

The rehabilitation of Marija Gimbutas' Kurgan theory, recent research developments

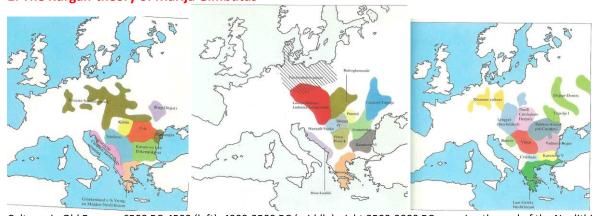
This update is in English and not in Dutch because recent literature on the rehabilitation of Marija Gimbutas is in English. This text will be included in in the new edition of The Language of MA titled 'The Language of MA revisited', forthcoming in 2020. The abbreviation of this 2020 book is LOMA rev.; the abbr. of the 2013 edition is LOMA.

Several Dutch articles on patriarchy and the transition from matriarchy to patriarchy can be found on my website www.anninevandermeer.nl under the button 'Vaderland' and subbutton 'De invasies van steppevolkeren en het begin van het patriarchaat' and 'actuele visies op de overgang van moederland naar vaderland'.

Content of this article:

- 1. The Kurgan-theory of Marija Gimbutas
- 2. The rehabilitation of Marija Gimbutas, recent interdisciplinary research
- 3. Colin Renfrew rehabilitating Marija Gimbutas' Kurgan-theory
- 4. David Anthony: 'Marija Gimbutas was right'...
- **5. Concluding remark**

1. The Kurgan-theory of Marija Gimbutas



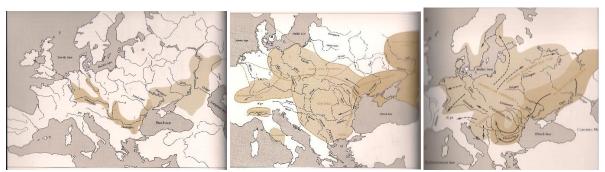
Cultures in Old Europe: 6500 BC-4500 (left), 4000-3500 BC (middle), right 3500-3000 BC mapping the end of the Neolithic.

The Kurgan-people, LOMA, 135. Marija Gimbutas described the culture of the steppe tribes or in her words the 'Kurgan people' as follows: 'they have a herders' economy with rudimentary agriculture, coarse pottery with cord impressions and sun motifs, domestication of horses, warfare, metal weapons, worship of masculine sky gods, a patrilineal social system, and finally elite graves of important men'. These graves she called 'kurgans; the Russian word for 'grave in a hill' is kurgan (they use another word for a 'hill'); these burial mounds form 'hills' in the landscape. Modern Danish and Swedish researchers do not speak of a kurgan but use the word 'barrow' or (male) grave in burial mounds (see downwards).

Recent genetic, linguistic and archaeological research has generally confirmed her work.² And even the grand old man from British archaeology, Lord Colin Renfrew - at first her friend and colleague but later attacking her - is rehabilitating her Kurgan-theory since November 2017. I will report on his

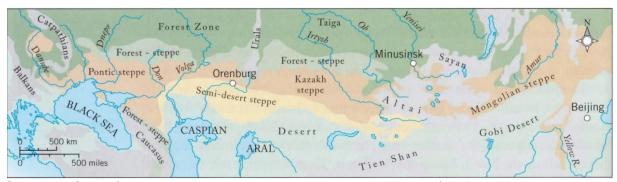
major shift at the end of this article. Marija's theories and ideas are currently undergoing *a Renaissance*, just as is Venus Art, which she first put on the map.³

Four Kurgan waves, LOMA 128-130. Marija Gimbutas described the transition from peaceful farming with women in the center to warlike herding with males in power in four different 'waves'. see my website www.anninevandermeer.nl button *Vaderland* and subbutton 'Actuele visies op de overgang van moederland naar vaderland'.



From left to right: the first, second and third wave; Maria Gimbutas, *The Civilization of the Goddess*, New York, 1991, ch. 10 'The End of Old Europe', 359, 368, 385.

- 7.1 The first wave of migrations, Kurgan wave I: 4300-4200 BC. See text LOMA, p. 128
- 7.2 The second wave, Kurgan wave II: 3400-3200 BC. See text LOMA, p. 129
- 7.3 The third wave, Kurgan wave III: 3000-2800 BC. See text LOMA, p. 129
- 7.4 The fourth wave, Kurgan wave IV: 2400-2200 BC. See text LOMA, p. 129-130
- 7.5 Subsequent invasions: 2000 BC-1500 AD. See text LOMA, p. 130



[LOMA, I.5.13] Map of Eurasian steppe. Here you see the steppe corridor stretching out from the Great Hungarian Plain and the Danube valley eastwards and eventually leading to China. It is a vast route of undulating open grassland. For expanded Dutch text see www.anninevandermeer.nl button Vaderland and subbutton 'De invasies van steppevolkeren en het begin van het patriarchaat'.

Climate change, LOMA p. 127. Natural disasters and deteriorating climates appear to be the driving force behind human migration patterns. Scores of steppe tribes inhabit the grassy steppe which, like a 5000 km-long motorway, also runs the south edge of the melting ice and the pine and deciduous forests of Eastern Siberia to Hungary. The people of the steppe are used to adapting to many changes in climate. In more northerly regions these are descendants of hunter-gatherers who, in the heavily forested north, continue hunting and gathering and sometimes make the transition to raising livestock. In more southerly regions, the descendants of hunter-gatherers have developed into farmers, if enough rain falls on the steppe. Whenever there are cold or dry periods, these farmers survive as semi-sedentary herders. Both in forests and on the steppe, these are not nomads; the steppe tribes are connected with the earth and in cold and dry periods adapt to a semi-nomadic way of life at best. Then the women, children and old people remain behind in the villages, while the men tend to the livestock elsewhere.



2. The rehabilitation of Marija Gimbutas, recent interdisciplinary research

(see my website Vaderland, subbutton 'Actuele visies op de overgang van moederland naar vaderland; extra Text LOMA rev, 135).

Some recent research *mitigites*⁶ or fully *rejects*⁷ the Gimbutas reconstruction of historic facts. But... other *even more recent* research confirms her reconstructions. Let's have more specific look.

Kurgan wave III and IV, LOMA 129-130. Marija Gimbutas discerned *two main periods* in Kurgan wave III (3000-2800 BC) and IV (2400-2200 BC).

*The *first period* from ca. 3000-2600 BC saw the nomadic *invasion* and the *confrontation* of steppe-pastoralists with the Neolithic indigenous agriculturalists.

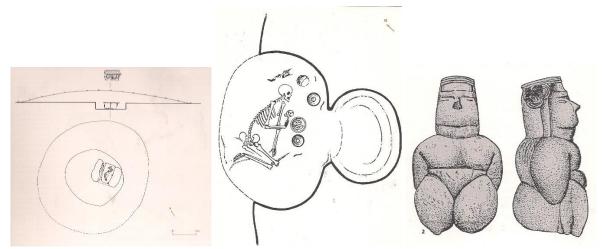
*The second period from 2600-2200 BC of assimilation and integration. The confrontation crystallized into local units belonging to the Bronze-Age Corded Ware culture (Touwbekercultuur uit de Bronstijd), that produced beakers with horizontal cord impressions, in Northwest and Northeast Europe.⁸

The latest research of Prof. dr. Kristian Kristiansen from Sweden and Prof. dr. Eske Willerslev from Denmark and their large mutual research teams *confirms* and *rehabilitates* the *invasion-assimilation*-concept of Marija Gimbutas. Both teams worked closely together in a more detailed interdisciplinary reconstruction of the Bronze Age using genetic, isotopic and linguistic research. On 4 April 2017 Kristiansen gave a lecture titled *'Steppe migrant thugs pacified by Stone Age farming women'*, in Copenhagen in Denmark. On 11 May 2017 Kristiansen gave the same lecture in Leiden in Holland, *'Steppe migrant thugs pacified by Stone Age farming women'*, of which was made a summary.

The Beginning of the Bronze Age. As said, the Swedish team of Kristiansen and the Danish team of Willerslev worked closely together. Both teams recently showed that the large demographic changes during the first part of the Bronze Age happened as a result of *massive, large-scale* migrations of Yamnaya people from the Pontic-Caspian steppes into Neolithic Northern Europe. They combine results from genetics, strontium isotopes on mobility, diet and linguistics on language change, to demonstrate how the integration process unfolded after the Yamnaya migrations/invasions from the steppe. They argue that Yamnaya migrants were predominantly male, who married women who came from neighbouring Neolithic farming societies. These Stone Age Neolithic societies were based on large farming communities, with collective clan-like shared ownership of property, animals and land; they also had collective burial rituals often in big stone chambers, so called megaliths. Very different from the traditions of the incoming migrants.

Proofs for a large scale migration. Eske Willerslev undertook the ancient DNA analyses together with Morten Allentoft and Martin Sikora. Willerslev: 'In our big Bronze Age study, published in 2015, we were astonished to see how strong and fast the genetic changeover was from the Neolithic to the

Corded Ware. There was a heavy reduction of Neolithic DNA in temperate Europe, and a dramatic increase of the new Yamnaya genomic component that was only marginally present in Europe prior to 3000 BC. Moreover, the apparent abruptness with which this change occurred indicates that it was a large-scale migration event, rather than a slow periodic inflow of people.'15



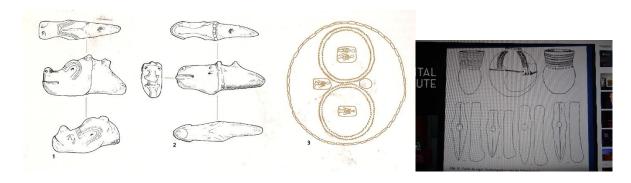
Left: Marija Gimbutas, *The Civilization of the Goddess*, 386 with image of Kurgan grave-barrow and individual burial. Middle and right: Marija Gimbutas, *The Civilization of the Goddess*, 241 with womblike-grave with fig. in dea-regeneratrix-position close to the right hand of the dead person lying in foetus-position, Sardinia, 4500 BC; LOMA 191 [I.7.13].

Differences. The Yamnaya people originated on the Caspian steppes where they lived as pastoralists and herders, using wagons as mobile homes. Their economy was based on meat, dairy products and fish, they were tall and rather healthy with little caries in their teeth. No agriculture is documented. *Barrows* (earlier called 'kurgans' by Marija Gimbutas) were aligned in groups forming lines in the landscape to mark seasonal routes and after death diseased people were put into *individual* graves under small family barrows. Their burial ritual thus embodied *a new perception of the individual* and of small *monogamous family groups* as the foundation of society.

I already made notice of this change from Stone Age megalithic clan graves to Bronze Age individual male burial mounds. (LOMA, 132-133) These recent views are confirming the earlier material.

Plague from the east? Around 3000 BC the continent had seen a decline in the agrarian Stone Age societies. This decline was probably the result of an early form of widespread plague from Siberia to the Baltic.¹⁶ Kristiansen: 'Perhaps Yamnaya brought plague to Europe and caused a massive collapse in the population'.¹⁷

Burning down of forests. It were the Bronze Age Corded Ware people (and *not* the Neolithic ones, as suggested by above mentioned Gimbutas critics Krystof Ciuk and Christoph Bauer, see above note 7) who burned down forest on an a massive scale, thereby creating open, steppelike grazing lands for their herds. A more gradual opening of the landscape is also found in other regions. ¹⁸



Horse-head sceptres and axes from east-central Europe. Right: double Kurgan-grave of a man and a woman, probably a suttee burial (the woman was buried when her husband died); Gimbutas, the Civilization of the Goddess, 363. Renfrew showed a diagram of Marija Gimbutas with Corded Ware pottery and battle sceptres/axes.

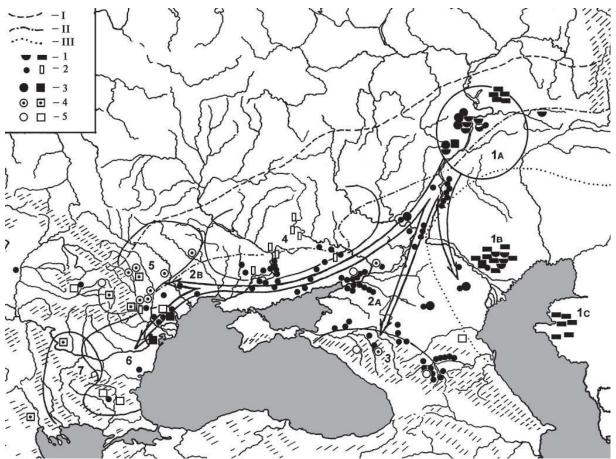


Diagram showing the spreading of the sceptres (axes) with horse-head-decoration: Harald Haarmann, *Die Indoeuropäer*, München, 2010, 28 fig. 4 with ref. to Dergachev, 2007, 147. Black symbols show a multitude, on the locations with the white symbols less were found.

Battle-axes in barrows. The Bronze-Age Corded Ware Culture elected the battle-axe as the most prominent male symbol, created new types of pottery and shared burial rituals in barrows over vast distances that had strong affinities with the Yamnaya burial rituals known from the steppe. They erected *tens of thousands* of small single-grave *barrows* in Northern-Europe, aligned in rows across the landscape, in similar way to the practice on the steppe. ¹⁹ The horse-head battle-axes and sceptres were massively found in the kurgan- or barrow graves. I also reported on this phenomenon. (LOMA, 133 n. 167 with ref. to Haarmann, Anthony and Marler)

Different diet. Yamnaya cultures (from wave 3) of the Pontic and Caspian steppe represented a full pastoral economy with seasonal movement of people and animals between summer and winter pastures, marked by barrows.²⁰ Herds consisted of cattle, sheep and horse, and the people moved in mobile homes, wagons. The economy was based on meat and dairy product as well as fish. Seeds from wild plants were used in soup with *meat*.²¹ No agriculture is documented. It was a healthy diet and life-expectancy was fairly high.

Women from non-local origin. We find family massacres in four multiple burials containing single families of father, mother and children in the Corded Ware Cemetery of Eulau in Germany. The mothers were of non-local origin, probably originating from the Harz-mountains, 50-60 km to the north.²² Kristiansen: 'we observe that Corded Ware males practiced exogamy, perhaps marriage by *abduction*, which provides a possible explanation for the killing'.²³ In a recent work on diet and

mobility among Corded Ware cemeteries in southern Germany, it was possible to demonstrate that exogamy was indeed a common practice among Corded Ware groups.²⁴ Most adult women between 28 and 42 were of non-local origin and had had different diet during childhood; this was more similar to previous Neolithic diets with vegetable protein.²⁵

Single male burials. Archaeological data in Jutland show that in the single burials in the Corded Ware Culture, 90 % males were found. First iansen: 'Historical sources from India to the Baltic and Ireland support this'. He also gives a reason for this *male dominance*. Kristiansen: 'Existing archaeological evidence of a strong 90% male dominance in the early phase of the Corded Ware/Single Grave Culture settlement in Jutland, Denmark, and elsewhere can now be explained by the old Indo-European tradition of *war bands of young, unmarried and landless males* who did not have any inheritance to look forward to'.²⁸

Seasonal war bands of young males. Kristiansen and many of his colleagues argue for a *dominance of males* during the *early phase* after the migrations; this corresponds to the old Indo-European mythology of later times (male-oriented father-son relation or brother-brother relation; mythical 'heroes' abducting and raping women).²⁹ The sources talk about *war-bands* who were employed in pioneer migrations as a dynamic force. Such bands were mainly made up of younger sons, as inheritance was restricted to the oldest son.³⁰ The youth bands consisted of boys from 12-13 to 18-19 years of age.³¹ They were led by a senior male and were often giving names as '*Black Youth*' or *dogs* and *wolves* as part of their initiation rituals.³² So the Yamnaya cultures sent out young, mobile, warlike males, engaged in *predatory wolf-like* behaviour.³³ They were organized war-bands to settle in new territories and taking (robbing) wives from farming cultures.

Again these visions on warlike young males with wolf- or dogs names confirm earlier literature.34



See LOMA 132 [1.5.14]. The black dots are cemeteries with several graveyards; each graveyard can house several kurgans. The little hills are places where the grey Corded Ware Ceramics were found; J. P. Mallory, *In Search of the Indo-Europeans. Language, Archaeology and Myth*, London, 1989, 240. 249.

The first phase had no pottery. Yamnaya settlements were dominated by males of first-generation migrants. In early male burials were found battle-axes type A, but there was *no pottery* yet. Corded Ware pottery appeared later in Northern Europe and this did not happen until women with ceramic skills married into this culture. These warlike young males 'took' non-local wives who married into a patrilineal culture. These women started to produce new pottery and introduced further innovations. Only then the Bronze Age Corded Ware pottery appeared.

Different language. The Yamnaya brought the Indo-European languages into Bronze Age Europe, but as herders, they did *not* have words for *crops* or *cultivation*, unlike the Neolithic farmers.³⁷ As the Corded Ware Culture developed it adopted words related to farming from the indigenous Neolithic people of the Bell Beaker Culture, which they were mixing with.

A new Proto-Germanic dialect. Guus Kroonen, a historical linguist, was able to demonstrate that these new words for *crops* or *cultivation* did not belong to the original Indo-European languages. Therefore it was possible to conclude that the Neolithic people were not speaking an Indo-European language, as did the Yamnaya invaders. Thus, the process of genetic and cultural admixture was accompanied by a process of language admixture, creating the foundations for later Germanic languages, termed Proto-Germanic.³⁸ So the result of this hybridization was the formation of a New Culture and a new dialect, The Proto-Germanic.





Left: Marija Gimbutas, *The Civilization of the Goddess*, ch 10, 373 fig. 10-17; right: large house/temple from Parta, Transylvania, Haarmann, *Das Rätsel der Donauzivilisation*, München 2011, 153.

Other differences. This recent research does not extensively describes all differences. There are more differences between Neolithic egalitarian, peaceful and matriarchal cultures and Bronze-Age warlike, patriarchal cultures:

*Take for example the differences between *large clan houses* for an extended family and *smaller*, rectangular houses for the nuclear family; sometimes this small house is built on a *high hill* for defensive reasons. (LOMA, 134) See picture above.

*There is an enormous difference in the *colourful* pottery of a high technical standard of Old-Europe Neolithic culture and the *simple grey* Corded Ware pottery from the Bronze Age. Maps show the dispersion of this type of simple pottery over large areas in Europe and the Middle East. (LOMA, 130, n. 126, 131 n. 139)

*The content of the graves differs. *Female figurines* are to be found in the clan graves. (LOMA, 133) *Battle-axes* and other weapons and horses are found in the kurgans or barrows.

* The spreading of these battle-axes with horse heads is mapped in Europe, the Middle East and Asia. *The spreading of kurgans over large areas is also mapped in Europe and the Middle East. (LOMA 132 map [I.5.14])



Left: Romania, Old Europe, Cucuteni A vase, 71 cm high, 25 cm wide, 4500-4100 BC. From: Catalogue *Neolithic Art in Romania*, Olten, Naples, 2008, 86 nr 36. Right: Bronze Age Corded Ware pottery from the Eastern Baltic, 2900-2300 BC.

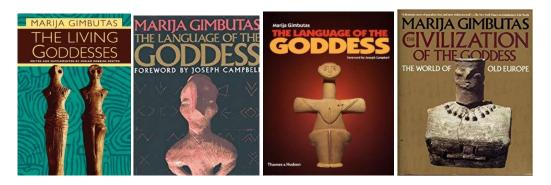
Kristiansen's conclusion. Back to the recent research transmitted by Kristiansen. He ends his article with this remarkable conclusion: 'This new historical interpretation rests on relatively sound ground and represents *a return to a more dramatic past* than the prevailing model of cultural and

technological transmissions'. So he supports Marija Gimbutas first and second phase-theories, without mentioning her name. In the first phase we witness the invasion and confrontation of steppe-migrants. In the second phase the assimilation and integration of these invaders with the Neolithic farming peoples of Europe.³⁹

3. Colin Renfrew rehabilitating Marija Gimbutas' Kurgan-theory



The grand old man of British archaeology Lord Colin Renfrew gave on 8 November 2017 a Marija Gimbutas memorial lecture at the Oriental Institute in Chicago. His lecture was titled 'Marija Rediviva DNA and Indo-European Origins'. The lecture evoked excitement in matriarchal and goddess circles. You can listen to the lecture and see Renfrew showing his slides when you follow the link. Will summarize his lecture.



A good friend. Renfrew starts his lecture telling his audience about his friendship with 'Marija' – note that he calls her Marija –. He stayed with her in her house close to Malibu, California, worked with her in archaeological sites and admired her energy, scholarship and the focus of her interest. He states that she was the first one in showing interest in female figurines, claiming that women played a leading role in *egalitarian* societies; but these were *not* matriarchal in her view. People in Old Europe lived in a *female-male balanced* society were nobody dominated the other. She became – also to her own surprise – one of the pioneers of the feminist movement of the second wave in California. He showed slides of her books, pictured above.

Renfrew about Marija's Kurgan-theory. This Old European Neolithic society disappeared by the incoming *invasion* of the Kurgan people of Indo-European origin, who built burial mounds or Kurgans and who brought male dominance and war. At this point the insights of Renfrew and Gimbutas at that time (sixties and seventies of the 20th century) parted. Renfrew adhered the hypotheses that the first agriculturalists were of Indo-European origin and came from Anatolia. He had to admit that he was wrong. The first farmers came from Anatolia and entered Cyprus around 9000 BC and the continent of Old Europe around 7500; they were certainly not of Indo-European origin. (LOMA, Part 1 ch. 5 and 7).

Renfrew was quite honest to admit that two or three years ago he would have given a less positive memorial speech, because at that time the latest DNA-research on ancient bodies was not available yet. Now in 2017 he has to admit: the recent DNA-results support many elements, but not all, of Marija's Kurgan hypothesis. So to his own surprise Marija ends up at the end of his November lecture as 'the triumphant precursor of much current work'.

Processual archaeology. Renfrew was an adherent of the New Archaeology or Processual Archaeology. This current in archaeology stated that 'migrations' had been exaggerated. It was all about a slow process of change; this was not caused by 'migrations' and certainly not by sudden 'invasions'. Renfrew in November 2017: 'DNA-results prove that there was a migration process'. Renfrew: 'She was right'. And it is proven by modern *molecular genetics* or *archaeogenetics*.

An old theory. Gimbutas stated: the Indo-Europeans came from the Pontic steppes, north of the Black Sea. She was not the first one to elaborate on this subject. The first one who developed this theory was Otto Schräder in 1890, followed by the Australian scientist V. Gordon Childe, *The Aryans*, 1923. After WWII Marija rekindled this old theory, that became out of fashion after national-socialist racism on the Indo-European Aryans. Gimbutas wrote about her Kurgan theory in the *American Anthropologist*, in 1963, 1968 and 1970: the invaders from the steppe brought new burial customs, stone battle axes and the rather unattractive Corded Ware pottery (Schnur Keramik). She produced diagrams of these dispersions of kurgans, axes and pottery. At this moment in his lecture Renfrew confessed: *'I was skeptical on migrations and I am still surprised that she was right'*.

DNA-research. Renfrew mentioned the earlier work on DNA by Albert Ammerman and Luigi Luca Cavalli Sforza (LOMA, 127 n. 85 and 86). But then he continued to give an overview of the most recent DNA-research, supporting the earlier archaeological and linguistic evidence of a migration/invasion from the Pontic steppes north of the Black Sea.

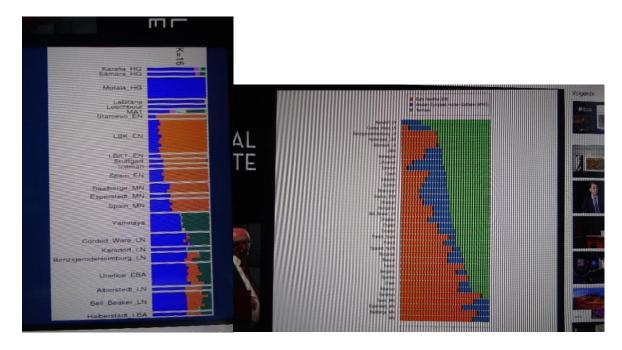
He mentioned the laboratory of David Reich in Harvard. Three major important studies on ancient mitochondrial DNA came from this center.

*The study of Wolfgang Haak and others, 'Massive Migration from the steppe was a source of Indo-European Languages in Europe', *Nature* 522, 2015, p. 207-211.

*Then he mentioned the article of I. Lazardis and others, 'Genetic origins of the Minoans and Mycenaeans', *Nature* 548, August 2017.

The third article he mentioned was of I. Olalde and others, 'The Beaker phenomenon and the genomic transformation of North-Western Europe' (forthcoming).

The studies of Haak and Lazardis and others were mentioned earlier in this article by Kristiansen. You will find them in the notes.



Colorful proof. Renfrew: 'There is no doubt that the Kurgan invasion-migration was massively supported by the work of Haak. The proto-Indo-European language reached Europe from the Yamnaya culture. So the work of Haak supports the Yamnaya- and Kurgan hypothesis of Marija Gimbutas'.

Renfrew showed colorful diagrams from the work of W. Haak (see diagrams above). The blue showed the DNA of hunter-gatherers. The orange that of early Neolithic European farmers. The green that came much later (left diagram) showed the DNA of the Yamnaya from steppe.

Renfrew ended by saying: 'I am leaving you a little confused, because the ancient DNA evidence (on many issues, specially the Anatolian one and the Beaker one) is not very clear. It will still be discussed for decades of years. But Marija's Kurgan hypothesis is magnificently vindicated by recent DNA research'.

4. David Anthony: 'Marija Gimbutas was right'...

On 7 November 2018 David W. Anthony, professor of Anthropology at Hartwick College (NY) and author of the book "The Horse, the Wheel and Language" (Princeton, 2007) visited Leiden University. At the Dutch National Museum of Antiquities, he presented his latest research on the much-debated origins of the Indo-European languages in a lecture titled 'Indo-European origins through linguistic, archaeological and ancient DNA perspectives'. He told his audience rather emphatically: 'Marija Gimbutas was right'.

5. Final Remark

We can only conclude: Marija Gimbutas' theories and ideas on the Kurgan-theory are true. Her work on the Kurgan-invasions is rehabilitated. Hurray, Hurray, Hurray!!!

Dr. Annine E. G. van der Meer, 13 November, 2018.

-

¹ See also C.C. Lamberg-Karlovsky, 'Achaeology and Language: The Indo-Iranians', *Current Anthropology* vol 13 (February 2002) 63-88.

² Haarmann, *Das Rätsel der Donauzivilisation*, 231; Anthony, *The Horse, Wheel and Language*, 307; Mallory, *In search of the Indo-Europeans*, 92, 184, 250.

⁷ Christoph Baumer, *The History of Central Asia. The Age of the Steppe Warriors,* I.B Tauris, London, New York, 2012 is one of those defenders of the 'assimilation' theory, mentioned by Barry Cunliffe, 56,78 with ref. to Krzystof Ciuk ed., Mysteries of ancient Ukraine, Toronto, 2008. Bauer, 78: 'it were the growing agrarian cultures or Cucuteni-Tripolye that expanded during the climate optimum to the Dnieper river eastwards near the modern city of Kiev. As the self-sustaining farmers practiced slashand burn agriculture and the soil was quickly depleted, they were forced periodically to move eastward to seek new virgin land, so that the culture spread as far as the Dnieper. Around 3300 BC Tripolye was overtaken by a severe, mostly self-inflicted crisis. A climatic cooling that had begun there around 3500 BC hampered farming, but the slash-and-burning approach and massive deforestation for building and heating purposes reduced the forested part of Tripolye's area. In this way the Tripolye farmers destroyed their own natural barrier against the slowly advancing steppe nomads in the north-east who at first could not cross this wall of forest with their herds. The stockbreeders in western Central Asia, who sought to escape the cooling climate by migrating to the south, began to infiltrate the cultural realm of the Tripolye. Astonishly the Tripoyle Culture did not collapse as a result of this migration but instead experienced a revival. The farmers adopted the technologies of the advancing herders and used their land...It appears that the expansion of the steppe nomads lifestyle to the west came about not so much through military attacks as by adoption of technologies of animal husbandry appropriate to the changed climatic and ecological conditions... '. Bauer, 79 note 78: 'The hypothesis of Marija Gimbutas in the 1970s of a brutal destruction on the peaceful, egalitarian and matrilineally organized agrarian culture of 'Old Europe' by militaristic and patriarchal Indo-European rider hordes from the east has been laid to rest'. There is no evidence that Chalcolithic agrarian culture was matriarchal and egalitarian, nor that steppe peoples had an armed cavalry as far back as the fifth of fourth millennium BC. It is true however that the seminomadic herders had an armed elite and erected kurgans'. The research of D. Anthony and D. Telegin seem to contradict this so called 'reconstruction' of Bauer (recorded by Bauer on page 56 notes 31, 32).

³ Haarmann, Das Rätsel der Donauzivilisation, 191.

⁴ Barry Cunliffe, *Europe between the Oceans*, 42 with map.

⁵ Brentjes, *Die Ahnen Dschingis-Chans*, 73; Haarmann, *Die Indoeuropäer*, 20, 26-26.

⁶ Barry Cunliffe, *By Steppe, Desert and Ocean. The Birth of Eurasia*, Oxford University Press, Oxford, 2015, 83-84 mitigates the invasions of steppe nomads: ,*The cause of the crisis in the lower Danube valley has been widely debated. The cold climate may have encouraged some herders to move into the lusher and warmer pastures of the Danube delta region. The evidence for this is comparatively slight, but local settlements seem now to have been abandoned and a number of kurgan burials of steppe type are found, some of them containing stone mace-head like horse-heads, buried with the dead. The appearance of these new elements has been taken to suggest the incursion of a group of pastoral herders, referred to as the Suvorovo culture, coming from the Dnieper valley about 4200 BC. While some archaeologists would argue that the evidence would be explained as the local population assimilating aspects of steppe-culture, on balance it is simpler to see the Suvorovo phenomenon as a <i>limited incursion* of steppe communities migrating into Europe'.

⁸ Marija Gimbutas, *Civilization of the Goddess*, 392-393; The Dutch translation of 'Corded Ware Culture' is 'Touwbekercultuur'.

⁹ Kristian Kristiansen, Morten E. Allentoft, Karin M. Frei, Rune Iversen, Niels N. Johannsen, Guus Kroonen, Łukasz Pospieszny, T. Douglas Price, Simon Rasmussen, Karl-Goran Sjogren, Martin Sikora & Eske Willerslev, 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', Antiquity, Bd. 91, nr. 356 (2017), 334-347.

- ¹² M. E. Allentoft e.a., 'Population genomics of Bronze Age Eurasia', *Nature* 522 (2015), 167-72; W. Haak e.a., 'Massive migration from the steppe was a source of for Indo-European languages in Europe', *Nature* 522 (2015) 207-11 https://doi.org/10.1038/nature14317; Kristiansen e.a., 'Retheorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 335.
- ¹³ Gimbutas writes: Jamnaya. In modern Russian this name is written as Jamnaja and in Ukraine-language as Jamna.
- ¹⁴ C. R. Meier, R. Ganslmeier, V. Dreseley and K. W. Alt, New approaches to the reconstruction of kinship and social structure based on bioarchaeological analysis of Neolithic multiple and collective graves', J. Kolár, F. Trampota eds., *Theoretical and methodological considerations in Central European Neolithic Archaeology*, British Archaeological Reports international series 2325, Oxford, 2012, 11-23; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 338, 343.
- ¹⁵ See lecture 'Steppe migrant thugs pacified by Stone Age farming women' of 4 April 2017 at the site of the Centre for Geogenetics, Copenhagen; See summary of the lecture of prof. K. Kristiansen 'Steppe migrant thugs pacified by Stone Age farming women' on 11 May 2017 in Leiden, 3.
- ¹⁶ S. Rasmussen e.a., 'Early divergent strains of *Yersinia pestis* in Eurasia 5000 years ago', Cell 63 (2015), 571-82, https://doi.org/10.106/j.cell.2015.10.009; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 335.

- ¹⁸ S. T. Andersen, 'History of vegetation and agriculture at Hassing Huse Mose, Thy, northwest Denmark, since the Ice Age, 'Journal of Danish Archaeology 11 (1993) 57-79; K Kristiansen, 'Eurasian transformations: mobility, ecological change and the transmission of social institutions in the third millennium and early second millennium BCE', The world system and the Earth system: global socioenvironmental change and sustainability since the Neolithic, Walnut Creek (CA), 2007, 149-162; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 336 with ref. to T.C. Doppler, 2015.
- ¹⁹ E. Hübner, Jungneolithische Gräber auf der Jüttischen Halbinsel. Typologische und chronologische Studien zur Einzelgrabkultur, Nordiske Fortidsminder, Serie B 24, Kopenhagen, 2005; Q. Bourgeois, Monuments on the horizon: the formation of the barrow landscape throughout the 3rd and the 2nd millennium BC, Leiden, 2013; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 336.

¹⁰ See Kristiansen's lecture of 4 April 2017 at the site of the Centre for GeoGenetics, university of Copenhagen: http://geogenetics.ku.dk/latest-news/alle_nyheder/2017/steppe-migrant-thugs-pacified-by-stone-age-farming-women/; in 2017 this full lecture was online.

¹¹ See the same lecture in the RMO in Leiden, the Netherlands – the sixth 'Louwe Kooimanslecture' – given by Prof. K. Kristiansen on 11 May 2017, 1-4; in 2017 an extended summary of this lecture was online.

¹⁷ Summary of the lecture of prof. K. Kristiansen on 11 May 2017 in Leiden, 2.

²⁰ Natalia Shishlina, *Reconstruction of the Bronze Age of the Caspian steppes: life styles and lifeways of pastoral momads,* British Archaeological Reports international series 1876, Oxford, 2008; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 337.

²¹ R. J. Schulting, M. P. Richards, 'Stable isotope analysis of Neolithic to Late Bronze Age populations in the Samara Valley', D. W. Anthony e.a. eds., *A Bronze Age landscape in the Russian steppes. The Samara Valley Project*, Los Angeles, 2016, 127-49; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 337.

²² Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 338.

²³ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 338.

²⁴ K.-G Sjogren, T. D. Price, K. Kristiansen, Diet and Mobility in the Corded Ware of Central Europe, *PLoS ONE* 11 (2016): e0155083 https://doi:10.1371/journal.pone.0155083; Kristiansen e.a., 'Retheorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 338-339.

²⁵ I. N. Lazardis e.a., 'Ancient human genomes suggest three ancestral populations for present-day Europeans', *Nature* 513 (2014), 409-13; Kristian Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 338.

²⁶ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 339 with ref. to Hübner, 2005, p. 632-33, fig. 454.

²⁷ Hedwig Falk, *Bruderschaft und Würfelspiel. Untersuchungen zur Entwicklungsgeschichte des vedischen Opfers*, Hedwig Falk hrg, Freiburg, 1986.

²⁸ Summary of the lecture of prof. K. Kristiansen on 11 May 2017 in Leiden, 2; Kristiansen e.a., 'Retheorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 339 with ref. to A. Petrosyan, 2011, 345, see note 29.

²⁹ LOMA 134; *Van Venus tot Madonna*, 264, 315-316 see for sev. ex. index 'held'; David Anthony, *The Horse, the Wheel and Language*, 134 gives the Ind-European myth of the twin brothers Manu and Yemo: their *cattle* was stolen by a big serpent (female symbol). Anthony, 135: 'The myth reflects the worldview of a male-centered, cattle-raising people'.

³⁰ A. Petrosyan, 'Armenian traditional Black Youths: the earliest sources', *Journal of Indo-European Studies* 39 (2011), 342-53; B. Sergent, 'Les Troupes de jeunes homes et l'expansion indo-europienne', Dialogues d'histoire ancienne 29 (2003), 9-27; A. Pike-Tay, D. W. Anthony, 'Dog days of winter: seasonal activities in a Srubnaya landscape', D. W. Anthony e.a. eds., *A Bronze Age landscape in the Russian steppes. The Samara Valley Project*, Los Angeles, 2016, 373-85; D. R. Bown, D. W. Anthony, Midwinter dog sacrifices and warrior initiations in the Russian steppes at Krasnosamarskoe, in press; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 339.

- ³⁴ See J. P. Mallory, *In Search of the Indo-Europeans. Language, Archaeology and Myth*, London, 1989 about war bands or 'Männerbunde': **110-11**; wolf: 108, 110, **116**, 157; see for recent research K. Kershaw, *The one-eyed god: Odin and the (Indo-)Germanic Männerbund,* Journal of the Indo-European Studies monograph 36, Washington D.C., Institute for the Study of Man, 2000; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 339. See note 29 for further literature, specially David Anthony.
- ³⁵ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 340 with ref. to Furholt, 2014, 6, fig. 3.
- ³⁶ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 340 with ref. to Ivanova, 2013 and Frinculeasa et al., 2015.
- ³⁷ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 340 with ref. to Klassen, 2005.
- ³⁸ G. Kroonen and R. Iversen, 'Talking Neolithic: linguistic and archaeological perspectives on how Indo-European was implemented in southern Scandinavia', *American Journal of Archaeology,* in press; Summary of the lecture of prof. K. Kristiansen on 11 May 2017 in Leiden, 3; Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 340,341, 342.
- ³⁹ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 343.
- ⁴⁰ Colin Renfrew gave on 8 November 2017 a Marija Gimbutas memorial lecture 'Marija Rediviva DNA and Indo-European Origins' at the Oriental Institute in Chicago; see for Renfrews very positive view on the Kurgan-theory of Marija Gimbutas:

https://www.google.com/search?q=Marija+Rediviva+DNA+and+Indo-European+Origins%E2%80%99&ie=utf-8&client=firefox-b.

³¹ Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 339.

³² Kristiansen e.a., 'Re-theorising mobility and the formation of culture and language among the Corded Ware Culture in Europe', 339.

³³ Heide Göttner-Abendroth, 'Notes on the Rise and Expansion of Patriarchy', *Societies of Peace, Matriarchies past, present and future,* Toronto, 2009, 424-433.

⁴¹ See: https://youtu.be/pmv3J55bdZc. The lecture provoked many reactions, see for example Carol Christ who wrote in December 2017 a blog called: 'Marija Gimbutas Triumphant'.

⁴² Swedish and Danish researchers found out in 2012 by genetic research that the first farmers wandered around in 3000 BC from the region of the Mediterranean to Northern Europa; see Pontus Skoglund, Helena Malmstrom, Maanasa Raghavan, Jan Stora, Per Hall, Eske Willerslev, M. Thomas P. Gilbert, Anders Gotherstrom, Mattias Jakobsson, 'Origins and Genetic Legacy of Neolithic Farmers and Hunter-Gatherers in Europe', *Science*, 27.4.2012: vol. 336, issue 6080, p. 466-469 (DOI: 10.1126/science.1216304). Abstract: The farming way of life originated in the Near East some 11,000

years ago and had reached most of the European continent 5000 years later. However, the impact of the agricultural revolution on demography and patterns of genomic variation in Europe remains unknown. We obtained 249 million base pairs of genomic DNA from ~5000-year-old remains of three hunter-gatherers and one farmer excavated in Scandinavia and find that the farmer is genetically most similar to extant southern Europeans, contrasting sharply to the hunter-gatherers, whose distinct genetic signature is most similar to that of extant northern Europeans. Our results suggest that migration from southern Europe catalyzed the spread of agriculture and that admixture in the wake of this expansion eventually shaped the genomic landscape of modern-day Europe. See also in German: 'Erste Bauern Nordeuropas stammten aus dem Mittelmeerraum. Steinzeitliche Jager und erste Landwirte waren genetisch sehr verschieden' (in English: 'First Farmers of Northern Europe came from the Mediterranean, Old Stone Age Hunters first farmers were genetically very different'), www.scinexx.de/wissen-aktuell-14699-2012-04-27.html.

⁴³ See for recent review of Anthony's work: https://indo-european.eu/2017/12/the-new-indo-european-corded-ware-theory-of-david-anthony/ Published by Carlos Quiles 17.12.2017.