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## Macroculture, sports and democracy in classical Greece

Nicholas Kyriazis · Emmanouil Marios L. Economou

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**Abstract** In the present essay we examine whether and how sports affected the emergence of democracy as a political phenomenon in Classical Greece. To achieve this we introduce in a model the concept of macroculture as a complex of mutually supporting values, norms and beliefs in various areas of human activity, like athletics, war, politics, etc. Then, we proceed through a historical review on the history of sports in Ancient Greece and we investigate various aspects of how and under which terms athletics performed during classical Greece, predominantly, in ancient Athens. We found that the values that gradually emerged through sports during an extended period that goes back as far as the Bronze Age times, led to the development of an environment of mutually supporting norms and values such as equality and trust, that by being correlated and coordinated each other, led to the creation of new values and norms, as the theory of macroculture proposes. We also found that these new values were “diffused” from athletics to the field of politics and played a key role to the emergence of democracy.

**Keywords** Macroculture · Sports · Democracy · Classical Greece

**JEL Classification** D71 · I28 · P11 · Z13

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## 1 Introduction

In the present essay we introduce the concept of macroculture in order to analyse how a system of values in sports that started shaping since the Bronze Age Period of ancient Greece, played a crucial but not exclusive role for the emergence of direct democracy as a political phenomenon during the Classical Period.

The emergence of direct democracy in the sixth century BC Archaic Greece has been of continuing interest to philosophers, sociologists, historians and economists since at least the fourth century BC with Plato's *Republic* and Aristotle's *Politics*. For those interested in the emergence of the democratic phenomenon, an extended academic literature is available as it seems that the issue is still open, despite ambitious earlier efforts to sufficiently interpret it through various concepts. Recent works tend to interpret the emergence of direct democracy in classical Athens as the result of a fierce antagonism between the opposed aristocratic groups during the Archaic Age period (circa 800–500 BC.) in their ongoing struggle for political prevalence in their city-states (O'Donnel and Schmitter 1986; Ober 1989). This antagonism made the aristocratic leaders to decide to make an "opening" to their non-aristocrat compatriots, that comprised the majority of the population in their city-states, in order to take them in their own side and securitize their future political support by offering them further political rights in exchange (Green 1998; Acemoglu and Robinson 2000; Lyttkens 2008, p. 17; Tridimas 2011, p. 52–53). Ober (2008) believes that the emergence of democratic phenomenon in classical Athens must not only be attributed to the antagonism among the aristocratic groups for political influence but also to the spontaneous uprising of the Athenian deme to dissipate the Spartan guard under king Kleomenes which had been established in Athens so as to restore and reinforce the aristocratic political order of Isagoras against Cleisthenes, the forthcoming democrat reformer. Other works emphasize the rapid rise of the population of mainland Greece and its colonies during the whole 800–300 BC period, from 500,000 to 4 million people Ober (2008, 2011, p. 7) asserting that it had a negative impact on the Gross Domestic Product per head and as a result it drove to intense socioeconomic repercussions for the peasants and little-farmers, a situation that made their position precarious (Morris 2002).<sup>1</sup> This view may imply that the uprising of the Athenian deme in 510 BC and the establishment of democracy in the following years could be seen as an attempt of the citizens for a more beneficial and Pareto improving situation.

Fleck and Hanssen (2006) in a different approach focus on the geography and topography of Greece by asserting that the stony and rough Greek ground made the control of the agricultural production less easy by the elite landholders and as a

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<sup>1</sup> Historical evidence proves that this disorder in the socioeconomic structure during the Archaic period in Greece made peasants and other unprivileged classes prone to excessive loans presumably from the wealthy aristocrats, that finally many did not manage to repay. As a result, they were gradually subjected to a status of serfdom. This repressive situation caused social and political unrest that finally terminated through Solon's reforms known as *seisachtheia* (greek: *σεισάχθεια*) which means shaking off debts through which the ability of a lender to claim the conversion of a free citizen into slave due to failure to repay his debts, was finally abolished. Solon's reforms released the peasants from serfdom, restored their farms and redeemed those who had been sold into slavery. See among others Forrest (1966), Thompson (1978) and Dunn (1992).

result an extended system of independent smaller farmers was developed.<sup>2</sup> Halkos and Kyriazis (2010) focus on path dependence break and regime change which was caused due to the Persian invasion of Greece during 490–479 BC and transformed Athens into a major Mediterranean seapower which developed through an emerging democratic environment.

Finally, Kyriazis and Paparrigopoulos (2011) and Kyriazis (2012) correlate the emergence of a new type of a Greek military formation during the Archaic period, the *hoplite phalanx*, with a series of new values and principles such as self-consciousness, cohesion, “homonoia”,<sup>3</sup> common purpose and will, trust, discipline and obedience etc. that played a crucial role for the emergence of the democratic values and spirit that developed during classical times. However, what we intend to show in this paper by using the concept of *Macroculture* is that another element for the emergence of democracy during the Classical Period has to do with sports and more specifically, with a set of athletic values which were gradually emerging since (at least) Late Bronze Age Greece (circa 1550–1100) BC. To achieve this we firstly undertake a historical review of the ancient Greek athletics since Classical times. We also focus on the way that athletics were functioning in Greece during Classical times. Our main findings indicate that this set of values that developed through sports such as equality, trust, friendship etc., in coordination with other values which similarly developed in other aspects of social life such as warfare and religion, as Kyriazis and Paparrigopoulos (2012) propose, were in strong correlation and interaction with each other. This interaction finally led to the emergence of new values and norms as the theory of macroculture predicts, such as equality, trust, *isonomia* (equality for the law), *isegoria* and *isopoliteia* (freedom of speech and political equality). These values were “diffused” through the bounded rationality effect into the field of politics and played a pivotal role to the emergence of democracy as a political phenomenon during the end of the sixth towards the fifth century BC in many Greek cities, with Athens being the most characteristic and known case.

The paper is organized as follows: We first analyse the concept of macroculture by providing also a model in order to show how a process of creation and correlation of a set of new values and principles can lead to a regime change in various aspects of social life such as religion, economy, politics etc. Then, by applying the concept of macroculture in ancient Greece as being our historical case study, we investigate whether and how sports played a pivotal role on the hellenic social life for an extended era that dates back to the Late Bronze Age Period till Archaic Greece (circa 1550–500 BC). Thirdly, we present how sports were organised in classical Greece and what social values were derived from them. The fourth part analyses how these athletic values intermingled with similar values that developed in the

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<sup>2</sup> Foxhall (1995) in a respective research came to a similar assumption when it comes to Mycenaean Greece. She found that the scattered agricultural production and the continuous rain made massive production under the aegis of the Mycenaean Kingdoms not feasible, in contrast to the Sumerian economy which was based in vast and united agricultural areas.

<sup>3</sup> “Homonoia” is usually being translated as concord, but P. Cartledge in a personal communication suggested to us that a better translation could be “same-mindedness” and unanimity, which is stronger than concord.

military organisations, such as the phalanx and the triremes, through a macroculture approach, a process that finally had a major impact for the emergence of democracy as a political phenomenon in classical Greece, with ancient Athens being the most representative case. Finally, our analysis ends by providing our main conclusions and findings.

## 2 Macroculture and bounded rationality

In this section we introduce, for the first time as far as we know, the concept of macroculture (taken over and adapted from organization theory) into institutional economics in order to analyse structural change. A “macroculture” encompasses the common values, norms and beliefs that are being shared among the members of a society or state. In our adaptation of the term in economics and politics, macroculture has also a dynamic time characteristic, that of long term periods. As we will show in our case study which covers a period between Late Bronze Age to Classical Greece (circa 1550–223 BC), the elements of macroculture take shape over time periods of decades to centuries. A macroculture is thus the framework in which new institutions also evolve over time, old ones are adopted or discarded. The term “macro” denominates both a sense of global issues (like macroeconomics in economics) and a relatively long term time period, being thus a dynamic term. Through these values, norms and beliefs, a macroculture guides actions, creates typical behaviour among independent entities, and coordinates their activities so that complex tasks may be completed (Jones et al. 1997; Abrahamson and Fombrun 1992, 1994). This happens in three ways: (1) By creating “convergence of expectations” (2) By allowing for idiosyncratic language to summarize complex routines and information and (3) By specifying broad tacitly understood rules for appropriate actions under unspecified contingencies (Williamson 1975, 1991; Camerer and Vepsäläinen 1988). The establishment of “communication protocols” follows.

Jones et al. (1997) have applied this concept to firms, while Almond and Verba (1963) parallel this, writing on “civic culture” as a shared set of beliefs among citizens. Putnam (1993) argues that democratic stability depends on specific forms of social organization and citizen values which he calls “civic traditions”. A similar line of argumentation (Granovetter 1992, p. 35) maintains that a structural embeddedness is developed: e.g. firms develop connected mutual contacts to one another. This corresponds to the establishment of mutual links or networks. These interactions define values and norms and thus strengthen this interdependence, the macroculture. This is consistent with Lazaric (2011, p. 148), who claims that “every recurrent interaction pattern in an organization may be hiding a potential routine” as well as with Vromen (2011), who labels these mutual values, norms and patterns of behavior as “routines” by depicting them as “multilevel mechanisms” that generate firm behavior.

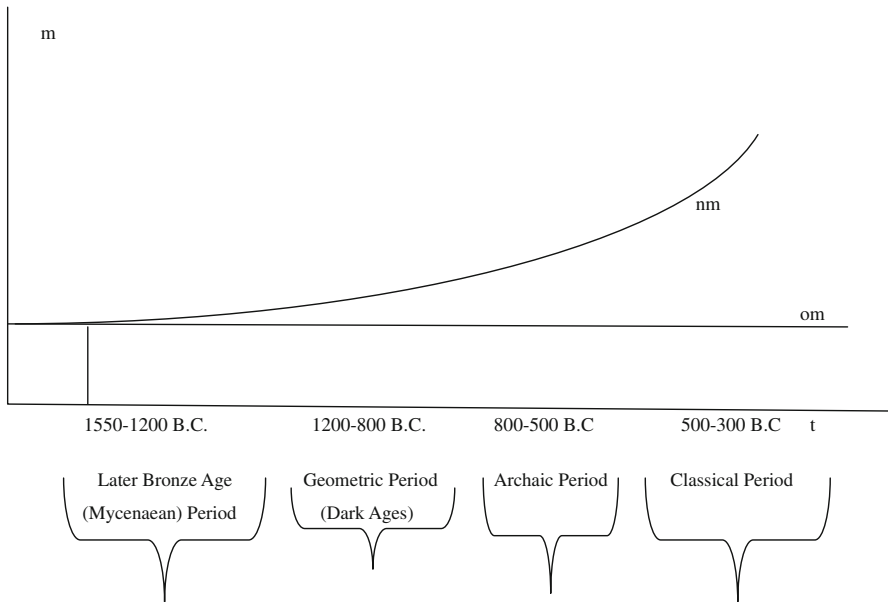
Two particular questions on this issue are, first how does such a macroculture develop and why are macrocultures proceeding along different paths, evolving different characteristics, e.g. what are the causes that shape macrocultures. Related

to this is the issue of “cause” and effect. Do values and norms preexist (and if so, why and how did they come about) and do they shape a particular macroculture, or is it the other way round, that is, a macroculture gives rise to specific values and norms. Thus, an actual answer can be given only if we manage to establish chronological sequences of events.<sup>4</sup> Kyriazis and Paparrigopoulos (2011, 2012) and Kyriazis (2012) have analyzed one aspect of macroculture, which has to do with the emergence of a new type warrior in Archaic Greece, the *hoplite* (named from his big round shield, the “hoplon”) and the new tactical formation, the *phalanx*, as coordination and cooperation mechanisms which give rise to specific mental attitudes, values and norms, even a specific language (e.g. clear commands for battle) and learning and knowledge. Even more, the new warship adopted during the early fifth century by the Greeks, the trireme and the naval fleets, developed and fine-tuned cooperation and coordination mechanism in the phalanx “customs” values and norms.<sup>5</sup> The next issue is why and how all these norms and values are diffused from one sector of the macroculture into another, making it a coherent whole. We believe that the answer can be found in the theory of Bounded Rationality. Simon (1982, 1991) developed the theory of bounded rationality that states that the mind has limitations for example in its capacity to absorb and use new information. We are not totally “rational” in the sense of seeking to maximize utility or any other “ideal”. What we actually do in real life is to try to reach a solution that satisfies us even if it is not the best possible one. We may even ignore the best possible one that would maximize utility. Simon calls this behavior “satisficing”. Satisficing enables us to find acceptable solutions with minimal expenditure of time and effort, thus reducing transaction costs. Such a behaviour has further consequences: Once we have found solutions to a particular problem that are perceived as adequate, when facing a new problem we try to use the established and known rules of the thumb, the known knowledge we possess, in order to solve the new problem. This again reduces our effort and time consumed, which is important due to our brain’s capacity limitation. Only if we do not find an adequate solution using the existing knowledge and if the problem we face is serious enough, do we devote effort and time to find new solutions. Once we have found some, we have increased our total learning and knowledge. Satisficing behavior thus diffuses known solutions and problem solving rules to new problems. But it does so also for a set of values and norms evolved in one area which are diffused and taken over in other contexts.

This is exactly how macrocultures develop and are strengthened and this is what happened in ancient Greek city-states. The values and norms which evolved in athletic events for an extended chronological period (1550–323 BC) such as trust and cohesion were transferred from the field of athletics to the field of politics and in coordination with similar values that developed through other social aspects of life such as religion and the military formation of the phalanx and the triremes, became *isegoria* (equality of speech), *isonomia* (equality in front of the law) and *omomoia*

<sup>4</sup> This point has been raised as a criticism against North by Daunton (2010).

<sup>5</sup> For the way that the phalanx formation was deployed in battlefields during war campaigns see among others, Krentz (2002) and Hanson (2009).



**Fig. 1** Transition from the old to the new macroculture regime

(concord).<sup>6</sup> Thus, to paraphrase the fourth century Athenian orator Demades, bounded rationality became the “cognitive glue” that held the various elements of a macroculture together into a coherent whole.<sup>7</sup>

### 3 A model of path dependence and change

Let us now formalize the emergence of new macrocultures that lead to social and political change in the long-run. Figure 1 illustrates the dynamic-structural change from one (old) macroculture to a different (new) one<sup>8</sup> where:

*om (old macroculture)*: Signifies the old macroculture, a system of norms, values and customs etc. that characterize the economic, social and political field of a state and associated institutions and organizations.

*nm (new macroculture)*: Signifies the emerging new macroculture, where new norms, values, customs etc. are being created, developed and diffused, so that

<sup>6</sup> Kyriazis and Paparrigopoulos (2011) and Kyriazis and Economou (2012) address the issues of the emergence of macroculture, values and norms in a historical context, that of Ancient Greece and their influence on the emergence of democracy.

<sup>7</sup> Demades actually called “theorika” (money paid to poorer Athenian citizens to enable them to watch the four days long theatrical contents, a form of public education) and “ekleisiasitika” (money paid to enable them to participate in the Assembly, about 40 days per year during the fourth century, see Hansen 1999) “the glue of democracy” (Plut. Mor 1017B).

<sup>8</sup> The following model is a development of (Kyriazis 2006; Kyriazis and Metaxas 2010). In Fig. 1 the path dependence and change of macrocultures is shown.



over time a break with the old path-macroculture is accomplished, and the state follows a new path. We consider curve nm following an exponential shape because when during each period the system follows the new path (nm), the probability of staying into the new path increases, and the probability of returning to the old path decreases, because during each subsequent step along the new path, the various elements of the new macroculture are being mutually reinforced and integrated into a whole.

Figure 1 can be described by two simple equations:

$$m = om + nm \cdot e^{(g(t) \cdot t)} \tag{1}$$

where m macroculture, om the old macroculture: the constant term, nm the new macroculture which predominates over time if  $g_t > 0$

$$g_t = f(k, d) \tag{2}$$

where  $g_t$  the rate of change depending on the creation of new elements of macroculture, k knowledge, d: speed of diffusion (of the macroculture effect).

A further elaboration could be done for  $g_t$  equation. So far we have analysed in the text how the new values are diffused, through the working of bounded rationality, from one area of a macroculture, to the others to form an interdependent and integrated whole. Having in mind that a process of a gradual structural social conversion of a society can be achieved through the macroculture effect, we can move from an old regime to a new that creates new organizations and institutions. For instance, the Mycenaean warlord’s assemblies that the Homeric epics describe could lead to the fully democratic participative assemblies that developed during the 5<sup>th</sup> century in Greece, like that of ancient Athens. Our theory could describe this sociopolitical transformation as a “diffusion” of new values of macroculture through a means of a bounded rationality context.

The conceptual framework presented in Fig. 1 can also be described by Table 1, which shows the conditional probabilities  $p_{n1}, p_{n2} \dots p_{nt}$ , that characterize each step along the new macroculture regime depending on the result of the previous period, and  $1-p_{n1}, 1-p_{n2}, \dots 1-p_{nt}$  describe the probabilities of a return to the old macroculture regime. Based on the previous analysis we have:

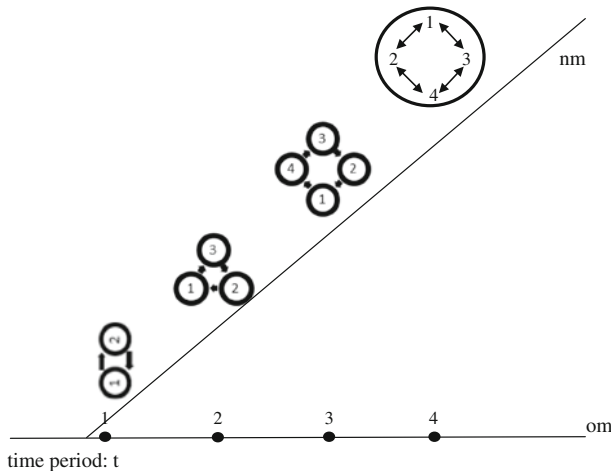
$$p_{n1} < p_{n2} < \dots < p_{nt-1} < p_{nt} \tag{3}$$

$$1 - p_{n1} > 1 - p_{n2} > \dots > 1 - p_{nt-1} > 1 - p_{nt} \tag{4}$$

Equations (3) and (4) have a logical explanation. For instance,  $p_{n1} < p_{n2}$ . This is valid because, as we have shown in Fig. 1, when during each period the state follows the new path (nm), the probability of staying into the new path (e.g.  $p_{n2}$ )

**Table 1** Decision tree probabilities

Time period	1	2	t
nm: New macroculture	$p_{n1}$	$P_{n2} = (p_{n2})/p_{n1}$	$P_{nt} = (p_{nt})/p_{nt-1}$
om: Old macroculture	$1-p_{n1}$	$1-p_{n2}$	$1-p_{nt}$



**Fig. 2** Decision tree and integration of various elements of macroculture

increases and is higher than the previous probability (e.g.  $p_{n1}$ ). So, it is clear that over time the probability of going back to the old macroculture ( $1-p_{nt}$ ) converges towards zero.

In Fig. 2, we represent a decision tree, where the different elements of a macroculture (e.g. athletics, religion, warfare, economy, politics etc.) are gradually being integrated into a new whole: The cycles represent the various elements of a new macroculture that emerge in one sector at time period 1, are reinforced through diffusion to other sectors at periods 2 and 3, and being integrated into a new mutually supporting macroculture at period 4.

According to our analysis in the text, the various elements of a new macroculture that started to emerge in the athletic events as a Greek social phenomenon during the 1550–510 BC period, in combination to other sets of values that developed—at least—since the Archaic period in religion, warfare, and the city-state environment, led to a mutual reinforcement of each other, and finally were integrated during the end of the period (end of sixth century) into a new macroculture that made the emergence of direct democracy in some cases a possibility.<sup>9</sup> In the next section we proceed to a historical review of sports as a social phenomenon in ancient Greece.

## 4 Sports in pro-classical Greece

### 4.1 Cretan and Mycenaean civilizations

So far, prominent historians that specialize on Greek issues have located three major historical periods from which we can trace elements about athletic events in ancient Greece before the emergence of democracy. These periods include Minoan Crete,

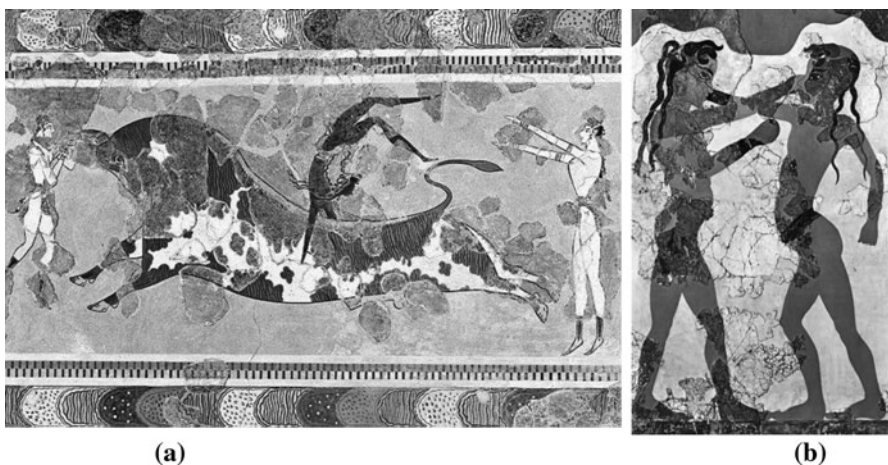
<sup>9</sup> Eighteen democratic states are attested in the end of the sixth century, with Athens being the most notable case. See Robinson (2004) and Raaufaub et al. (2007).

Mycenaean Greece and the Archaic Period. When it comes to the Minoans of Crete, archaeological evidence has unveiled some very important elements that originated from a rhyton decoration from Hagia Triada. This rhyton has a number of registers from which we can learn about athletic events such as running, boxing, wrestling and jumping, as well as extreme and dangerous too sports such as jumping over upright laid swords (greek: *κυβιστηρες*) and bull-leaping (greek: *ταυροκαθίσια*).

Minoan society seems to have been characterized by an extended sense of freedom that apart from men enabled women too, to participate in every aspect of social life, even in bull-leaping (Marinatos and Hirmer 1960; Platon 1970, p. 196–200). Figure 3a depicts a sport event in Crete in which the athlete, is “rushing” straight towards the bull, grabbing it by its horns and through an acrobatic technique he manages to position himself just in the backside of the animal. Figure 3b is another Minoan fresco, painted around 1550 BC on the island of Thera which shows two young boxers in loin-cloths. In fact Doumas (2003) offers us information about a series of splendid frescoes that were found in the Akrotiri, on the island of Thera, a city which is regarded as a landmark of the earliest Cycladic civilization.

These frescoes make us conclude that sports had a widespread influence in Cretan society as a whole. Renfrew (1988) agrees with the above approaches and adds that the archaeological evidence from Hagia Triada and Thera proves that these athletic events must have taken place for a period at least before 1500 BC.

Renfrew also believes that when we proceed to the Mycenaean world we can find a much more martial atmosphere that correlates sports and combat. Archaeological evidence that comes from Mycenaean graves and vases from around 1550 BC shows soldiers in full armor. Also, evidence that comes from shaft-graves, through which we confirm the existence of chariots, horses and charioteers, makes some authors deduce that during the period of the Mycenaean world they held martial sports, such as chariot races, boxing, wrestling, in parallel with the other sports like



**Figure 3** Bullfighting in ancient crete

**Table 2** The athletic events during the Troy campaign (circa 1250 BC.)

Event	Line (mentioned in the text)	Winner	Prizes for the winner (1st prize)	Prizes for the rest of participants
Chariot race	289–650	Diomedes	A slavegirl and a tripod	A 6 year old mare, a cauldron, 2 talents of gold, <sup>a</sup> an unfired jar with two handles
Boxing	651–699	Epeios	A hard working 2 years old mule	A two handled goblet
Wrestling	700–737	Aias and Odysseus (the result is a “draw”)	A great tripod (of a value of twelve oxen)	A skillful hardworking woman-slave (valued at 4 oxen)
Running	740–792	Odysseus	A unique and beautiful bowl made of silver	A great ox, half of a talent
Fencing (with fully armed athletes)	798–824	Aias and Diomedes (the result is a “draw”)	A magnificent silver sword	–
Discus-throwing	825–849	Polypetes	A great amount of iron	–
Archery	850–883	Miriones	10 Double-bladed axes	Single bladed axes
Javelin throwing	889–897	Agamemnon	A unique spear	An unfired cauldron with patterns of flowers curved on it

Source Personal research based on “Iliad”

<sup>a</sup> It is not exactly clear what kind of talent Homer has in mind here. It could be either a measure of weight, or simply of value. During eighth century B.C., when Iliad was written, no coins were yet in circulation in Greece. Thus, a silver talent would not yet have a monetary value as it did later, as in classical Athens, when a talent was the equivalent of 6,000 drachmae. The cost of building a trireme warship was one talent (Lyttkens 2008: 10; Ober 2008) and the daily wage of a worker in 480’s was less than a drachma (Kyriazis and Zouboulakis 2004). Still, the talents offered by Achilles to Diomedes and Odysseus must have been regarded as of high value

bull-leaping (Renfrew 1985:15). Evidence for chariot races as well as other sports are mentioned by the Epics of Homer himself. In *Iliad*, in Book 23, 259–897 we are informed about a series of athletic contests that took place in Troy (See Lattimore 1951; Rieu 2003). These events were held by Achilles, the most famous warlord of the Greek military campaign in Troy in order to honour the death of his beloved friend, Patroklos by the prince Hector, the commander in chief of the Trojans.<sup>10</sup> Table 2 presents the games that were held during the Troy campaign as well as the victors and the prizes they earned.

<sup>10</sup> In antithesis to scholars such as Kirk (1965) who argued that the Trojan war happened at about 1100 BC., other scholars such as Lattimore (1951) and Hammond (1987) argue that it finally happened in a period that varies between the beginning and the end of the thirteenth century. We believe that the athletic contest we describe here took place in a period of one and a half century later, approximately 1250 BC, an estimation that is also offered by Herodotus, which is an ancient source.

Homer's *Odyssey* (Book 11. 101–234) also informs us about athletic events that took place in the island of the Phaiakians (greek: Φαίακες) in order to honour Odysseus. We spot again sports such as boxing, wrestling, running, jumping, and discus throwing. In lines 132–133 we learn that “all the Phaiakian people were watching the games and were happy about the events”. This makes us deduce that sports were extremely popular in Mycenaean Greece as a social phenomenon. It is worthy to mention that Homer mentions that except winners, other participants were rewarded too for their effort in the games with a number of prizes, a social custom that was maintained even during the classical era and afterwards as we will mention in the next chapter of this analysis. We think that this aspect of sports to reward with prizes the best athletes and winners is important because apart from the agonistic spirit of sports that demanded physical and mental strength and certainly, courage, self-confidence and signs of bravery necessary for the martial sports like chariot racing and fencing, it introduced the mentality of “incentives” to the winners. This means that apart from the prestige among their compatriots, “tangible” gifts, such as a young mule, a two-handled goblet, a tripod with a value of twelve oxen etc. may be interpreted as a situation that increases the personal utility of the winners. In that sense it is certainly a Pareto improving situation, which is a major determinant in the modern *Welfare Economics*. This competitive mentality of sports in the Mycenaean period (or at least in the Archaic if we believe that Homer actually depicted social situations of his time- eighth century BC and not those of the 13th BC) which is accompanied by a set of values such as those that we mention here, seems to have been evident to Friedrich Nietzsche. In one of his works, *Homer's Contest*, published in 1875, he observed that even for a period as old as that, Greeks had an inherent trend to compete with each other. Nietzsche asserted that these inherent agonistic instincts of the Greeks to compete with each other through war were finally introduced in a productive version when used through sports, art and literature (Lungstrum and Sauer 1997).<sup>11</sup> Nietzsche also believed that Greek culture with its festivals, athletic contests such as wrestling, dramatic and artistic competitions etc., provided motives to compete among the members of the local societies in each city-state. This struggle and striving, the *agon*, according to Nietzsche led to the creation of new values (Acampora 2002), a thesis which is consistent with the theory of macroculture. In short, Nietzsche, in antithesis to Burckhardt, believed that the agonistic spirit of the Greeks was the reason of the achievements of the ancient Greek civilization.

#### 4.2 Geometric and archaic period

We turn now into the examination of the next two historical periods before the emergence of democracy which are, the Geometric Period, called also the “Dark

<sup>11</sup> Friedrich Nietzsche in this point disagrees with his mentor Jacob Burckhardt, who through a series of essays under the title *Griechische Kulturgeschichte* (published in 1872, after his death), asserted that the Greek world was characterized by ruthless competition for honour between the aristocratic groups. According to him, this antagonism led to an irrational and dangerous situation of political corruption, vice and demagogy in classical times. See also (Burckhardt 1998) and Murray and Stern (1999) for further details. For Nietzsche's *Homer's Contest* see Acampora (2002).

Ages” of Greece (about 1100–800 BC) and the Archaic Period. Dark Ages is a period poor in material, both archaeological and written due to the Dorian invasion that caused the decline of the Mycenaean civilization. However, in contrast to scholars like Finley (1983) who believed that the Dorian invasion caused the dissolution of the socioeconomic and political status quo in the Mycenaean Greece, more recent scholars such as (Foxhall 1995; Renfrew 1988, p. 21; Ober 2011, p. 7)<sup>12</sup> have shown that the Dark age period was not so “dark” as it was thought to be, especially for those Mycenaean city-states that were not fully dependent on palatial economic organization. In accordance to these findings, van Effenterre (1985) found that the major, social and economic relationships that dated back to Mycenaean period, such as household organization and economic elite (the aristocrats) behavior and practices, were not abandoned but they took a different shape during Archaic and Classical period.

The above views make us believe that sport events as a social phenomenon were not abolished or abandoned during Dark Ages but continued to exist probably in a less dynamic environment. The idea that sport activities during Geometric period continued to exist as a social phenomenon is consistent with our macroculture theory, which could justify this historical chain in sports from the Mycenaean down to the Classical period as a process of mutually reinforcing values that lead to the creation of new values which affect in other fields of social interactions too, such as politics. This seem to be the case also for Glass (1988) who mentions many other examples from Greek mythology that dated back to the so called *Heroic Age*, were mythological figures appear in literature, either participating in formal contests or striving against adversaries in rather technical athletic terms.<sup>13</sup> During the Archaic period, the famous Olympic Games were institutionalized in 776 BC with just a single sport event: running called the *stadion* and held every 4 years. However, based also on earlier but pivotal studies like that of Gardiner (1930), Lee (1988) believes that a variety of sports were performed too even before the official inauguration of the Olympic Games such as discus and javelin throwing, boxing, wrestling and a chariot race type for four horses. This belief is consistent with the findings of Herrmann (1972) too. Lee offers us an archaeological justification for the existence of sport events in Olympia before 776 BC. He argues that the excavations in Olympia brought to light numerous tripods after 1000 BC and for three consecutive centuries. Lee mentions that Homer in *Iliad*, is referring to athletic prizes such as tripods, something we have already analytically presented through Table 2, and considers it improbable that none of the tripods that were found by archaeological research are connected with athletics. So, by the historical data that we have provided in this chapter, it seems obvious to us that sports were an ongoing social phenomenon in pro-classical Greece.

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<sup>12</sup> Paul Cartledge in a personal communication to us, agrees with the idea that the negative impact of the Dorian invasion into mainland Greece was not so catastrophic as it was thought to have been in the previous decades.

<sup>13</sup> Glass (1988) mentions examples such as boxing (Polydeukes and Amykos), wrestling (Theseus), the foot race (Atalanta, a woman mythical heroine and Melanion), chariot racing (Pelops and Oinomaos) and discus throwing (Perseus) etc.

## 5 Sports as a privilege of the elite class or as a phenomenon of “civic culture”? The theoretical dispute

One of the most crucial dispute among international scholars about ancient sports in Greece has to do with the degree of participation of athletes of non-aristocratic origin in the athletic events. Among the first modern scholars who are advocates of the first theory is Gardiner (1930) who argued that since Homeric times, sports were a privilege of the aristocrats. Gardiner nominated those aristocrat athletes as “amateur gentlemen” meaning that they competed against each other for their own sake while disinterested in material rewards. Gardiner also argued that when from the sixth century lower class athletes entered Olympic games, nobles were restricted to the equestrian sports. Pleket (1975) in a more recent study believes that the Homeric poems are a reflection of how the eighth and seventh century’s nobles competed for bullion, cauldrons, slave women etc. In accordance with Pleket, Kyle (1987) and Poliakoff (1987) think that Archaic period athletes were certainly nobles, and that a small entrance of lower class athletes in sport events in the Olympic games took place in a period between 600 and 400 BC and certainly not before that time. The above views are contested by other scholars. Firstly, Pleket (2005, p. 16) rejects Gardiner’s views about amateurism during the Archaic period Greek athletics and connects sports to warfare by saying that the Greek word *agon* means both warfare and sports, which they “were the two sides of the same coin”. The dominance of sports during the Archaic period by the nobles is also put in question by Young (1984). Young charges Pleket for an attempt to use a special pleading in order to ascribe a noble origin to all athletes by using obscure arguments even by transforming the first Olympic victor, Koroibos, from a cook into a priest of the upper class.<sup>14</sup> Young also argues that Pleket’s attempt to ascribe a noble origin to a series of famous Olympic victors like Milon of Kroton, a brilliant wrestler, and Theagenes of Thasos are not justified properly.

He also mentions the late sixth century Glaukos of Karystos, a farmer, mentioned by Pausanias in his *Description of Greece* 6.10.1-3., as well as the early sixth century Polymestor of Miletos, a cowherd and Amesinas of Barce, a goatherd both consist of cases mentioned in *On Athletics* by Philostratos (an ancient source). In summary, Young (1984) believes that there were always good numbers of Olympic victors of non-noble origin during the Archaic and Classical period. The idea that a process of “democratization” of sports took place between Archaic and Classical era, is also corroborated by a series of other authors too. According to the findings of international scholars this can be justified with a series of arguments:

Firstly, since Solon’s reforms in 592 BC more and more citizens of the lower classes started participating in sport events (Thompson 1978). Secondly, some years after Solon’s socioeconomic reforms, a series of very important athletic events started taking place all over Greece, similar in their content of games to that of the already famous Olympic games. Among them, the *Nemean Games* were established in 592 BC and were taking place every 2 or 3 years, the *Isthmian Games* were established in 582 BC and were held the year before and the year after the Olympic

<sup>14</sup> Pritchard (2003) offers an extended analysis about the different arguments that attempt to shed light on the issue of athletics as privilege of nobles, or as an accessible potential from the lower classes too.



Games. Other famous athletic festivals were the *Panathenaic Games* in Athens, and the *Delphi Games*, etc.<sup>15</sup>

Thirdly, except “fighting for an olive branch” and gaining personal prestige in their city-state homelands, victorious athletes were receiving a series of gifts and prizes too. Solon’s reforms contained a state prize for winners, which was 100 drachmas for victorious athletes in Isthmian Games and 500 drachmas for the Olympian victors (Thompson 1978; Kyle 1987, p. 29–31; Pleket 2005). Pleket (2005, p. 406–407) also argues that during 400–300 BC period the amount of prizes extended to 3,000–6,000 drachmas for Olympian winners, which we think it is an undeniably great economic benefit for the winners and an extra motive to participate in the games.<sup>16</sup> Victorious athletes also had access on public meals, privileged seats on public festivals, and gifts from state including money O’ Sullivan (2003) or even, “tangible” goods such as olive, valued several hundreds of drachmas (Young 1984).

Prichard (2009) mentions that athletics was one of three subjects of traditional male education in classical Athens. The other widely-agreed disciplines were *mousike* (music) and *grammata* (grammar), which occasionally were accompanied by choral lessons in singing and dancing dithyrambs. In addition, we know (Ar. Pol. VIII, 3.1) that during the fifth century in Athens but in the other Greek city states too,<sup>17</sup> gymnastics were an institutionalized lesson for children offered in public schools as an elementary education during their 6–14 years.

Every Greek city-state had at least one *gymnasion* and *palaistra*, athletic facilities where students were receiving also athletic workout. Students were divided mainly in two educational groups: Between *paides* (youngsters) and *neaniskoi* (young men). Every gymnasium had a man in charge of the building, the staff and the program of education, called *gymnasiarchos* who was elected annually and must have been between 40 and 60 years of age. Other assigned members of the gymnasium were the *didaskaloi*, the teachers with specialties in different fields, the *paidotribai* (physical trainers), the *paidagogues* (special trainers which they were assigned to make male kids familiar with sport skills and techniques) and the *paidonomoi*, who were deciding which boys had completed their study satisfactory and could advance to the next year’s lessons (Miller, 2004).

Based on ancient sources (Aristophanes *Knights* 1238–9; Plato *Gorgias* 456c–e) we learn that they were also privately owned *palaistra* (wrestling schools) for kids who were being trained by the *paidotribai* (athletic trainers). “Secondary”

<sup>15</sup> For a detailed analysis of the Nemean Games see Miller (1989). For the Panathenaic Games see Young (1984). Philips and Pritchard (2003) offer a detailed analysis of these agonistic festivals as well.

<sup>16</sup> Having in mind that during the fifth century the average wage of a skilled worker was one or less than one drachma daily (see Thompson 1978; Kyriazis and Zouboulakis 2004), 100 drachmas as a reward for victory in Nemea or 500 in Olympia should be regarded as an amount of money adequate to make even an athlete from the lower class capable enough to focus on his athletic training for a long time without having absolutely in mind what Polybius referred to as *νεκκὰ τοῦ πορίζειν τὸν βίον*, meaning the daily needs and expenses of a man such as food, or housing etc. and even—in our case—buying his athletic equipment. These state subsidies to the winners were equivalent to the expenditure of the very costly trierarchy liturgy.

<sup>17</sup> However, Sparta’s educational system, the *agōgē*, including basically athletic and military training war rather harsh compared to that of Athens and other Greek city-states. For the system of *agōgē* see Cartledge (2001).



education (from 14 to 18 years) seems to have been a privilege of the wealthy classes who could afford the expenses of further education. Post-secondary education called *ephebeia* basically was a military training but later, however, more advanced academic schooling was incorporated.

But except for education, every citizen including *ephiboi* under 18 years old had the privilege to exercise themselves in sports in the three *Public Gymnasia*, the *Academy*, the *Liceum* and the *Kynosarges* an institution which was financed by the state and gradually expanded during the fifth century. Public Gymnasia comprised of an extensive complex of athletic facilities available to every adult man to make use of them without socioeconomic discriminations, providing they were not slaves (Fisher 1998).

Thus, as Guttman (1978, p. 26) points out, through the ability of citizens of noble origin to train “side by side with the aristocrats” in the public gymnasia, a process of democratization seems to have taken place, a belief that is also supported by Humphreys (1974) and Thompson (1978) too. Furthermore, Hubbard (2008) offers an interesting view of the greek *gymnasia*. He argues that gymnasia for kids (hosting youngsters between 14 and 18 years old), were subsidized by state *liturgies*.<sup>18</sup> Their supervisors, the *gymnasiarchs*, most of them of aristocratic origin, in order to gain prestige within their city, both with other well-off admirers of sports, they were inclined to offer subsidies and patronage to promising young athletes so as to compete and win in local tribal torch races or other kind of games at various deme-festivals.

Golden (2008) in accordance to Pleket and Kyle rejects the above thesis of Young and Gutmann about the democratization of sports by arguing that gifts were given only to athletes after victories and that public gymnasia services practically were used only by the privileged elite which had enough time for leisure to exercise or to participate in the 30 days Olympic festives instead of working. However, historical evidence seems not to justify those advocates of sports as a privilege of the aristocrats only in Classical times. Hubbard (2008) and even Pleket (2005), based on Isocrates 16.33 mention the case of the notorious noble Alcibiades, a pure advocate of the aristocratic ideals complaining that in his time (circa in the mid of the fifth century BC) many among the participant athletes of the non-equestrian sports were certainly of non-noble origin.

## 6 Athletic values and warfare and the road towards democracy

So far, we have analyzed that athletics was an ongoing phenomenon in ancient Greek social lifestyle since Mycenaean times. What we propose to show now, is that the athletic values that emerged through the athletic events played a major role in the emergence of a system of values that were diffused from sports to the field of politics leading to democracy. However, it seems necessary first to present analytically the athletic events of the Olympic Games, during Classical Period. Table 3 summarizes all the series of events according to Miller (2003, 2004) and Pleket (2005).

<sup>18</sup> A liturgy was a public service established by the city-state of Athens through which its richest members, more or less voluntarily, were responsible to finance some state activities with their personal wealth. Many wealthy Athenians had decided to undertake various liturgies and even spent far more than necessary for them, because this could be a means of achieving “fame”, good standing and recognition among their fellow citizens. See Kyriazis (2009) who analyses extensively the ways of subsidizing the ancient Athenian state.

**Table 3** The sports of the olympic games

Horse races	Held in the hippodrome with 1,2, 3 or 4 charioteers
<i>Equestrian sports</i>	
Pentathlon (greek: Πένταθλο)	A mixture of sports
<i>Foot races (running)</i>	
Stadion (greek: Στάδιο)	Running circa 200 m
Diaulos (greek: Δίαυλος)	Running circa 400 m
Dolichos (greek: Δόλιχος)	Circa 4,200–4,500 m
Race in armor (greek: Οπλίτης δρόμος)	400 m Race including full war personal armour/equipment)
<i>Heavy sports</i>	
Boxing (greek: πυγμαχία)	
Wrestling (greek: πάλη)	
Pankration (Greek: παγκράτιον)	

Source Personal modification based on Miller (2003, 2004) and Pleket (2005) findings

Pleket (2005) argues that the Homeric poems express values such as physical strength, fitness, *arete* (excellence), and “battle of sports” the *agon*. Pritchard (2003) argues that physical education gave young men the bodily strength they needed to be brave on the battlefield. Pleket continues the Homeric line by analyzing Pindar’s *Odes*, which express similar values and he finally continues with the Hellenistic and the Roman periods were values such as *andreia/euandria* (bravery), masculinity, courage, *ponos* (toil), *karteria* (endurance), *euexia* (comportment), *eutaxia* (discipline), *philoponia* (endurance-love of toil) and military valour were generally acknowledged among the athletes as commonly accepted.<sup>19</sup>

Raubitchek (1988) also believes that the Olympic Games contributed to a panhellenic movement for harmony, friendship, peace and *ekecheiria* (truce) among the Greeks, which was announced by the oracle of *Delphi*, the most important oracle in the classical Greek world. It should be mentioned however that *euexia* was considered necessary for women too in Archaic and Classical Greece, like in Minoan Crete and Mycenaean Greece.

Spears (1984) also mentions that athletics were used in Sparta as a means of training rugged male warriors and healthy vigorous mothers. This information offers us two other values that derive from sports, which are toughness and durability.<sup>20</sup>

<sup>19</sup> However we have to mention here that Pleket on this point misses the meaning of the Greek word *euexia*, which literally means, a sense of health, beauty and physical strength.

<sup>20</sup> Spears also mentions that women’s participation in sport events were a panhellenic phenomenon. She mentions the *Heraean Games*, as the most famous athletic events intended for women only. These games were taking place in Olympia too, just like the Olympic Games. Greek women could also participate in chariot races in the Olympic Games as owners of chariots. Thus, Kyniska, a Spartan woman, daughter of king Archidamos and sister of king Agiselaos became an Olympian winner, not only once but in two consecutive Olympiads, in 396 and 392 BC because her chariot won in a chariot race called *tethripion* (Greek: τέθριππον). This is important because it shows a form of egalitarianism in two ways: A woman becomes an Olympia winner (in contests open generally only to men), and in property rights: A woman is the owner of the chariot, on an equal footing to men (Cartledge 1987, p. 29). After Kyniska, many other Greek women won chariot races like Eurileonis from Sparta too, in 368 BC and Bilistiche in 264 BC from Macedonia etc. (Golden 2008).

Goodson (1991) agrees that Greeks regarded beauty as the very essence of virility, and they considered it necessary to achieve the perfect balance between mind and body<sup>21</sup> while Glass (1988) mentions that in Greek *gymnasia* kids were learning how someone could become *kalos kagathos* (morally and physically attractive). Osborne (1993) argues that sports and rewards and prizes through them had a major role on building a spirit of cohesion among the different (in age and social status) members of each small social sub-group of the city-state. Furthermore, Miller (2000, p. 78; 2004) comes to the very important conclusion that the fact that the fifth century athletes were performing nude in the athletic festivals, is a sign of *isonomia* (political equality), *isegoria*, (equality of speech and in front of the law without regard to class) and *if not democratia itself developed out of athletics*.<sup>22</sup>

Miller (2003) also mentions an excellent story that derives from the Olympic games: During the fifth century BC two athletes, also being brothers from Rhodes participated in the Olympic Games. The one won in boxing and the other in wrestling. After their victories, they took a joint lap and then run into the crowd to pick up their father called Diagoras, an Olympic victor himself too in his young days. As the two young athletes paraded their father around the track, the crowd become amazed and reacted by “showering” them with flowers. Then, a Spartan spectator shouted out to their father: *Die now Diagoras! You'll never be happier*. This incident makes us believe that another set of values derives from the athletic contexts: respect (to the family, to father and the city-state), virtue, self-sacrifice, altruism and politeness.

Figure 4 presents the warfare sports, *pygmachia* (boxing—Fig.4a), *pale* (wrestling— Fig. 4c) and *pankration* (Fig. 4b, d), a sport that is a mixture of wrestling, boxing and kicking, a forerunner of modern mixed martial arts. In this context Elias (1971) in accordance to Nietzsche and Burckhardt, believed that sports, being primarily a military training were undeniably more civilized than aggression in battlefields, while Delorme (1960) and Humphreys (1974) correlate military training and hoplite warfare with athletic training and sport in Classical Greece through *gymnasia* as did Renfrew (1988) for pro-Classical Greece. Boys were being educated on warfare sports such as *hoplomachia* for kids, a basically adult athletic event that permitted using even heavy weaponry such as *εν ασπίδιω και δόρατι* (using a heavy shield and a thrusting spear). Roisman (2005, p. 105) defines exactly a number of such values that derive from warfare, such as courage, strength, fraternity, order, self-control, discipline, self-sacrifice, loyalty, and service to the state.

<sup>21</sup> Ancient Greek philosopher Thales from Miletus, who lived between seventh and sixth century BC and is considered one of the “Seven Sages” of antiquity said the famous phrase, “*νοῦς ὑγιής ἐν σώματι ὑγιεῖ*”, which is synonymous to: “*mens sana in corpore sano*” of the Roman poet Juvenal, which means: a sound mind in a healthy body. Another major value of the Greeks was *meden agan*, which meant, nothing in excess, which is similar to “*πάν μέτρον ἄριστον*” (everything in moderation), a panhellenic belief. These ideas make us believe that other two values that derive from ancient sports are self-awareness and temperance.

<sup>22</sup> We owe to Gerrit Meijer the comment that *isonomia* is not the proper word for what Miller (2000, 2004, p. 233) intends to describe because *isonomia* has to do with equality in front of the law. Alternatively Miller could have used the ancient word *isopoliteia*, which means an environment under which equal political rights among the members of a society are guaranteed.



**Figure 4** ‘The Agonistic Spirit of “Heavy” or “Warfare” sports. Wrestling, boxing, and pankration

Maurizio (1998) connects athletics, politics and democracy too by arguing that the most enthusiast advocates of democracy were those people of non-aristocrat origin that were members of the emerging hoplite class and the lower social class of the *thetes* who were serving as rowers in the navy, a thesis that coincides with the Kyriazis and Paparrigopoulos (2011) and Kyriazis (2012) findings, while Göhler (1970) and Mann (2001) argue that participation in athletic events could have a major role in order to increase the personal prestige of those members of the hoplite class who wanted to participate in the political life of the newly Athenian and the other hellenic democracies.

We argue that athletics was one of the distinguishing elements of a new macroculture that led in some cases to democracy. There certainly was a link between warfare and the athletic contests, some of which had a direct relevance for battle prowess and endurance (like wrestling, boxing, running in full armour called *hoplitodromos*, javelin and disc throwing). On the other hand, other sport events such as the chariot races were not linked to contemporary warfare (Greeks did not use chariots in warfare after the Mycenaean period). Chariot races were rather a relic of older aristocratic times. Athletics were common to all Greek city-states and thus it cannot be claimed that they led to differences in levels of democracy among city-states. But they were one of the preconditions of a unique macroculture that

promoted egalitarian values.<sup>23</sup> In accordance to Göhler and Mann, Pritchard (2009) is referring to the political practise of many members of the Athenian elite to subsidise the athletic infrastructure of the Athenian city through the institution of *liturgies* in order to increase prestige and valuable political support. Under this practise, Pritchard mentions the cases of many prominent politicians that engaged with the renovation of many important athletic facilities such as the public gymnasia. For example Kimon, spent private money renovating the Akademy, Perikles used public funds to do the same to the Lykeion and Alkibiades proposed a law and modified another concerning Kynosarges, while the later fourth century Athenian leader Lycurgus oversaw the building of the Panathenaic stadium and a further renovation of the Lykeion. But according to our view, apart from rising personal political prestige, liturgies for athletics might produce some social values such as, cohesion among the different social groups of the city-state and even a high sense of duty from the elite members when it comes to the standard of living of their lower class compatriots.

Finally, Phillips and Pritchard (2003) argue that the Greek competitive spirit, the *agon* was not manifested only in sports but in warfare, politics, law and oratory too while Cartledge (2000) comes to the important conclusion that political competitiveness should not be seen in isolation from physical competitions or competitions such as recital, dance and drama.

Table 4 combines and correlates the systems of values that developed in parallel in athletics and warfare in Classical Greece. Table 4 describes how new values and norms are created through a process of interaction of these values under a mutually reinforcing environment through a process of bounded rationality, an idea which is compatible and verifiable by the findings of the theory of macroculture we have already analysed in the second part of our analysis. We argue that according to Table 4, the values which we spotted through athletics and warfare in this section finally lead to the creation of new values and norms in politics such as *isonomia*, *isegoria*, and *isopoliteia*, as the theory of macroculture predicts.

## 7 Conclusion

The main objective of our research has to do with the effects of athletic values in the emergence of democracy, with ancient Greece being our case study. According to our analysis the various elements of a new macroculture (e.g. in athletics, warfare, politics etc.) that gradually appeared during a period that dates back even as far as the Later Bronze Age Greece were being integrated during at least the last part of the Archaic period (eighth–seventh century), into a new macroculture through the bounded rationality effect that made the emergence of direct democracy a possibility which verified during the classical period where 18 democratic states are attested in the end of the 6<sup>th</sup> century, and most notably Athens. See Robinson (2004), Raaufaub et al. (2007). We further argue that athletics influenced democratic values like equality, and not vice versa, as is clear from the

<sup>23</sup> We owe this elaboration to the comments of an anonymous referee.

**Table 4** The emergence of a democratic macroculture

Emerging macroculture elements	Democratic macroculture	
From Mycenaean to Geometric and Archaic Greece	→	to Classical Greece
Old Ethics accumulation and co-integration	Interactive process of Creation of new values and principles	New norms and values:
<b>Athletic games:</b>		
<p><i>euexia</i> (physical strength, fitness), toughness and durability, masculinity, beauty, virility, balance between mind and body, <i>agon</i> (battle of sports), <i>andreia/euandria</i> (bravery), courage, <i>ponos</i> (toil), <i>karteria</i> (endurance), <i>eutaxia</i> (discipline), <i>philoponia</i> (endurance-love of toil) military valour, virtue, self-sacrifice, self-consciousness, altruism, peace, <i>ekecheiria</i> (truce), harmony, friendship, <i>arete</i> (excellence), <i>kalos-kagathos</i> (morally and physically attractive), respect (to the family, to father and the city-state), politeness, justice, self-denial, fair competition, equality, egalitarianism, cohesion, self-awareness, temperance, <i>homonoia</i> (same mindedness), trust, cohesion, <i>isonomia</i> (political equality), <i>isegoria</i>, <i>demokratia</i>.</p>	<p>Integration of previous elements into political fields:</p> <p>isonomia, (justice in front of the law),</p> <p>isigoria, (freedom of speech)</p> <p>isopoliteia (political equality),</p> <p>homonoia (concord)</p> <p>freedom</p>	<p>Participative democracy as a result of integration between various different elements and ethics</p> <p>Convergence of interests</p>
<p><b>Warfare: (hoplites and phalanx)</b></p> <p>military valour, trust, self-confidence, discipline and “rules” and order, self-control, self-sacrifice, bravery, courage, strength, loyalty, service to the state-love for the motherland, <i>homonoia</i> (concord), fraternity, cohesion, high sense of responsibility and duty, self-denial, equality, freedom</p>		

chronological sequence of events: Athletic contests were established already during the Mycenaean Age and insitutionalised (historically since the first recorded Olympiad in 776 BC, but probably again earlier) at least 250 years before the emergence of democracy (in Athens in 510 BC). The same is true with the other elements shaping a democratic macroculture. Hoplite warfare and the phalanx were established at the latest in the 650s, 150 years before democracy. The Greek religion

with its democratic elements (Kyriazis and Economou 2012) was prevalent at least from the eighth century (the time of writing of Homer and the works of Hesiod) again at least 250 years before democracy. Lastly, the city-state environment with its competitive culture, where people have to measure themselves against each other, for example in sporting events (Meier 2012, p. 15) existed already during the Mycenaean Period. True, other ancient cultures had practiced sporting events. Sumerians were performing a series of sports such as chariot races, wrestling and boxing. In the wider area of ancient Mesopotamia a series of festivities were taking place occasionally, accompanied by sport activities. However the “intensity” of these events was limited (Poliakoff 1987). Sports were not the first priority for the Babylonians too. Babylonians preferred to be occupied with science, such as astronomy and mathematics while sports such as swimming and hunting were mostly a habit of the nobles (ibid., p. 108). In contrast to the more belligerent Babylonians, the war-like Assyrians were performing sports like riding, javelin throwing, archery, running, swimming, chariot racing and hunting of wild animals as a means of training their army in order to be ready to use and always active. The same goes also for the Hittites (Mouratides 1998). Ancient Egyptians were also performing sports such as boxing, wrestling, jumping, running, weightlifting, gymnastics, swimming in the canals nearby river Nile as well as games related to using balls etc. (Decker 1992; Strouhal 1992). However the above authors agree that athletics in ancient Egypt was mainly a privilege of the nobility class, like in Babylon too etc. Sports in Egypt were in correlation to military training as well. Finally, the Phoenicians were also performing some kind of water sports like rowing (Mouratides 1998).

What was different and unique in the case of ancient Greece was that sporting events became institutionalized in the great pan-hellenic events like the Olympic Games, open to all Greek free citizens, linked to high prestige for the winners. Egyptians might participate in some sports as Decker (1992) and Strouhal (1992) propose (but not simple farmers as in Greek city-states), but they did not receive the high honor's accorded to Olympic winners by their states, like Diagoras of Rhodes. Thus, we underline, that in other cultures, the incentives and the egalitarian spirit of athletics was lacking. Persians, being good horsemen were practicing horse racing and archery (Crowther 2007). This obviously means that sport activities were in close relationship with warfare like with the cases of Assyria and Egypt and the Hittite Empire. Crowther also mentions a game which resembles to modern polo, known as *chogān*. Again, these events were open only to noblemen (horsemen and horse owners) and not common persons. Persia acquired a vast multiethnic empire during the sixth century BC. Still, no kind of athletic events like the Olympic Games, open to participants of the various subject peoples, ever appeared. Such an idea probably was so strange to the Persians that probably never ever considered it. For the Greeks, Olympic, Phythian, Isthmian, Nemean, Dephi and the other games were a unifying cultural element, out of which another important political value emerged: *isopoliteia*. In ancient Greece, this did not mean equal political rights (these being covered by *isegoria*) but the possibility of granting political rights to a citizen of one city-state e.g. a citizen of say, Sikyon could be also a citizen of Corinth and vice versa. No such concept ever arose in earlier multiethnic empire



like the Assyrian or Persian. Miller (2004) argues that sports had a fundamental role in Greek society. It is obvious that through the athletic festivals Greeks reinforced their cultural identity. By accepting that other Greeks belonged to the same culture and were equals as sports contestants, a base of political equality was established. During the fourth century, the Aetolian and Achaean Federations were created exactly on this concept of *isopoliteia*, thus being the forerunners of today's European Union.<sup>24</sup>

We propose a further analysis on the other aspects of direct democracy such as religion, warfare, city-state culture and the political proto-federations etc. in forthcoming papers.

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## References

### Ancient authors

- Aristophanes "Knights", (Arist. K.).  
 Aristoteles "Politics", (Ar. Pol.).  
 Homer "Iliad", (Il.).  
 Homer "Odyssey", (Od.).  
 Hesiod "Works and Days", (Wor.).  
 Isocrates "Panegyricus", (I.).  
 Pausanias "Periegesis". (P. Per.).  
 Pindar "Odes" (P. Od.).  
 Plato "Gorgias", (Pl. G.).  
 Polybius "Histories", (Pol.).  
 Plutarch "Moralia" (Plut. Mor.).

### Modern authors

- Abrahamson, E., & Fombrun, C. J. (1992). Forging the iron cage: Interorganisational networks and the production of Macro-culture. *Journal of Management Studies*, 29, 175–194.
- Abrahamson, E., & Fombrun, C. J. (1994). Macrocultures: Determinants and consequences. *Academy of Management Review*, 19(4), 728–755.
- Acampora, C. D. (2002). Nietzsche contra Homer, Socrates, and Paul. *Journal of Nietzsche Studies*, 24, 25–53.
- Acemoglu, D., & Robinson, J. A. (2000). Why did the west extend the franchise? Democracy, inequality, and growth in historical perspective. *Quarterly Journal of Economics*, 115(4), 1167–1199.
- Almond, G.A & Verba, S. (1963, reprinted 1989). *The civic culture: Political attitudes and democracy in five nations*. California: Sage Publications.
- Burckhardt, T. (1998). *The Greeks and Greek civilization*. New York: St. Martin's Press.
- Camerer, C., & Vepsalainen, A. (1988). The economic efficiency of corporate culture. *Strategic Management Journal*, 9, 115–126.

<sup>24</sup> The Greek federation by granting *isopoliteia* to the citizens of the city-states comprising them, were thus more advanced than today's European Union. A French citizen does not have automatically German citizenship etc. although both countries are members of the EU. We owe this elaboration to the comments of an anonymous referee.



- Cartledge, P. (1987). *Agasilaos and the crisis of Sparta*. London: Gerald Duckworth and Company.
- Cartledge, P. (2000). Greek political thought: The historical context. In C. J. Rowe & M. Schofield (Eds.), *The Cambridge history of Greek and Roman political thought* (pp. 11–22). Cambridge: Cambridge University Press.
- Cartledge, P. (2001). *Spartan reflections*. London: Duckworth.
- Crowther, N. B. (2007). *Sport in ancient times*. Westport: Greenwood Publishing Group Inc.
- Daunton, M. (2010). Rationality and institutions: Reflections on Douglas North. *Structural Change and Economic Dynamics*, 21, 147–156.
- Decker, W. (1992). *Sports and games of Ancient Egypt*. New Haven, Connecticut: Yale University Press.
- Doumas, D. (2003). *Santorini, a guide to the island and its archaeological Treasures*. Athens: Ekdotiki Athenon.
- Delorme, J. (1960). *Gymnasion: Étude sur les monuments consacrés à l' education en Grèce*. Paris: E. de Boccard.
- Dunn, J. (1992). *Democracy: The unfinished journey, 508 BC to AD 1993*. Oxford: Oxford University Press.
- Elias, N. (1971). The genesis of sport as a sociological problem. In E. Dunning (Ed.), *The sociology of sport* (pp. 88–115). London: Frank Cass.
- Fleck, R. K., & Hanssen, F. A. (2006). The origins of democracy: A model with application to Ancient Greece. *Journal of Law and Economics*, 49, 115–145.
- Forrest, W. G. (1966). *The emergence of Greek democracy: Character of Greek politics, 800–400 B.C.* London: Weidenfeld and Nickolson.
- Foxhall, L. (1995). Bronze to iron: Agricultural systems and political structures in late Bronze Age and early Iron Age Greece. *The Annual of the British School at Athens*, 90, 239–250.
- Finley, M. I. (1983). *Economy and society in Ancient Greece*. New York: Penguin Non-Classics.
- Fisher, N. (1998). Gymnasia and the democratic values of leisure. In P. Cartledge, P. Millett, & S. von Reden (Eds.), *Kosmos: Essays in order, conflict and community in classical Athens* (pp. 84–104). Cambridge: Cambridge University Press.
- Gardiner, E. N. (1930). *Athletics of the ancient world*. Oxford: Oxford University Press.
- Glass, S. L. (1988). The Greek Gymnasium. In W. Raschke (Ed.), *The archaeology of the Olympics* (pp. 155–173). Wisconsin: The University of Wisconsin Press.
- Göhler, J. (1970). Olympioniken als kriegler und politiker: Zur sozialen stellung der olympiasieger im altertum. *Die Leibeseziehung*, 19, 190–195.
- Golden, M. (2008). *Greek sport and social status*. Texas: University of Texas Press.
- Granovetter, M. (1992). Problems of explanation in economic sociology. In N. Nabria & R. G. Eccles (Eds.), *Networks and organizations: Structure, forms and action* (pp. 25–26). Harvard: Harvard Business School Press.
- Green, P. (1998). *The Greco-Persian wars*. California: University of California Press.
- Goodson, A. (1991). *Therapy, nudity and joy: The therapeutic use of nudity through the ages from ancient ritual to modern psychology*. Los Angeles: Elysium Growth Press.
- Guttman, A. (1978). *From ritual to record*. New York: Columbia University Press.
- Halkos, G., & Kyriazis, N. (2010). The Athenian economy in the age of Demosthenes. *European Journal of Law and Economics*, 29, 255–277.
- Hammond, M. (1987). *Homer: The Iliad*. London: Penguin Books Ltd.
- Hansen, M. H. (1999). *The Athenian democracy in the age of Demosthenes*. London: Bristol Classical Press.
- Hanson, V. D. (2009). *The western way of war. Infantry battle in Classical Greece*. Los Angeles and London: University of California Press, Berkeley.
- Herrmann, H. V. (1972). *Olympia: Heiligtum und wettkampfstätte*. München: Hirner.
- Hubbard, T. (2008). Contemporary sport sociology and ancient Greek Athletics. *Leisure Studies*, 27(4), 379–393.
- Humphreys, S. C. (1974). The nothoi of Kynosarges. *The Journal of Hellenic Studies*, 94, 88–95.
- Jones, C., Hesterly, J., & Borgatti, S. (1997). A general theory of network governance; exchange conditions and social mechanisms. *Academy of Management Review*, 22(4), 911–945.
- Kirk, G. S. (1965). *Homer and the epic*. Cambridge: Cambridge University Press.
- Krentz, P. (2002). Fighting by the rules: The invention of the hoplite agon. *Hesperia*, 71(1), 23–39.
- Kyle, D. G. (1987). *Athletics in Ancient Athens*. Leiden: E. J. Brill.
- Kyriazis, N., & Zouboulakis, M. (2004). Democracy, sea power and institutional change: An economic analysis of the Athenian naval law. *European Journal of Law and Economics*, 17(1), 117–132.

- Kyriazis, N. (2006). Seapower and socioeconomic change. *Theory and Society*, 35(1), 71–108.
- Kyriazis, N. (2009). Financing the Athenian state: Public choice in the age of Demosthenes. *European Journal of Law and Economics*, 27, 109–127.
- Kyriazis, N., & Metaxas, T. (2010). Bounded rationality and institutional change. *Evolutionary and Institutional Economic Review*, 7(1), 1–19.
- Kyriazis, N., & Paparrigopoulos, X. (2011). The birth of democracy: Values in war and politics in Classical Greece. In P. Hermann (Ed.), *Democracy in the theory and action* (pp. 277–287). Hauppauge, New York: Nova Publishers.
- Kyriazis, N. (2012). *Why ancient Greece?*. Athens: Psychogios Publications.
- Kyriazis, N., & Paparrigopoulos, X. (2012). War and democracy in ancient Greece. *European Journal of Law and Economics*. doi:10.1007/s10657-012-9352-1.
- Kyriazis, N., & Economou, E. M. (2012). *Property rights and democratic values in Bronze Age and Archaic Greece*. Munich Personal RePEc Archive, MPRA Paper No. 42399.
- Lazarcic, N. (2011). Organizational routines and cognition: An introduction to empirical and analytical contributions. *Journal of Institutional Economics*, 7(2), 147–156.
- Lattimore, R. (1951). *The Iliad of Homer*. Chicago and London: University of Chicago Press.
- Lee, H. M. (1988). The “first” Olympic games of 776 BC. In W. Raschke (Ed.), *The archaeology of the Olympics* (pp. 110–118). Wisconsin: The University of Wisconsin Press.
- Lungstrum, J., & Sauer, E. (1997). *Agonistics: Arenas of creative contest*. New York: State University of New York Press.
- Lyttkens, C. H. (2008). A rational-actor perspective on the origin of liturgies in Ancient Greece. *Journal of Institutional and Theoretical Economics*, 153, 462–484.
- Mann, C. (2001). Athlet und polis im archaischen und frühklassischen Griechenland Göttingen: Vandenhoeck & Ruprecht.
- Marinatos, S., & Hirmer, M. (1960). *Crete and Mycenae*. London: Thames and Hudson.
- Maurizio, L. (1998). The Panathenaic procession: Athens’ participatory democracy on display. In D. Boedecker & K. A. Raaflaub (Eds.), *Democracy, empire and the arts in the 5th century Athens* (pp. 297–318). Cambridge: Harvard University Press.
- Meier, C. (2012). *A culture of freedom*. Oxford: Oxford University Press.
- Miller, S. G. (1989). *Nemea: A guide to the site and the museum*. Berkeley: University of California Press.
- Miller, S. G. (2000). Naked democracy. In P. Flensted-Jensen, T. H. Nielsen, & L. Rubenstein (Eds.), *Polis and politics: Studies in ancient Greek history* (pp. 277–296). Copenhagen: Museum Tusulanum.
- Miller, S. (2003). The organization and functioning of the Olympic Games. In D. J. Philips & Pritchard, D. (Eds.), *Sport and festival in the ancient Greek world* (pp. 1–41). Swansea: Classical Press of Wales.
- Miller, S. G. (2004). *Ancient Greek athletics*. New Haven and London: Yale University Press.
- Morris, I. (2002). Hard surfaces. In P. Cartledge, E. E. Cohen, & L. Foxhall (Eds.), *Money, labour and land* (pp. 8–43). Abingdon: Routledge.
- Mouratides, I. (1998). *History of physical education*. Thessaloniki: Christodoulides Publications (in Greek).
- Murray, O., & Stern, S. (1999). *The Greeks and Greek civilization*. New York: St. Martin’s Press.
- Ober, J. (1989). *Mass and elite in democratic Athens: Rhetoric, ideology, and the power of the People*. Princeton: Princeton University Press.
- Ober, J. (2008). *Democracy and knowledge*. Princeton: Princeton University Press.
- Ober, J. (2011). Wealthy hellas. *Journal of Economic Asymmetries*, 8(1), 1–39.
- O’Donnell, G., & Schmitter, P. C. (1986). *Transitions from authoritarian rule: Tentative conclusions about uncertain democracies*. Baltimore, Maryland: John Hopkins, University Press.
- O’ Sullivan, P. (2003). Victory, statue, victory song: Pindar’s agonistic poetics and its legacy. In D. J. Philips & D. Pritchard (Eds.), *Sport and festival in the ancient Greek world* (pp. 75–101). Swansea: Classical Press of Wales.
- Osborne, R. (1993). Competitive festivals and the polis: A context for dramatic festivals at Athens. In A. Sommerstein, S. Halliwell, J. Henderson, & B. Zimmermann (Eds.), *Tragedy, comedy and the Polis* (pp. 21–38). Bari: Levante Editori.
- Phillips, D. J., & Pritchard, D. (2003). Introduction. In D. J. Philips & D. Pritchard (Eds.), *Sport and festival in the ancient Greek world*. Swansea: Classical Press of Wales.
- Poliakoff, M. B. (1987). *Combat sports in the ancient world*. Yale: Yale University Press.

- Pritchard, D. (2003). Athletics education and participation in Classical Athens. In D. J. Philips & D. Pritchard (Eds.), *Sport and festival in the ancient Greek world* (pp. 293–351). Swansea: Classical Press of Wales.
- Prichard, D. (2009). Sport in the cultures of the ancient world. In Z. Papakonstantinou (Ed.), *Sport in the cultures of the ancient world* (pp. 64–97). London and New York: Routledge.
- Platon, N. (1970). The prosperity of the Minoan civilization. *History of the Greek nation*. (A). Athens: Ekdotiki Athinon (in Greek).
- Pleket, H. (1975). Games, prizes, athletes and ideology: Some aspects of the history of sports in Greco-Roman World. *Stadion*, 1, 49–89.
- Pleket, H. (2005). The Olympic Games in antiquity. *European Review*, 12(3), 401–413.
- Putnam, R. (1993). *Making democracy work*. Princeton: Princeton University Press.
- Raaufaub, K., Ober, J., & Wallace, R. W. (2007). *Origins of democracy in Ancient Greece*. California: University of California Press.
- Raubitchek, A. E. (1988). The panhellenic idea and the Olympic Games. In W. Raschke (Ed.), *The archaeology of the Olympics* (pp. 13–25). Wisconsin: The University of Wisconsin Press.
- Renfrew, C. (1985). *The archaeology of cult: The sanctuary at Philakopi*. London: British School of Archaeology at Athens.
- Renfrew, C. (1988). Minoan-Mycenaean origins of the panhellenic Games. In W. Raschke (Ed.), *The archaeology of the Olympics* (pp. 13–25). Wisconsin: The University of Wisconsin Press.
- Rieu, H. (2003). *The Odyssey*. London: Penguin Classics.
- Robinson, E. W. (2004). *Ancient Greek democracy: Readings and sources*. New Jersey: Wiley.
- Roisman, J. (2005). *The rhetoric of manhood: Masculinity in the attic orators*. Berkeley: University of California Press.
- Simon, H. (1982). *Models of bounded rationality (1 and 2)*. Cambridge, MA: MIT Press.
- Simon, H. (1991). Bounded rationality and organisational learning. *Organisation Science*, 2(1), 125–134.
- Spears, B. (1984). A perspective of the history of women's sport in Ancient Greece. *Journal of Sport History*, 11(2), 32–47.
- Strouhal, E. (1992). *Life of the ancient Egyptians*. Oklahoma: University of Oklahoma Press.
- Thompson, J. G. (1978). Solon on athletics. *Journal of Sport History*, 5(1), 23–29.
- Tridimas, G. (2011). A political economy perspective of direct democracy in Ancient Athens'. *Constitutional Political Economy*, 22(1), 58–82.
- van Effenterre, H. (1985). *La cite Grecque: Des origines a la defaite de Marathon*. Paris: Hachette literature.
- Vromen, J. (2011). Routines as multilevel mechanisms. *Journal of Institutional Economics*, 7(2), 175–196.
- Williamson, O. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Williamson, O. (1991). Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*, 36(2), 269–296.
- Young, D. (1984). *The Olympic myth of Greek amateur athletics*. Chicago: Ares Publishers.