘friend’, *arayan(n)i-* ‘free (not being a slave)’, Old Irish *aire* ‘free man’, Lithuanian *arvesnis* ‘free (?)’ (a hapax; Petit 2010: 180–181), and Russian *róvnyj* ‘even’, *rovéśnik* ‘peer’ (Pronk 2013: 295–296). These are all derivatives from the Proto-Indo-European verbal root **h₂er-* ‘to fit’, which supports the idea that an *arí-* is a suitable male match for a young woman. A concept similar to that of *arí-*, a stranger belonging to the same culture and speaking the same language, is expressed in Greek by the word *ξένος* ‘stranger, guest, host’ (as opposed to *βάρβαρος* ‘non-Greek stranger’), and in other European languages with the word **g^hos-tis* (Latin *hostis*, Gothic *gasts*, Old Church Slavonic *gostb*) (Benveniste 1969: 92–96). There is, however, no demonstrable connection between the European words for guest/stranger and endogamous marriage practices. The opposition between people inside and outside a larger ethnic, cultural, and/or linguistic community seems to be of Proto-Indo-European date. It is reasonable to assume, though not entirely certain, that the apparent Indo-Iranian habit of giving away one’s daughter in marriage outside the direct family but within the larger community was also of Proto-Indo-European date. There is no reason to assume, however, that endogamy was absolute in Proto-Indo-European times, and it is quite possible that under certain circumstances, perhaps when the husband could not afford to pay a bride-price or when the marriage in question concerned a second or subsequent wife, it was deemed acceptable for an Indo-European male to marry a non-Indo-European female (cf. Zimmer 2003: 122–123).

The hypotheses based on these forms are that (a) a preferred form of marriage was a marriage between cross-cousins and (b) there was a special relationship between a boy and his maternal uncle (the avunculate).

19.5 Cross-Cousin Marriage

We have seen above that there are indications that Proto-Indo-European society was endogamous. The more specific alleged habit of marrying one’s cross-cousin proposed for Proto-Indo-European specifically relates to a marriage between the daughter of the sister of the husband’s father to the son of the brother of the wife’s mother.⁸ From the perspective of the son, the paternal grandfather is in such cases the same person as the maternal granduncle. In Proto-Indo-European, this person would be the **h₂euḥ₂s* (Benveniste 1969: 223–229; see Kloekhorst 2008: 352 for the reconstruction). Because, as we have seen, the word was associated with the maternal uncle as well, Benveniste assumed a shift in meaning from ‘grandfather’ to any older male maternal relative.⁹ This semantic shift could

⁷ Avestan demonic terminology often reflects practices of Indo-Iranian society that were branded as evil by the Zoroastrians.

⁸ There is an example of such cross-cousin marriage from the fragmentary Hittite royal genealogy: king Zidanta I appears to have been married to the daughter of his father’s sister (Goedegebuure 2004). There are further traces of marriage within the family. In Ancient Greece, in situations when the only legal heir was a woman (the so-called *ἐπικληρος* or *πατροῦχος* *παρθένης*), she was obliged to marry a relative of her father.

⁹ There is a word for ‘husband’s brother’, PIE **dh₂eiuer-*, but no specific word for the brother-in-law on the side of the wife (the maternal uncle of their children). It is possible that the wife’s brother would have been referred to as **h₂euḥ₂s* by her husband as well, but there is no evidence that supports this hypothesis.

then be connected to the fact that the words for ‘maternal uncle’ contain additional suffixes: they are derivatives of **h₂euhs₂s*.¹⁰

Cross-cousin marriage would also be reflected in the fact that the word for ‘grandson’, PIE **nepōt*, also means ‘sister’s son’, an opposition that mirrors that of the ‘grandfather/maternal uncle’. There is no reconstructible word for any of the cousins, including the potentially eligible cross-cousins ‘paternal brother’s son’ and ‘maternal sister’s daughter’, which suggests that they (or a selection of them) might simply have been referred to as ‘brother’ and ‘sister’ (Risch 1944: 117–118), a phenomenon not uncommon in kinship systems similar to the Proto-Indo-European one.

In any case, it remains unclear to what extent the various aspects of the Indo-European kinship system could be maintained by men migrating to areas where the population consisted chiefly of people not belonging to Indo-European society.

19.6 Criticism and Alternative Reconstructions

The idea that the Indo-Europeans favored cross-cousin marriages has been criticized by a number of scholars. The main objection is the lack of evidence for such a practice in the oldest Indo-European literature and in the kinship terminology (Friedrich 1966: 29; Gates 1971: 43; Beekes 1976: 45–46). Neither the specific meaning ‘sister’s grandson’ for PIE **nepōt*, nor ‘maternal grand uncle’ for PIE **h₂euhs₂s* is directly preserved (Latin *avunculus* ‘maternal uncle’, lit. ‘little grandfather/granduncle’, comes closest). These facts would imply that if cross-cousin marriages had been ever common practice, they were no longer so when Indo-European started to spread across Europe and Central Asia.

Opponents of cross-cousin marriage as an Indo-European institution have argued that the word **nepōt* originally meant only ‘grandson’, with independent shifts to ‘nephew’ in Celtic, Slavic, Germanic, and Albanian (Beekes 1976: 54–55; Szemerényi 1977: 168; Hettrich 1985: 458–459). This seems unlikely, because the meaning ‘sister’s son’ is rather specific and there is no evident connection between the grandson and the sister’s son in post-Proto-Indo-European times. PIE **h₂euhs₂s* would originally have been an unspecified older male family member, but not the father’s brother. There was a different word for the paternal uncle (father’s brother): PIE **ph₂truiHo-* (Sanskrit *pitṛvyà-*, Old High German *fetiro*, Old Russian *strvi*, Latin *patruus*), derived from the word for father.

It turns out that there are some valid objections against positing cross-cousin marriages as a preferred type of marriage in Proto-Indo-European society. On the other hand, the fact that

¹⁰ Latin *avunculus* probably received its diminutive suffix by analogy with *homunculus* ‘little man’. There is, therefore, no reason to reconstruct an *n*-stem **avō* that would be comparable to the Celtic and Germanic forms (Dellbrück 1889: 488).

the reciprocal pairs grandfather–grandson and sister’s son–maternal uncle are expressed with the same or similar words requires an explanation. One has to start from the grandson/sister’s son, who is the same person, as the grandfather/maternal uncle are two different people. It seems that the role of the grandfather shifts to the maternal uncle at some point, either because the grandfather passes away, or because it was customary for a boy to be brought under the care of the maternal uncle at a certain age. All of this makes sense if we assume that the word that we reconstruct with the meaning ‘grandfather’, **h₂euhs₂s*, originally referred to the paterfamilias on the maternal side, i.e. either the maternal grandfather or one of his sons after his death, while the paterfamilias on the paternal side, i.e. the paternal grandfather or father, was referred to with the word for ‘father’ (Risch 1944: 118–121). This scenario is weakened somewhat by the fact that in those languages that preserve a reflex of **h₂euhs₂s*, it does not refer to the maternal or paternal grandfather only (Beekes 1976: 58).

19.7 The Avunculate

The special linguistic status of the maternal uncle and sister’s son points to the existence of an avunculate, i.e., a system in which the mother’s brother bears responsibility for the raising of his sister’s son. Such a system is reflected in various Indo-European traditions, as shown by Bremmer (1976).¹¹

There was probably one word referring to both the ‘son-in-law’ and the ‘sister’s husband’, because Greek *γαμβρός* and Russian *zjat* have both meanings. They appear to be derived from the Proto-Indo-European verbal root **g_{em-}*, but the exact reconstruction of the noun is unclear. This double meaning suggests that a woman could be given away in marriage by her brother (who would become the *avunculus* of her children), perhaps only if their father had died before she got married.

It has been suggested that the Indo-European avunculate is due to the similarity between the affectionate relationship between grandfather and grandson and that between maternal uncle and sister’s son, contrasting with the severe relationship between father and son (Bremmer 1976: 71–72). A more concrete explanation could be that responsibility for (part of) the raising of a male child could shift or regularly shifted from the father’s family to the mother’s family, probably in the form of fosterage, which appears to have been common in Indo-European society (cf. Bremmer 1976; Olsen 2019: 150; Stockhammer, Chapter 21, this volume). This would be in line with the old idea that the ‘grandson/nephew’ is **ne-pot-*, literally ‘in-capable, not his own master’ (Olsen 2019: 151). The Proto-Indo-European **h₂euhs₂s* would be the male relative responsible for the upbringing of a male child. The root of this noun could be identical to that of Sanskrit *ávati* ‘to help, support’, Latin *iuvō* ‘to help, assist’, Old Irish *con-ói* ‘to

¹¹ Cf. further Barlau (1976) on Germanic, Ó Cathasaigh (1986) on early Irish literature, and Sørensen (1998) on kinship in the Old Hittite royal family.

protect' < PIE **HeuH*.¹² These explanations are not completely in contradiction with cross-cousin marriage – as the avunculate is often associated with cross-cousin marriage – but there is no remaining evidence that supports the reconstruction of cross-cousin marriages for Proto-Indo-European society.

19.8 Discussion

We can conclude that in early Indo-European society, mobility into and out of the core family could be permanent or temporary and differed for men and women:

- a newlywed woman moved into the family of her husband, who was perhaps in some cases the son of her mother's brother;
- a boy could (temporarily?) move to the family of his mother to be fostered.

We can add to these practices a coming-of-age ritual for adolescent boys (PIE **h₂iuHones*) who would temporarily leave home in groups, the so-called *Männerbünde* (PIE **korios*?). Members of these youth bands retreated into the wilderness to live there like “animals.” They were “dead” to society and were licensed to steal and carry out raids. In the rituals associated with this retreat, the young men wore clothes or masks that would characterize them as dogs or wolves.¹³

These youth bands have often been assumed to have played a role in colonization and Indo-European expansion.¹⁴ Some of the youth bands would have explored unknown territories, looking for suitable targets to raid. Some may have chosen to settle in the newly discovered territories, or their reports back home may have stimulated a more organized colonization. From later periods, it is known that, e.g., the early Germanic war band was “from the beginning an inter-tribal association attracting warriors from other tribes to its ranks” (Greene 1998: 136). The youth bands may thus have been instrumental in exploring and colonizing new territory and in offering opportunities for youths from non-Indo-European tribes to join Indo-European society.¹⁵

¹² This root etymology goes back to the nineteenth century; cf. Dellbrück (1889: 482). The *Lexikon der indogermanischen Verben* (Rix 2001) reconstructs **h₂euH-* on the strength of the rather doubtful comparison with Hittite *īya(u)watta* ‘erholt sich’. García Ramón (1996) has connected it with Latin *avēre* ‘wish, take pleasure in’, for which he reconstructs a causative **h₂ouh₁-éjo/e-*. Even if the root etymology is correct (it is explicitly rejected by the *Lexikon der indogermanischen Verben*), the semantics of the Latin verb rather point to a stative verb **He/ouH-eh₁-*. The full grade of the root and the absence of parallel formations elsewhere suggest that this verb is a relatively recent secondary formation, so no conclusions about the color of the laryngeal, if there was one, should be based on *avēre*.

¹³ Archaeological traces of associated dog sacrifices have been suspected in Scandinavia (Gräslund 2004) and southern Russia (Brown & Anthony 2017).

¹⁴ Sergent (2003), Kristansen et al. (2017). On *Männerbünde*, see further Falk (1986), Kershaw (2000), and McCone (1987, 2002) with references to the relevant literature.

¹⁵ In Vedic society, youth bands were associated with horse-riding (Falk 1994). It is possible that this is a continuation of the Proto-Indo-European situation. If this is true, the spread of Indo-European

As observed at the beginning of this chapter, elements of aDNA associated with the spread of Indo-European into Europe are predominantly found in paternally inherited ancient Y-DNA, while maternally inherited mitochondrial DNA contains a larger proportion of “local” DNA. The males who spread their DNA and Indo-European languages into Central Europe apparently often mated with local females, who themselves or whose ancestors in the not-too-distant past spoke a non-Indo-European language. Perhaps some of these non-Indo-European women in Indo-European society were taken as booty during raids by the youth bands. It seems unlikely, however, that marriages between Indo-European-speaking men and nonlocal women were predominantly the result of abduction. If marriage was seen as an indicator of group membership, it is likely that marrying off their daughters into Indo-European families was one of the ways in which non-Indo-European peoples would try to align themselves with the dominant Indo-European groups.

The linguistic data indicate that Proto-Indo-European marriage probably took place primarily between members of the same community. The genetic evidence from Corded Ware Europe suggests, however, that endogamy was at least partly abandoned for practical reasons when Indo-European males started to move out of their original communities and migrate to new territories. The genetic evidence also suggests that patrilineality remained largely unchanged during the migrations associated with the spread of Indo-European languages. The fact that at least the westward migrations were male-biased betrays a difference in societal roles between males and females. Males were clearly more mobile than females and could move more independently of other members of the family, which might confirm that the all-male youth bands of speakers of early Indo-European languages played a significant role in these migrations. Upon arrival in Europe, Steppe males mated with local females, while local males apparently became more restricted in their possibilities to father offspring. This is in accordance with the linguistic evidence that the Steppe males came from a society with a patrilineal kinship system.

In some Bronze Age settlements in the Central European area where males show predominant Steppe ancestry, there is also clear evidence for patrilocality. A large percentage of the women in these settlements were of nonlocal origin (Sjörger et al. 2016; Knipper et al. 2017; Mittnik et al. 2019), pointing to a patrilocal society in which there was systematic mobility of women. Isotope analysis shows that the women moved away from the area where they had grown up when they were in their adolescence or later, which makes it likely that the movement was associated with marriage practices. Burial practices suggest that these women became integrated into the society of their husbands, though curiously, no offspring of the nonlocal women have been identified in the graves of the settlements. Although neither their DNA nor their material culture can show

languages might also be visible in ancient equine DNA. Note, however, that the silver Gundestrup cauldron, which is dated to the first centuries BCE, depicts what is usually thought to be a Celtic youth band as foot soldiers, while more mature warriors are depicted on horseback.

us which language these people spoke, it is very likely that the men spoke an Indo-European language, while, especially in the early Bronze Age, the native language of some of the women (or their recent ancestors) may well have belonged to a different language family.

The consistently patrilocal Indo-European system explains why it was so often an Indo-European language that prevailed in the genetically and linguistically diverse societies that arose as a result of the migrations of Indo-Europeans. The long-term effects of matrilineal and patrilocal systems on language transmission (and vice versa) have been shown to be significant in a recent case study of the relationship between genetics and language on Sumba and Timor (Lansing et al. 2017). This study showed that, on these islands, consistent patrilineality or matrilineality caused social communities to become speech communities.

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