Warfare in the European Neolithic: Truth or Fiction?

> There is no evidence of territorial aggression [in Central Europe between 6500 and 5500 BC], and the total absence of lethal weapons implies a peaceful coexistence between all groups and individuals. Villages have no fortifications except occasional V-shaped ditches and retaining walls where structurally necessary. Villages were usually founded on choice locations near rivers or streams or on lake terraces, and the use of steep hills or other inaccessible terrain for habitation was unknown during this peaceful period (Gimbutas 1991:48).
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> No defensive features such as palisades or ditches are found in the early period of this [the Linearbandkeramik] culture (39).
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> No weapons except implements for hunting are found among grave goods in Europe until c. 4500-4300 B.C., nor is there evidence of hilltop fortification of Old European communities (352).

Marija Gimbutas wrote that "the period of 4500- 2500 B.C. (calibrated chronology) is one of the most complex and least understood in prehistory. It is a period which urgently demands a concerted effort by scholars from various disciplines" (Gimbutas 1980:1). In her view, warfare did not exist in Neolithic Europe until after c. 4400 BC when nomadic peoples, assumed to speak a Proto-Indo-European language, began to enter Europe from north of the Black Sea. The vision of Neolithic "Old Europe" as originally peaceful has inspired a new view of European origins among theorists from a variety of disciplines throughout the world. Nevertheless, a number of archaeologists dispute Gimbutas' claim. My intention in this paper is to present a preliminary examination of evidence on both sides of this question to begin to determine whether or not Old Europe was indeed peaceful as Gimbutas has claimed.

In *Archaeology: The Science of Once and Future Things*, archaeologist Brian Hayden writes: "There is abundant evidence for warfare during the Middle and Late and even Early Neolithic, long before the Indo-Europeans arrived on the scene, although it may not have been so intense or so one-sided as the conflicts with the Indo-Europeans" (Hayden 1993:350). A comprehensive examination of the question of warfare during the European Neolithic is beyond the scope of this paper, for it would require an exhaustive analysis of hundreds of articles and monographs that discuss this subject written in every Western and Eastern European language. Since Hayden's book is currently in use as an introductory university text, I will examine the articles used by Hayden to support his argument that warfare existed before the arrival of Indo-European speaking peoples.

It is first necessary to define a few terms. Neolithic (literally "New Stone Age") specifically refers to the use of ground stone tools. It often implies a sedentary agrarian life style utilizing a variety of domesticated plants and animals. In northern Europe the Neolithic is often typified by the appearance of ceramics rather than by fully settled agricultural communities while the Neolithic economies of cultures north of the Black Sea, in the Caucasus Mountains and the Caspian Sea regions depended upon the domestication of cattle, sheep and goats (Gimbutas 1997:352) . The Neolithic period in Europe does not begin at one moment in time. In the Mediterranean area, as well as in central and southern Anatolia, the earliest Neolithic communities are dated by calibrated radiocarbon

chronology to the early seventh millennium B.C. The Balkans established a food producing economy toward the end of the seventh millennium, and in central Europe between 6000 and 5500 B.C., whereas agriculture was not established in Britain until around 4500 B.C. (Gimbutas 1991:6).

The term "Old Europe," coined by Marija Gimbutas, refers to the pre-Indo-European Neolithic cultures, initially of southeast Europe (she eventually extended the term to include all of pre-patriarchal Europe). In her view, Old Europe was peaceful until a collision of cultures took place that introduced an androcratic, aggressive ideology and weapons for war into Europe for the first time. Gimbutas uses the term "Kurgan" to refer to the warlike nomadic pastoralists who, according to her Kurgan Hypothesis,[1] infiltrated Europe in three waves between 4400 and 2800 B.C.

Brian Hayden challenges the idea that Old Europe was peaceful by stating that a number of sites were enclosed by walls of a "defensive nature." For evidence, he sites Evans & Rasson (1984:720) and Webster (1990:343). Evans & Rasson's article is a 1984 review of the literature on Neolithic and Chalcolithic research in southeast Europe. There are only two paragraphs in the entire article that make reference to defensive structures:

> Features such as ditches, banks, or fences may be investigated for a variety of functions (Jacobsen 1981).[2] The identification of a community by a wall or fence may be symbolic (to create a sense of community) or functional (to keep animals in or out, for instance). Tringham (1971)[3] suggests that the evidence for fences, ditches, and banks is more likely a method of community "demarcation" than evidence for fortification. The question of works constructed with defense in mind - "fortification" - is another matter (Evans & Rasson 1984:720).

The second paragraph begins with a sentence that calls attention to a report by Sebastian Morintz (1962)[4] concerning the existence of Gumelnita sites in Romania, considered "fortified" because of the existence of walls and trenches, their location on summits, promontories, terraces or on islands. The second sentence mentions Henrieta Todorova's 1973 paper[5] that describes "some communities having fortifications," especially the plan

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[1] The Kurgan Hypothesis of Marija Gimbutas locates the homeland of nomadic Proto-Indo-European speakers in the Volga steppe region of south Russia. After domesticating the horse during the fifth millennium B.C. they began their out migrations into Europe and into the Indus valley. This is the explanation offered by Gimbutas for the striking similarities between the Lithuanian language and Sanskrit.

[2] Thomas W. Jacobsen (cited in Evans & Rasson 1984): "Franchthi Cave and the Beginning of Settled Life in Greece. *Hesperia* 50 (4) 1981:303-319.

[3] Ruth Tringham (cited in Evans & Rasson 1984): *Hunters, Fishers and Farmers of Eastern Europe: 6000-3000 B.C.*, 1971. London: Hutchinson University Library.

[4] Sebastian Morintz (cited in Evans & Rasson 1984): "Tiputi de asezari si sisteme de fortificatie si imprejmuire in cultura Gumelnita." *Studii si Cercetari Istorie Veche* 13 (2) 1962:273-284.

[5] Henrieta Todorova (cited in Evans & Rasson 1984): "Die früesten Fortifikationsysteme in Bulgarien." *Zeitschrift für Archeologie* 7 (1973):229-238.

of Poljanica in Bulgaria. No information substantiating these sites as fortifications is given, nor is a distinction made between those sites with "ditches, banks, or fences" that are interpreted as fortifications, and those that are not. The term "fortification" is simply taken at face value. A book edited by George Christopoulos (1970: 69, 79)[6] is mentioned because it includes artist reconstructions of the Sesklo and Dimini sites in Thessaly, interpreted as fortified with no further information.

The Sesklo site (shown at c. 5900-5700 B.C. in Figure 1) is encircled by a retaining wall along the edges of a rather steep slope. Although the excavator, Demetrios Theocharis (n.d.), used the terms "acropolis" and "megaron" to describe the walled site, assuming the existence of a ruling elite, no direct evidence was found in this, or in any other site of the Sesklo culture, to indicate the rule of a chieftain or of territorial aggression. The Dimini site followed the Sesklo culture, and the artist's illustration [Fig. 2] published in Hayden (1993:252) shows a fortified settlement. Although a date is not given for this reconstruction, it could not have been later than 4000 B.C., since the Dimini culture in Thessaly is dated (by calibrated radiocarbon chronology) to c. 5500-4000 B.C. (Gimbutas 1991:23, 420; Whittle 1996:79-89). The most recent archaeological analysis of Dimini, however, has reversed the earlier conclusion: the "fortification" was a series of retaining walls.

> [Dimini] consists of several concentric retaining walls, between which there were buildings and work areas, with the innermost defining a broad central space empty except for some building around the outer part. The walls are not now seen as defensive, and there are several entrances through all the circuits (Whittle 1996:87).

The Karanovo settlement of Poljanica in northeastern Bulgaria [Fig. 3], mid-fifth millennium B.C., had three parallel palisades, traditionally referred to in the literature as a fortification. According to Gimbutas, they functioned "perhaps as protection from wild animals, which are not to be confused with hill-fort fortifications of the Indo-European type" (Gimbutas 1991:93). Poljanica is organized in a square formation open to the four directions, typical of other square enclosures found in Old European culture groups during the fifth and fourth millennia B.C. Emilie Pleslová-_tiková, from the Archaeological Institute of the Czech Academy of Sciences in Prague associates the plan of Poljanica with a ritual tradition of four corner/four season symbolism, as an expression of paleogeometry and paleoastronomy (Pleslová-_tiková 1980:61). The square enclosure of Makotrasy in central Bohemia from the Funnel-necked Beaker culture (TRB), excavated by Pleslová-_tiková, is an especially sophisticated example of astronomical orientation stemming from advanced agricultural technology [Fig. 4].

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[6] George A. Christopoulos, editor-in-chief (cited in Evans & Rasson 1984): *History of the Hellenic World: Prehistory and Protohistory,* 1970. Athens: Ekdotike Athenon S.A.

> It is possible that this square structure was built according to an already existing model and with extant knowledge of the northernmost local azimuth of moonrise. . .which appears only once in 18.6 years. . . Perhaps men of that time knew how to transfer the horizontal right angle from which the northernmost moonrise differed, from the azimuth of some fixed correlated points on the horizon. . .where the bright stars rise or set. . . . The paleoastronomic structure at Makotrasy may also have served as a clue to the first application to the principle of the Pythagorean triangle, actually incorporated in the geometric base of numerous paleoastronomic constructions. . . a place of central cultic activity; the religious ideas primarily related to the cult of the moon and sun (69-71).

We will continue with the subject of other enclosures which also suggest a ritual significance later in this paper.

The article by Gary Webster on "Labor Control and Emergent Stratification in Prehistoric Europe" includes only these few words relating to fortification:

> From the late 4th millennium on, cultural development in adjacent regions of the Balkans and the Aegean follow strikingly different trajectories. . . There is evidence for settlement nucleation (sometimes with fortification) and the associated widespread abandonment of small peripheral sites during the late 4th millennium . . perhaps reflecting a declining agricultural base" (Webster 1990:344).

Although widespread site abandonment during the late fourth millennium B.C. might have resulted from "a declining agricultural base," Gimbutas' Kurgan Hypothesis explains the dislocation of populations and the appearance of fortifications as the result of invasions by Kurgan peoples between the fifth and third millennia B.C. (Gimbutas 1991:358, 368). According to Gimbutas, the repeated intrusions of steppe people into Europe over two millennia shattered the continuity of Old European development (although Old European traditions continued in the Aegean and Mediterranean islands until the mid-second millennium B.C.). During the fourth millennium B.C., a structural reorganization seems to have taken place across much of southeast Europe. Evidence for this comes from the abandonment of 600-700 tell sites in the Balkans which had flourished from as early as the seventh millennium B.C. As archaeologist James Mallory points out, the indigenous populations were displaced in every direction except eastward, moving into marginal locations - islands, caves or easily fortified hilltop sites. The apparent cultural collapse and chaos of this period produced a Balkan "dark age" (Mallory 1989:238). Webster's comments are not, therefore, in contradiction with Gimbutas or Mallory.

Hayden continues: "Evidence for warfare and fortifications appears in the earliest Neolithic sites in central and eastern Europe (Milisauskas, 1986:787) and continues until the late Neolithic (Pavúk, 1991), sometimes with bodies in the defensive ditches"

(Hayden 1993:350). It should be pointed out that neither Milisauskas nor Pavúk write about bodies found in defensive ditches.

In his 1986 article, "Selective Survey of Archaeological Research in Eastern Europe," Sarunas Milisauskas devotes one brief paragraph to the subject of fortifications. In his view, warfare and fortifications began with the appearance of Neolithic farmers.

> A number of fortified settlements were excavated such as the early Neolithic settlement at Eilsleben in East Germany (Kaufmann 1977, 1982)[7] and the Middle and Late Neolithic fortifications at Bronocice in Poland (Kruk and Milisauskas 1979, 1985).[8] V. Pavúková found ditches at the Lengyel site of Svodín in Slovakia (Milisauskas 1986: 787).

Since evidence for the association of Neolithic farmers with warfare is not presented, it is impossible to evaluate its merit. Is Milisauskas simply assuming that ditches are evidence of warfare? Did Brian Hayden actually read the articles that Milisauskas cited with his statement that Neolithic farmers brought warfare (which were written in German in Slovakian and Polish publications), or is he simply adopting Milisauskas' viewpoint as truth? In any case, no discussion of the material evidence is given. Milisauskas, however, goes go on to say:

> It should be noted that not all Neolithic sites with ditches or enclosures are classified as fortified sites. For example, the Neolithic site of Makotrasy in Czechoslovakia was classified as a ritual place (Pleslova-_tikova et al. 1980).[9] The orientation of the enclosures at Makotrasy was consistent with sunrise and sunset at the winter and summer solstice (Milisauskas 1986: 787).

The article by Juraj Pavúk, "Lengyel-culture Fortified Settlements in Slovakia," was given to me at an international congress in Bratislava in 1991. Afterwards, Marija Gimbutas and I drove to the well-known site of Buèany in Slovakia to view a recently excavated roundel[10] [Fig. 5]. I listened intently to her discussion with the excavators

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[7] D. Kaufmann (cited in Milisauskas 1986): "Entdeckung und Vermissung einer befestigten linienbandkeramischen Siedlung bei Eilsleben, Kr. Wanzleben." In *Zeitschrift für Archaologie* 11 (1977):93-100; ."Zu einigen Ergebnissen der Ausgrabungen im Bereich linienbandkermischen Erdwerk bei Eilsleben, Kreis Wanzleben." In *Siedlungen der Kultur mit Linearkeramik in Europa,* edited by B. Chropovsky and J. Pavuk (1982): 69-71. Nitra: Slovenska Akademie Vied.

[8] J. Kruk and S. Milisauskas (cited in Milisauskas 1986): "Befestingungen der späten Polgár-Kultur bei Bronocice (Polen). *Archäologisches Korrespondenzblatt* 9 (1) 1979:9-13; *Bronocice: osiedle obronne ludnosci kultury lubelskowolynskiej (2800-2700 lat p.n.e).* Wroclaw: Ossolineum.

[9] E. Pleslova- _tikova et al. (cited in Milisauskas 1986): "A Square Enclosure of the Funnel Beaker Culture (3500 B.C.) at Makotrasy (Central Bohemia): A Palaeoastronomic Structure." *Archeologicke Rozhledy* 32 (1980):3-35.

concerning the evidence unearthed at the site and their interpretation of its function. Two concentric V-shaped ditches, nearly 70 meters in diameter, define the site which is open on each of the four cardinal directions. The excavators considered that it may have been used for seasonal, ritual activities by settlements of the Lengyel culture located in the surrounding area.

After eight pages of text describing such earthworks as "fortifications" (although no evidence of warfare is mentioned), Juraj Pavúk includes these comments on the last page of his article:

> The high cultural level of this society is borne out by the structure of the large settlements, which are dominated by central fortifications, designed and built with a view of exploring patterns in natural phenomena and exploiting them for the benefit of the communities concerned. Both the astronomical orientation of the fortification. . .and the planned layout of the adjacent settlements as well as their subsequent enclosure, suggest that the economic needs of the community were dominant in the process of settlement foundation. Circular and oval fortifications in settlement sites might have represented a reaction to certain critical situations, helping to use natural phenomena as observed in their context. If they were designed and built as calendrical devices, they must have fulfilled other tasks based on the laws of nature or on the movements of the heavenly bodies, in addition to astronomical time measurements. A connection with the growth cycles of cultivated cereals and other plants comes to mind as the most likely candidate. Features of this kind are, however, best understood as cult facilities (Pavúk 1991:356).

Some of the roundels (ditched enclosures) are extremely large. The _lkovce site, for instance, measures 900 meters north-south and almost 500 meters at its width. The interiors could accommodate the entire local population which, according to Pavúk, "could have represented a setting for rituals but also a refuge for all inhabitants of the site" (356).

Pavúk indicates that the early period of the Lengyel culture seems to have been economically prosperous. A pattern of settlement discontinuity arose, however, that is not explained by social and economic causes, indicating "a new strategy both towards the environment and towards social and cultural traditions" (356). Pavúk observes that this discontinuity became a conspicuous feature of Lengyel settlements "which were founded and deserted within one cultural stage" (354). He discusses only the possibility of

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[10] A "roundel" is a circular earthwork, usually called a "henge" monument or a "causewayed camp" (originally assumed to be a military enclosure). It is composed of a flat, circular space surrounded by one or more ditches and banks, sometimes utilizing large stones or palisades, with one or more entrances (often open to the four directions). Roundels are found from the fifth millennium B.C. in central Europe in the Linearbandkeramik (LBK) culture, and in the Lengyel culture in Moravia. During the fourth millennium B.C. they were created by the Funnel-necked Beaker culture (TRB) in eastern Germany. Roundels appear 1-2 millennia later in Britain as Stonehenge, Avebury, Woodhenge, among others (Gimbutas 1991:207-208, 338-341).

environmental factors to explain dislocation, although he does say that "the emergence of settlements with defense facilities and with considerable concentrations of people reflects a social situation of crisis and conflict" (356).

Pavúk gives the calibrated radiocarbon dates for Lengyel I as c. 4900-4700 B.C., and Lengyel II as c. 4400-4200 B.C. He adds that "no fortifications dating from Lengyel III and Lengyel IV stages are known from Slovakia" (353-354). Since Lengyel I appears to have been prosperous and stable, the instability must have taken place during the Lengyel II phase (4400-4200 B.C.). This period coincides exactly with the appearance of the first Kurgan wave into Europe.

In *The Civilization of the Goddess,* Marija Gimbutas writes:

> North of Budapest and in western Slovakia, Lengyel disappears after c. 4400-4300 B.C., and reemerges in Bavaria, central Germany, and western Poland. . . The discontinuity of the Varna, Karanovo, Vinèa and Lengyel cultures in their main territories and the large scale population shifts to the north and northwest are indirect evidence of a catastrophe of such proportions that cannot be explained by possible climatic change, land exhaustion, or epidemics (for which there is no evidence in the second half of the 5th millennium B.C.). Direct evidence of the incursion of horse-riding warriors is found, not only in single burials of males under barrows, but in the emergence of *a whole complex* of Kurgan cultural traits. . .The earliest hill forts are contemporary with late Lengyel and Rössen materials or immediately follow them. Radiocarbon dates place this period between 4400 and 3900 B.C. (Gimbutas 1991:364).

A population fearing attack would be motivated to restructure an existing earthwork, originally created for ritual purposes and communal gatherings, into a fortification for protection. Such elaborations can be seen at the Slovakian sites of Svodín and _lkovce [Figs. 6 & 7]. Their final dislocations are noted by Pavúk in this way: "In the following phase of Lengyel IV (Ludanice), the farmers came back to the . . .dunes and banks of the Danube, penetrating, for the first time since the Palaeolithic, the caves of western Slovakia" (Pavúk 1991:355).

> This abandonment and movement, often propelling neighbouring cultures into one another, operated against a background not only of somewhat elusive traces of hybridization with the steppe cultures. . . but also with continuous incursions of mobile pastoralists (Mallory 1989:238).

Hayden continues:

> Excavations at Talheim, in Germany, have exposed a Neolithic mass grave in which thirty-five skulls had been fractured by shoe-last axes used as maces (see

> Wahl & König, 1987),[11] while arrowhead tips in the skeletons of early Neolithic peoples also indicate significant levels of group violence (Whittle, 1991:261;[12] Schutkowski, 1991) (Hayden 1993:350).

Marija Gimbutas has also drawn from the article by Wahl & König to give an account of the Talheim finds:

> Signs of violence - evidence of people murdered with spears or axes - appear in this period and continue in the subsequent millennia. . . . In Talheim, east of River Neckar in south-western Germany, thirty-four skeletons of murdered people - men, women and children - were uncovered in a pit dug into the settlement area of the LBK (several potsherds of late LBK were found in the debris, but no other finds were associated with the skeletons). At least eighteen skulls had large holes in the back or top from thrusts of stone axes or flint points, which suggests that the people were killed from behind, perhaps as they fled. Skeletons were found in a pit 1.5 by 3.1 m across and 1.5 m deep in chaotic order and positions, with females, males, and children mixed together.[13] Since murdered people were buried in the cultural layer of the LBK culture with radiocarbon dates indicating early 5th millennium B.C., the massacre must have happened after this time, probably within the Rössen period (Gimbutas 1991:364-365).[14]

This site and numerous others are evidence of the brutality that accompanied the appearance of Kurgan peoples into Europe. Another example is provided by Nicolai Merpert, Director of Foreign Archaeology, Institute of Archaeology, Moscow. His excavation of Junazite in the Upper Thracian Valley of Bulgaria uncovered the grisly conclusion to the last Eneolithic (Neolithic with copper) habitation level of the Karanovo culture of the mid-fourth millennium B.C.

> All of the walls were smashed down and burned, covering the debris of the house interiors and the remains of the inhabitants. Almost fifty skeletons were found, as well as parts of dismembered bodies. Whole families - men, women and children - were situated inside the dwellings, up to seven skeletons in one house. Some of the bodies were laying in unnatural positions: on the stomach with the raised

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[11] J. Wahl and H. König (quoted in Hayden 1993:350), "Anthropologisch-traumatologische Untersuchung der menschlichen Skelettreste aus dem banderamischen Massengrab bei Talheim, Kreis Heilbronn." *Fundberichte aus Baden-Württemberg,* Band 12 (1987):65-194.

[12] The article by Whittle will be discussed later in connection with Hambledon Hill in southwest England.

[13] At this point, Gimbutas cites the 1987 article by J. Wahl and H. König.

[14] Marija Gimbutas describes the Rössen period as "the late phase of the LBK culture with elements deriving from Kurgan I. The name comes from the cemetery near Merseburg, C Germany" (Gimbutas 1991:426).

> hands, with faces directed down, and so on. Others were in a contracted position on the side. All of them were situated upon the floors or upon the surfaces between the houses. Several skulls had traces of trauma.
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> Undoubtedly, this is the picture of the humiliation of the final Eneolithic settlement, with all its population, by newcomers who brought the culture of the Early Bronze Age. The attack was swift. Therefore, the remains of the house interiors - the pottery, clay and bone figurines, stone tools and even gold ornamentation - were conserved under the crashed down walls. Immediately after the devastation the surface was smoothed out, the pits were filled up and upon the bones, in the full sense of the word, the construction of the first settlement of the Early Bronze Age was begun (Merpert 1997:74).

Numerous other Bulgarian tells display skeletons in similar conditions, described by Bulgarian archaeologist Henrieta Todorova as examples of "the struggle against the nomads of the steppe"[15] (quoted in Merpert 1997:75).

The 1991 report by Holger Schutkowski describes two men killed by arrows who were found together in an "emergency burial" in Bavensted, Hildesheim, Lower Saxony. A radiocarbon date is not given for this site although it is described as Late Neolithic, which would probably place it within the range of the Globular Amphora culture in northern Germany.[16] Although we do not know the specific circumstances that provoked the death of these two men by flint arrows, the turbulence that took place in Europe during the Late Neolithic as a result of the Kurgan invasions led to many violent situations. Previously peaceful peoples found themselves under enormous stress, either as refugees, or needing to defend their ancient territories from dislocated intruders. Hybrid cultures formed, c. 3500-3000 B.C., as amalgamations between Old European cultures and the North Pontic culture (Gimbutas 1991:368). Returning to Hayden:

> Farther west, in central and western France and in Belgium, more than forty late Neolithic fortified sites have been recorded in the last two decades alone, and these sites constitute the apex of settlement hierarchies (Scarre, 1984a:241-42, 253, and 1984b:332-35; Keeley & Cahen, 1989; Jaden & Cahen, 1990).[17] Even more fortified Middle Neolithic sites have been found in the rest of France (Hayden 1993:350).

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[15] Henrieta Todorova, *Kamenno-mednata epocha w Bulgarii,* 1987. Sofia.

[16] The pastoral Globular Amphora culture appeared during the mid-fourth millennium B.C. in central and northern Europe, causing the disintegration of the Funner-necked Beaker culture (TRB). Their burial rites and material culture have similarities to those of the Kurgan culture in the North Pontic region, in contrast to the Old European TRB (see Gimbutas 1991:381-384, 393, 400-401, 421).

[17] I was not able to locate the 1990 article by Ivan Jadin and Daniel Cahen, "La guerre avant l'an mil." Wéris, Belgium: Musée de Wéris.

In "The Neolithic of West-Central France," Christopher Scarre mentions the discovery, by aerial survey, of a "considerable number of late neolithic fortified sites" (Scarre 1984a:225). Concerning the Late Neolithic (c. 2800-c.2300/2100 bc - uncalibrated) in the coastal zone, "fortified settlement sites, often with elaborate systems of ditches and ramparts, appear at the beginning of this period, making a sharp contrast with the dearth of middle neolithic settlement evidence" (1984a:237). Scarre suggests that the appearance of sixty known fortified sites reflects a situation of increasing community stress, competition for critical wetland pasture and a change in the organization of society toward a social hierarchy. Even the monumental tombs used in the earlier Neolithic for collective burials were no longer built and lost their importance in the new social circumstances (Scarre 1984a:241-243).[18] According to Scarre, intergroup hostility may have developed as the best land was taken and expansion began into areas considered marginal (1984b:332).

> Excavations have shown that these defensive works, even at their simplest, were of substantial proportions. . . At champ Durand the inner ditch was rock-cut, 5m across at the lip and 2.5m deep. . .The inner, middle and outer ditches were of successively shallower depth . . .[which] would have enabled defenders stationed on the inner rampart to fire over the heads of those on the two outer ramparts, in the manner of certain medieval castles (1984a:255).

The availability of wetland pasture, due to a drop in sea level that led to this *geographical opportunism* was short lived. By the third millennium B.C., the sea level began to rise again, causing the lowlands to become waterlogged. "This may have been one reason for the abandonment of the fortified sites at about this time; there is nothing to indicate that they were violently overthrown" (1984a:265).

The article by Lawrence Keeley and Daniel Cahen (1989:157-176) discusses evidence from three fortified Late Linearbandkeramik settlements in northeastern Belgium, constructed approximately 3 km apart along the boundary of the Upper Geer River. The sites of Darion, Oleye and Longchamps, dated to c. 6300-5900 b.p. are examples of the earliest agriculturalists to enter the region. The presence of defensive structures, found only in western LBK areas, challenges traditional assumptions about the peaceful nature of their colonization.

> The character and complexity (e.g., baffle gates, multiple palisades, deep ditches, etc.) of Darion's defenses seem clearly to have been intended to deter humans, implying that these enclosures were fortifications (Keeley & Cahen 1989:168).

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[18] Marija Gimbutas discusses the significance of communal burials in the megalithic tombs of western Europe as expressions of a community based, non-hierarchal social structure in which a spiritual connection with the ancestors was honored. The kurgan burials, in contrast, celebrated the personal power of an elite individual. The abandonment of communal tombs could certainly indicate the rupture of Old European communal patterns (see Gimbutas 1991).

The small scale of the population at Darion (35 adults) and the large scale of the palisade (400 meters long) suggests a cooperative effort of construction and defense in concert with other LBK villages in the area. The fortifications at Darion and Longchamps were erected between 6300 and 6200 b.p., at the pioneer stage of colonization, while the Oleye fortification was erected after that settlement was destroyed by fire. The threat that led to these protective constructions seems to have lasted less than a generation. Within thirty years, and perhaps less than fifteen, the fortifications were allowed to fall into disrepair. At Longchamps, "the threat was of relatively brief duration, as the ditch was allowed to fill rapidly and, after a decade or so, was used as a dumping area by the inhabitants" (168-170).

The authors ask why these defenses were created. A number of plausible hypotheses are explored, such as their use as "kraals" to protect livestock from human and non-human predators, because of raids from LBK or non-LBK groups, or as symbols of status or ritual importance (170).

> Any internecine warfare among LBK social units, whether they were villages or clusters, would be expected to increase with intensifying competition over resources, which should be correlated with increasing population density and the length of LBK settlement in an area. In other words, fortifications should be a late feature of the local sequence and more prevalent through time. This is not the case in our area. With plentiful open land to the north and west of the Upper Geer cluster, it is difficult to see why any conflicts over resources within the LBK should develop (171).

Evidence was found of a high degree of economic cooperation between the closely spaced villages which would not indicate a situation of rivalry or competitive status, such as expected between chiefs or "big men" who would be inclined to make war.

> The homogeneity in adze materials between sites in the Upper Geer cluster also fits poorly with the idea that "big men" were the distributors. . . Perhaps it is time to resurvey the ethnographic literature to see if there are forms of social organization other than chiefdoms that are capable of centralizing the acquisition and distribution of valuable commodities to the extent evidenced here (174).[19]

The authors ask why LBK fortifications are found only in the western region of their population area, and linger on the fact that these colonies were established in western areas utilized by Late Mesolithic foragers.

> There is evidence accumulating that indicates the Late Mesolithic hunter-gatherers of NW Europe were becoming much more intensive foragers, with higher

[19] See chapter 9, "Social Structure," in Gimbutas 1991.

> population densities and greater sedentism than their contemporaries further east (Price 1987). Hunter-gatherers of this type would have been more vulnerable to the ecological disruptions caused by LBK colonization and more capable of offering significant resistance (171).

An analogy is made to the destruction of native economies by colonial settlements in America and the subsequent resistance by the indigenous populations. Since the LBK defenses were soon abandoned, the authors add that "brief periods of armed hostilities do not preclude more peaceful interactions over longer periods" (172).

Hayden concludes:

> In England, such Neolithic sites as Hambledon Hill and Crickley Hill not only were fortified but met violent ends; they were burned and their defenses left littered with arrowheads, some of them inside the body cavities of men killed during attacks on the ramparts. . .(Mercer, 1985; Dixon, 1979) (Hayden 1991:350).

In his 1985 article, "A Neolithic Fortress and Funeral Center," R. J. Mercer describes the huge defensive enclosure at the top of Hambledon Hill in southwestern England as one of the largest Neolithic sites excavated in Europe so far.

The transition to agriculture was well established in Britain by 4000 B.C., and by c. 3600 B.C., the elevated site of Hambledon Hill was being used for excarnation and elaborate funeral rituals. The rampart of the early circular enclosure "was a timber-framed case into which a mass of chalk from the ditch was packed to produce an impressive but ultimately unstable barrier" (Mercer 1985:99). Within the compound corpses were exposed to the elements for defleshment, then the bones were gathered and ceremonially reburied, accompanied by offerings and communal celebrations.[20] Sixty percent of the bones found within the enclosure were of young children, while female and male adults were found in equal proportions with all members of the community represented.[21] Valuable offerings were buried in pits, with some imported from as far away as Brittany. Offerings were also deposited in the ditch, which included a series of skulls laid right side up at irregular intervals on the ditch floor (98-99).

Hambledon Hill underwent a gradual modification over 200-300 years, and by c. 3400 B.C. it had three concentric ramparts; the inner rampart was supported by 10,000 oak beams "as thick as telephone poles" (94). Such a project would have demanded an enormous expenditure of energy from the surrounding agrarian communities.

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[20] A two-stage burial involving excarnation and ceremonial burial of the defleshed bones was practiced by a number of Old European societies. It is also found in Old Anatolia and in many primal cultures throughout the world.

[21] An egalitarian social structure is indicated that is typical of pre-Indo-European societies.

By the mid-Neolithic, c. 3300 BC, a period of social upheaval took place during which several Neolithic sites were abandoned, left littered with leaf-shaped arrowheads. Mercer suggests that violence may have been brought on by economic or environmental factors. An attack was made to Hambledon Hill around that time in which c. 200 meters of ramparts were torched and destroyed by fire. The skeletons of both defenders and attackers were found, some pierced by arrowheads. Hambledon Hill was abandoned soon afterwards (101).

The 1991 article by Alasdair Whittle, "A Late Neolithic Complex at West Kennet, Wilshire, England," describes the discovery of two palisade enclosures in the area of the famous Avebury complex (one over 40 meters in diameter and the other c. 180 meters in diameter) associated with Beaker pottery,[22] dated to the Late Neolithic - Early Bronze Age (Whittle 1991:256).

> It is possible to regard the palisade enclosures as sacred precincts, defensive strongholds or stockades around prominent settlements. There are arguments for and against each possibility. . . .The great wooden walls could be seen as defensive, and may have ended by being burned. Finds of arrowhead tips in skeletons have shown the Eary Neolithic as not wholly peaceful, and raiding or warfare could have been endemic in the Later Neolithic. . . [I]f the enclosures belong to a very late phase of the Neolithic, transformations can be seen taking place (Whittle 1991:261).

In *The Civilization of the Goddess* (1991), Marija Gimbutas discusses the appearance in England and Ireland during the mid-fourth millennium B.C. of single male burials under round barrows [Fig. 3]. These represent a complete contrast to the tradition of communal burials that typify the egalitarian practices of the indigenous Neolithic communities. "Analogies are known across the Channel in the Rhine and Upper Danube region. . .in the Rössen and Aichbühl-Schwieberdingen groups dated to the period of 4300-3900 B.C." (Gimbutas 1991:216). "This signals the arrival of the first people carrying Kurgan traditions across the Channel or North Sea. . . At the same time, signs of warfare and violence appear" (1991:365).

P.W. Dixon discusses the site of Crickley Hill in his 1979 article "A Neolithic and Iron Age Site on a Hilltop in Southern England." About fifty Neolithic enclosures or "causewayed camps" have been identified in southern England that were originally thought to be defensive. As Dixon explains, archaeologists have come to accept the view that these were not built as fortifications for the following reasons: settlements were not found inside the enclosures; there were numerous entrances offering easy access to

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[22] The pastoral Bell Beaker culture was formed from Yamna (Kurgan) and Vuèedol traditions in east-central Europe. (Vuèedol is a Kurganized culture that arose from the Baden culture in the northwest Balkans). Between 2500 and 2100 B.C. it spread between central Europe, the British Isles and the Iberian Peninsula (Gimbutas 1991:419, 429).

attackers; and the most defensive sites were often ignored. Enclosures were thought to be livestock enclosures or spiritual centers, while "current opinion is inclined to regard the causewayed camps as serving a variety of practical and ritual functions. . . (Dixon 1979:186-187).

A knoll at the top of Crickley Hill was enclosed by a bank and ditch in which five phases of Neolithic occupation were found. Pottery finds indicate fairly uniform phases between c. 3500 and 2500 B.C. The final Neolithic phase did enclose a settlement and a new bank was cut, faced with a vertical stone wall. Its two narrow entrances were closed with strong gates. This military enclosure did not protect the final Neolithic settlement from a violent and sudden end. A fire destroyed the gates and scores of leaf-shaped flint arrowheads traditionally used for hunting were found scattered around the site (187-188).

> The picture that is now emerging is one of a sedentary and stratified society capable of achieving substantial communal works, a society that both built fortified settlements and attacked them (188).

It is important to keep in mind that the Early Neolithic in Britain corresponds to the period of the first incursions of Kurgan peoples into southeast Europe. The appearance of Kurgan influenced burials in Britain, during the mid-fourth millennium B.C., is simultaneous with the earliest fortifications of a military type. A similar situation is found throughout Europe in which signs of stress and armed hostilities, the dislocation of previously settled populations into the territory of others, and attempts to defend settlements from attack are clearly apparent after 4400 B.C.

The Kurgan Hypothesis of Marija Gimbutas explains the appearance of warfare in Europe as the result of a "collision of cultures" between the settled agrarian pre-Indo-European societies and armed, mobile people utilizing the horse. If this hypothesis is not considered, the Neolithic becomes a blur of seemingly spontaneous outbursts of competition and the expected hostilities between "big men."

Marija Gimbutas held the view that a communal based social structure prevailed throughout the pre-Indo-European cultures of Old Europe that was primarily peaceful, not organized in terms of an aggressive system. In my view, the creation of fortifications by the LBK colonists to possibly protect themselves from a brief period of attack by Mesolithic people does not pose a challenge to Gimbutas' theory.

It is clear that archaeologists interpret some enclosures as fortifications while others are not, although there seems to be no universal agreement about how this distinction should be made. Once a structure is called a fortification in the literature, this term, and the constellation of accompanying associations, is repeated with little or no questioning of its validity. Perhaps this is because an assumption is automatically made that warfare is endemic to the human condition. The idea that people from numerous settlements within a region might have pooled their efforts to construct an earthwork for ceremonial purposes, without a defensive motivation, has seemed virtually unthinkable to many researchers.

Brian Hayden's blanket assertion that there was warfare in the Neolithic is lacking in scientific rigor. To acknowledge the effect of the Indo-Europeanization of the cultures of Old Europe can provide a new understanding of the rise of warfare at the end of the Neolithic period.

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Footnotes:

[1] The Kurgan Hypothesis of Marija Gimbutas locates the homeland of nomadic Proto-Indo-European speakers in the Volga steppe region of south Russia. After domesticating the horse during the fifth millennium B.C. they began their out migrations into Europe and into the Indus valley. This is the explanation offered by Gimbutas for the striking similarities between the Lithuanian language and Sanskrit.

[2] Thomas W. Jacobsen (cited in Evans & Rasson 1984): "Franchthi Cave and the Beginning of Settled Life in Greece. *Hesperia* 50 (4) 1981:303-319.

[3]Ruth Tringham (cited in Evans & Rasson 1984): *Hunters, Fishers and Farmers of Eastern Europe: 6000-3000 B.C.*, 1971. London: Hutchinson University Library.

[4] Sebastian Morintz (cited in Evans & Rasson 1984): "Tiputi de asezari si sisteme de fortificatie si imprejmuire in cultura Gumelnita." *Studii si Cercetari Istorie Veche* 13 (2) 1962:273-284.

[5] Henrieta Todorova (cited in Evans & Rasson 1984): "Die früesten Fortifikationsysteme in Bulgarien." *Zeitschrift für Archeologie* 7 (1973):229-238.

[6] George A. Christopoulos, editor-in-chief (cited in Evans & Rasson 1984): *History of the Hellenic World: Prehistory and Protohistory,* 1970. Athens: Ekdotike Athenon S.A.

[7] D. Kaufmann (cited in Milisauskas 1986): "Entdeckung und Vermissung einer befestigten linienbandkeramischen Siedlung bei Eilsleben, Kr. Wanzleben." In *Zeitschrift für Archaologie* 11 (1977):93-100; ."Zu einigen Ergebnissen der Ausgrabungen im Bereich linienbandkermischen Erdwerk bei Eilsleben, Kreis Wanzleben." In *Siedlungen der Kultur mit Linearkeramik in Europa,* edited by B. Chropovsky and J. Pavuk (1982): 69-71. Nitra: Slovenska Akademie Vied.

[8] J. Kruk and S. Milisauskas (cited in Milisauskas 1986): "Befestingungen der späten Polgár-Kultur bei Bronocice (Polen). *Archäologisches Korrespondenzblatt* 9 (1) 1979:9-13; *Bronocice: osiedle obronne ludnosci kultury lubelskowolynskiej (2800-2700 lat p.n.e.).* Wroclaw: Ossolineum.

[9] E. Pleslova- _tikova et al. (cited in Milisauskas 1986): "A Square Enclosure of the Funnel Beaker Culture (3500 B.C.) at Makotrasy (Central Bohemia): A Palaeoastronomic Structure." *Archeologicke Rozhledy* 32 (1980):3-35.

[10]A "roundel" is a circular earthwork, usually called a "henge" monument or a "causewayed camp" (originally assumed to be a military enclosure). It is composed of a flat, circular space surrounded by one or more ditches and banks, sometimes utilizing large stones or palisades, with one or more entrances (often open to the four directions). Roundels are found from the fifth millennium B.C. in central Europe in the Linearbandkeramik (LBK) culture, and in the Lengyel culture in Moravia. During the fourth millennium

B.C. they were created by the Funnel-necked Beaker culture (TRB) in eastern Germany. Roundels appear 1-2 millennia later in Britain as Stonehenge, Avebury, Woodhenge, among others (Gimbutas 1991:207-208, 338-341).

[11] J. Wahl and H. König (quoted in Hayden 1993:350), "Anthropologisch-traumatologische Untersuchung der menschlichen Skelettreste aus dem banderamischen Massengrab bei Talheim, Kreis Heilbronn." *Fundberichte aus Baden-Württemberg,* Band 12 (1987):65-194.

[12] The article by Whittle will be discussed later in connection with Hambledon Hill in southwest England.

[13] At this point, Gimbutas cites the 1987 article by J. Wahl and H. König.

[14] Marija Gimbutas describes the Rössen period as "the late phase of the LBK culture with elements deriving from Kurgan I. The name comes from the cemetery near Merseburg, C Germany" (Gimbutas 1991:426).

[15] Henrieta Todorova, *Kamenno-mednata epocha w Bulgarii,* 1987. Sofia.

[16] The pastoral Globular Amphora culture appeared during the mid-fourth millennium B.C. in central and northern Europe, causing the disintegration of the Funner-necked Beaker culture (TRB). Their burial rites and material culture have similarities to those of the Kurgan culture in the North Pontic region, in contrast to the Old European TRB (see Gimbutas 1991:381-384, 393, 400-401, 421).

[17] I was not able to locate the 1990 article by Ivan Jadin and Daniel Cahen, "La guerre avant l'an mil." Wéris, Belgium: Musée de Wéris.

[18] Marija Gimbutas discusses the significance of communal burials in the megalithic tombs of western Europe as expressions of a community based, non-hierarchal social structure in which a spiritual connection with the ancestors was honored. The kurgan burials, in contrast, celebrated the personal power of an elite individual. The abandonment of communal tombs could certainly indicate the rupture of Old European communal patterns (see Gimbutas 1991).

[19] See chapter 9, "Social Structure," in Gimbutas 1991.

[20] A two-stage burial involving excarnation and ceremonial burial of the defleshed bones was practiced by a number of Old European societies. It is also found in Old Anatolia and in many primal cultures throughout the world.

[21] An egalitarian social structure is indicated that is typical of pre-Indo-European societies.

[22] The pastoral Bell Beaker culture was formed from Yamna (Kurgan) and Vuèedol traditions in east-central Europe. (Vuèedol is a Kurganized culture that arose from the Baden culture in the northwest Balkans). Between 2500 and 2100 B.C. it spread between central Europe, the British Isles and the Iberian Peninsula (Gimbutas 1991:419, 429).

The vision of Neolithic â€œOld Europeâ€ as originally peaceful has inspired a new view of European origins among theorists from a variety of disciplines throughout the world. Nevertheless, a number of archaeologists dispute Gimbutasâ€™ claim.Â A comprehensive examination of the question of warfare during the European Neolithic is beyond the scope of this paper, for it would require an exhaustive analysis of hundreds of articles and monographs that discuss this subject written in every Western and Eastern European language. Since Haydenâ€™s book is currently in use as an introductory university text, I will examine the articles used by Hayden to support his argument that warfare existed before the arrival of Indo-European speaking peoples. It is first necessary to define a few terms. Warfare in Neolithic Europe book. Read 2 reviews from the world's largest community for readers. The Neolithic ('New Stone Age') marks the time when the ...Â Goodreads helps you keep track of books you want to read. Start by marking â€œWarfare in Neolithic Europe: An Archaeological and Anthropological Analysisâ€ as Want to Read: Want to Read savingâ€¦ Want to Read. Neolithic Britain estimated Mediterranean and Danubian route8, which may be. consistent with the association between Britainâ€™s more easterly-distributed Carinated Bowl tradition14 and the Nord-Pas-de-Calais region of France, as Neolithic people in these regions of mainland Europe are thought to have interacted with populations of Central European Neolithic ancestry14, 27-29.Â The limited regional variation in WHG ancestry we see in the British Neolithic samples could reflect subtle but differing degrees of regional admixture between farmers and foragers, and/or multiple continental source populations carrying varying levels of WHG ancestry colonising different regions of Britain.