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The emergence and the evolution of property rights in ancient Greece

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Abstract. In this paper, we trace the emergence and the evolution of property rights from the Homeric Era (1100–750 BCE) to Classical Greece, based on ancient sources and modern interpretations. Indications of the emergence of property rights are to be found in the writings of eighth century Homer and Hesiod. Property rights evolved, together with changes in warfare and city-states during the Archaic and Classical periods, becoming more secure and specific, based on contracts. We analyse as case studies Themistocles' Naval Law of 483/2 BCE and Nicophon's Monetary Law of 376/5. We also cover some other aspects of property rights, such as commercial transactions and the enforcement of contracts, official (written) law and legally binding procedures of law enforcement, banking services and the rights of women.

1. Introduction

The emergence of property rights and their protection and security is now accepted as one of the basic elements for economic development and one of the basic differences in economic development that took place in some 16–17th century European states, such as England and the United Provinces (Dutch Republic) *vis-à-vis* the great Asian empires like the Ottoman, the Indian Mughal, and China under the Ming and Qing Dynasties (North, 1981, 1990).[1]

John Locke had already pointed out the importance of private property and the rights of their owners as early as the 18th century, while the positive feedbacks of an economic environment that favours the freedom of commerce and the protection of private property that creates savings were also pointed out by Classical economists such as Adam Smith in 'The Wealth of Nations'.

Hodgson (2015a: 1) provides a key feature: he argues that property itself is a part of our natural condition and that, without doubt, feelings of possession are deep-rooted in human history and in human conscience. McCloskey (2010: 332) writes on this: '*feelings of private property are hardwired into humans, or so anyone who has raised a two-year-old will attest*'. According to Libecap

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1 A first draft of this paper was presented at the Second WINIR Symposium on Property Rights held in Bristol, 4–6 April 2016.

(1989: 1) '*property rights institutions range from formal arrangements, including constitutional provisions, statutes and judicial rulings, to informal conventions and customs regarding the allocations and use of property*'.

Modern scholars have also spotted the crucial importance of the existence of a clearly defined system of property rights as a mechanism in favour of the well-functioning of a modern economy (see, among others, Alchian and Demsetz, 1973; Allen, 2014, 2015; Barzel, 1997, 2002, 2015; Cole, 2015; Commons, 1924; Demsetz, 1967: 350; Hodgson, 1998, 2001, 2004, 2009, 2015a, 2015b, 2015c; Hodgson and Knudsen, 2008; Lyttkens, 2013; Ober, 2008). Advocates of the 'New Institutional Economics' school of thought such as Williamson (1975, 1991), North (1978, 1981, 1990, 1991, 1999), and North and Weingast (1989) have already established theoretical models that relate the protection of property rights to a wide variety of social phenomena.

Douglas North in particular has argued convincingly on the importance of property rights in economic development, for example, in his analysis of the Spanish 'mesta' system which prevented the 'enclosure' development in Spain and thus the promotion of innovation in agriculture, contrasting this with the 'enclosure' development in Great Britain that gave strong incentives to agriculture and thus, to economic growth.

However, there is an ongoing discussion and controversy concerning the issue of 'legitimate property rights' (meaning that legal rights cannot exist without law) instead of 'economic' or 'possession' rights on property (simply meaning, possession, or control). In favour of the first interpretation of property rights are scholars such as North (1981, 1990), Barro (1997), De Soto (2000), and Hodgson (2009, 2015b, 2015c) who argue that property rights and their protection are not just a case of possession – as the proponents of the second interpretation, such as Barzel (1997, 2002, 2015) and Allen (2015) argue – but that the term 'property' should be received for cases of institutional possession with legal mechanisms of adjudication and enforcement.

Since this discussion recently culminated once more[2] we think that it may be interesting to look into the historical cases so as to check the explanatory power of both views on the issue. Having this in mind, this paper is an attempt to analyse the emergence and the gradual evolution of property rights in ancient Greece by taking into account the discussion already mentioned above. It is argued that the first elements in favour of the existence of property rights protection can be found in the Homeric and Hesiodic poems. We also take into account the rest of the related ancient sources, the archaeological findings (such as inscriptions) and modern literature.

In the first section, we trace the emergence of property rights in Homeric Greece, followed by developments in Archaic Greece. We then analyse

2 See the recent debate on this, in *Journal of Institutional Economics*, vol. 11, issue 4, December 2015 and the contributions of Hodgson (2015b, 2015c), Allen (2015), Barzel (2015), and Cole (2015).

Themistocles' Naval Law (483/3 BCE), Nicophon's Monetary Law (376/5 BCE) as case studies of property rights in Classical Athens, combined with an analysis of additional ancient sources which further supports an argumentation in favour of the existence of institutional arrangements such as the legal binding of contracts, commercial transactions protected by written law, banking services, and the property rights of women. Thus, the paper concludes that it is best to interpret the regime of property rights in Greek antiquity through Hodgson's views about legal property rights instead of other interpretations (mainly Barzel's 'economic' property rights or 'possession' rights).

This paper is organised as follows: in the first part, we analyse property rights from the Homeric Age (1100–750 BCE) to Archaic Greece (750–500 BCE), whereas in the second part we focus on the Classical era (510–322). We finally offer our conclusions that verify that an environment of protection of property rights did exist in Hellenic antiquity.

2. A regime of property rights: evidence through Homer and Hesiodic poems

Homer's *Iliad* (mid-eighth century BCE) begins, in today's terminology, with a dispute about property rights cloaked in terms of 'personal honour'. Agamemnon, the king of Mycenae and war leader of the invading Greeks at Troy, had been obliged to relinquish a slave girl that had been allotted to him after the sack of a city, because of the god Apollo's wrath (Il. 1, 161–171). Being the supreme commander of the army, he felt that he was entitled to receive as a part of his war loot, in retaliation for his loss, another slave girl, Briseis, who had been given as a tribute to Achilles, the king of Phthia and mightiest champion of the Greeks.

Achilles gave his slave girl to Agamemnon, neither in good grace nor in fear of him, but because he did not want to split the unity of the Greeks. But, aggrieved and dishonoured, he withdrew from the fight, which created great difficulties for the Greeks. At first, this incident could be interpreted as an indication of a violation of property rights. But seeing it in another way, this incident can be seen also as an exception to the rule. This is why Homer emphasizes this event.

Agamemnon then infringed on Achilles' rights (an uncommon occurrence, hence the importance given to this event by Homer), but as a negative compensation, Achilles withdraws from battle and nobody can oblige him to participate in the war. The other kings try to persuade him, but cannot compel him. From the above, it is clear that individuals (kings, aristocrats, and simple warriors) had property rights to the spoils of war (both humans and objects). Raauflaub (1997) also underlines the egalitarian distribution of booty during Homeric times.

During the Trojan period (if we accept that Homer described the customs of war of about 1250 BCE and not those of his own era) these rights were clearly ascertained and denominated. Prisoners and objects were collected and

then distributed according to rules. First choice went to the commander-in-chief (Agamemnon) and then in decreasing order according to merit and one's contribution to battle. Thus, second choice went to Achilles, the best warrior of all. These property rights served as incentives to motivate men to fight effectively (Frey and Buhofer, 1988).

Following the dispute between Agamemnon and Achilles, Homer informs us about another incident which we consider an important point concerning the emergence of property rights and justice. A simple warrior, something of a popular speaker, Thersites, steps forward and takes part in the king's dispute, becoming the champion of the person whose property rights have been abused (Achilles) and the challenger of the party who has abused unjustly the established property rights, mainly Agamemnon, but also against other kings who support him, such as Odysseus (Il. 2. 210–241). Thus, Thersites can be seen as a member of a 'proto-jury' made of persons of non-noble origin.

This thesis is consistent with Stuurmam (2004: 173) who asserts that the Thersites episode indicates that ordinary warriors did not just obey blindly the orders of their commanders or kings but that '*warriors count for something*'. Stuurmam offers a detailed analysis of the various interpretations of the Thersites incident. In any case, this incident could be seen as a form of a proto-egalitarian behaviour. Thersites is then punished for his impudent words by a blow from Odysseus, who considers him to be guilty of calumny (Il. 2. 246–265). Still, what makes this episode remarkable and different from other contemporary cultures is that such a stand by a simple soldier would be unthinkable before a Middle Eastern emperor or a Pharaoh and that his punishment is extremely light, just a single blow.

This behaviour of Thersites (proponent of justice and protection of property rights) is also indicative of free-speech and 'isegoria' (equality of speech) that underpins democratic politics. It is actually an example relatively similar to the process of free speech in front of an assembly, what would become in the Classical period 'isegoria', one of the founding values of direct democracy. Thersites speaks freely, in front of the army and the kings. This again is the first step that culminates in the famous dictum of the Athenian classical period assembly (in Greek: *tis agorevein vouletai*? 'who wants to speak'?).[3]

Further, the existence of property rights regarding plots of land is confirmed. The world 'kleros' means a plot of land that belongs to the chief of a family. Hector says to the Trojans that, even if they are killed, their sacrifice will not

3 Many passages indicating democratic values and egalitarian behaviour can be found in both the Iliad and the Odyssey. For the Iliad see among others (Il. 1. 304–305, 539–544, Il. 2. 51–56, 142–165, 278–304, 773–778, Il. 7. 312–320, In Il. 8. 489–497; Il. 9. 9–18, Il. 10. 196–253, Il. 14. 61–75, Il. 19. 34–35, 42–45, 45–153, Il. 20. 4–25) and for the Odyssey, (Od. 1. 80–95, 272–275, 371–372, Od 2. 6–21, Od. 17. 307–487). Many modern authors such as Andrewes (1971: 75), Raaflaub (1997b: 642–643), Stuurman (2004: 173), and Kyriazis and Economou (2015) argue about the democratic nature and implications concerning the incident with Thersites.

have been in vain, because they will safeguard their homes and 'kleros'. It seems that even foreigners had the right to own land, whereas fallow or unexploited land that a person cultivated only for himself became his property (Zimmern, 1931: 288). Foxhall (1997: 128) adds on this issue that '*some notion of private property was at the heart of Greek concepts of land tenure well back into the dim and distant past*'.

Homer's 'Odyssey' also gives some additional information on property rights. Here again, there is an ambiguity as to whether the period concerned is the Mycenaean (during which Odysseus lived, about 1280–1260 BCE) or his own, mid-eighth-century Archaic period. In Book 1 (Od. 1. 160) Telemachus, speaking to a foreign guest, castigates the suitors of his mother, Penelope, '*who waste foreign goods*'. Again here, if someone wanted to generalize this incident, he/she could argue that property rights were not secure or that they were only partially secured in Archaic Greece. However, as will be further argued, fact such as the trespassing behaviour of the suitors was the exception and not the rule in Homeric and Archaic Greece. That is why Homer emphasizes the fact.

Further, in Od. 1. 402–404 one of the suitors, Eurymachus, answers Telemachus arguing that Telemachus has undeniable property rights to his house and farm lands. In Od. 2. 333–336 the suitors discuss what to do with Odysseus' house and the movables agreeing that they should take and distribute them among themselves, but the house itself should remain the property of Odysseus' wife, Penelope. This is a strong indication that the property rights to houses (and in land more generally) could not be violated and, very importantly, women such as Penelope could own houses as their own property, something that was possible in some Classical Greek city-states later on, for example, in Sparta and Gortyn on Crete, but not, at least *de jure* but probably yes *de facto* in Athens (Cohen, 1997; Fleck and Hanssen, 2009).

The 'Odyssey' gives some additional information on trade and the exchange of goods which again presupposes the existence of clearly attributable property rights, because without them, trade and markets exchange are impossible: in Od. 1. 430–432, we are informed that Odysseus' father, Laertes, had bought a girl as his faithful housekeeper, Eurikleia, in exchange for 20 cows. In Od. 14. 100–105, we are informed of the existence of salaried shepherds under the supervision of the chief-shepherd Eumaios. This is an indication of the existence of property rights in labour of free persons, as against slaves or medieval serfs. Book 17 (Od. 17. 415–427) indicates the existence of household servants (not slaves) who again receive, presumably, payment in wages or salaries for their labour. In Od. 18. 356–364, the possibility of employment as a free labourer in agriculture is again confirmed, when a suitor asked the disguised Odysseus if he would like to work in his fields for a high wage.

The above indications illustrate the issue of labour provision already in existence in Homeric and Archaic Greece. Slaves and free remunerated labourers worked side by side, as was the case also in Classical Greece. This thesis is also

supported by Forrest (1966). Slave labour was not sufficient to cover all needs so free men worked not only as farmers on their own plots of land, but could find employment as salaried persons for various other activities, mainly in agriculture.

Hesiod, a contemporary of Homer, writing during the second half of the eighth century BCE (about 750–720 BCE) in his 'Works and Days', which can be seen as a farmer's handbook, gives information about his own times, that is, Archaic Greece, for the region of Boeotia (north of Attica). It is clear that it addresses free farmers, who own their land and are masters of their produce. Property rights to land and its produce are undeniable. Further, free farmers do not pay any taxes to kings and their bureaucracy, as was the case in the eastern empires. Hesiod's work contains numerous 'moral' counsels addressed to his brother, Perses, but for the benefit of a wider audience, from which we can infer the values, norms and customs valid in the emerging culture of the Archaic period: justice is paramount. (WD. 210–218, 219–224, 225–228, 248–255). The message here is that one should be just and those unjust will receive divine retribution, even if they are kings or aristocrats.

In WD. 263–269, the task of divine justice is attributed to Zeus, the father of the gods. This task is so important that Zeus has a daughter, Dike (Justice)[4] who is entrusted with supervising justice. Her task is to plead to Zeus cases of injustice among men and ask him to punish them. Dike, thus, is a forerunner of modern 'attorneys'. As far as we know, only in the Greek religion of the period do we find a 'specialized' goddess of justice, which shows the importance that the Greeks ascribed to justice. Hesiod goes so far as to write (WD. 274–281) that justice is the supreme good that Zeus gave to men.

Here, we can thus establish even a ranking of values during the Archaic Period in Greece: Justice is the supreme value. And, of course, justice to safeguard inviolable property rights. Zeus will punish (WD. 282–285) unjust acts.[5] Although 'Works and Days' does not give us an idea of a clearly established legal system, it gives an overall impression of an emerging culture of customs, norms, and values regarding justice and property rights. Finally, Hesiod informs us that the observance of justice brings prosperity to the city-state (WD. 213–247).

An important passage must be also mentioned (WD. 370): '*Let the wage promised to a friend be fixed; even with your brother smile - and get a witness; for trust and mistrust, alike ruin men*'. This is probably the earliest occidental statement on a formal contract. It shows a type of social relation that is utterly different from Mycenaean feudalism as well as from tribal solidarity: If even with your brother you require a witness, the relation is no longer to a ruler or

4 Dike means also court trial in both ancient and modern Greek. See also below.

5 This value system continued and was further developed during Classical times: the playwright Menander (342–292 BCE), for example, wrote the famous: 'estin dikis opthalmos os ta pant ora' ('Gnomai Monostichoi', 179) which means that the eye of justice sees everything, and nothing – bad or illegal – remains unpunished. Before him, among others, Plato in many of his 'Dialogues' ('Euthyphro') discusses the ideal of justice and the law (see Allen, 1970).

to a blood relative but to a fellow citizen to which you are foremost bound by law. Thus, a radical 'break' with the past (not merely a smooth evolutionary next step) must have taken place. And as we will argue later on, this break is probably related to the destruction of the Mycenaean palaces not only in today's Greece but in all of Magna Graecia from Sicily/Southern Italy) to Asia Minor.[6]

In his second (but probably earlier work) 'Theogony', Hesiod provides additional support to the value of justice. In Th. 881–884 Zeus, when he vanquishes the Titans, attributes offices to the gods with justice. Further (Th. 901–904), he marries as his second wife Themis (Judgement) who bears three daughters, Eunomia (Lawfulness), Dike (Justice), and Eirene (Peace). 'Themis' is a word which is still used for the actual practice of justice in law courts. The importance of justice and laws, here, also for the first time, becomes clear: not just one, but three goddesses, Themis, Dike, and Eunomia, are related to the safeguarding of justice and law.

We indicated above that in *Works and Days* no indications of the actual laws are to be found. But in *Theogony* the name of the goddess Eunomia (Lawfulness) is an indication that laws (even if as yet unwritten) must have existed and that the principal 'value' of the law was strong. If not, why should a goddess such as Eunomia have to exist?

The historic case of Homeric and Archaic Greece seems to indicate the emergence of *de facto* property rights as possession, after a procedure of distribution of war booty. Here, some rules, although as yet not written, nor institutionalized, seem to have existed. Disputed cases could be adjudicated in front of 'semi-formal' courts, like the assembly of the kings or even, the assembly of the warriors. But these courts were not yet either formal, or specialized, as in classical Athens. Since *de facto* state authority, formal legal rules and courts were missing, property rights and their defence were based on customs and moral sentiments, of justice, as put forward by Thersites, as pointed out by Hodgson (2009: 146) who argues that '*custom is the key to understanding law*'.

The importance of customs as a mechanism for shaping a society's preferences is also acknowledged by Hayek (1973: 72) who argued that '*law in the sense of enforced rules of contact is coeval with society*'. This, according to Hodgson (2009: 144), means that '*law existed before the state constitutions and legislative institutions*'. Religion also provided a moral basis for the evolution and establishment of property rights, based on ideas of justice (Hodgson, 2009; North, 1978, 1981, 1990). But remarkably, although Homer portrays gods as taking part in battle, aiding their favourite champion,[7] they did not interfere in the property right dispute between Agamemnon and Achilles.

As a general comment on this part, we argue that Homeric society did not have a fully institutionalized regime for safeguarding property rights with specific

6 We owe these clarifications to Gunnar Heinsohn in a personal communication to us.

7 As also in Ramayana–Baghavad Gita when Krishna serves as charioteer to the mortal hero Arjuna.

written rules, as was the case in ancient Athens during the Classical period. However, this does not mean that property rights were not somehow protected. Private property in land was protected by custom, being *de facto* transferred from generation to generation without a 'contract' or any other type of legal title because trespassing private land was a very rare phenomenon.

3. The regime of property rights during the Homeric and the Archaic periods

It seems that Homeric society did not have a fully institutionalized regime for safeguarding property rights with specific written rules, as was the case in ancient Athens during the Classical period. However, this does not mean that property rights were not somehow protected. During the Homeric period, property in land passed from generation to generation without a 'contract' or any other type of legal title because trespassing private land was a very rare phenomenon (Forrest, 1966). Zimmern (1931: 288) argued that the continuous usage of a specific part of land by a specific individual became a *de facto* part of his land ownership, whereas Forrest (1966) describes this proto-regime of private property securitization as an undisputable property and not an undisputable right.

The impression we get from Homer and Hesiod is that property rights had emerged during the Homeric Greek era, up to eighth century Archaic Greece, but that they were as yet not totally secure. Kings, as in the case of Agamemnon in Homer, or unjust aristocrats as in the case of Hesiod, could infringe on the property rights of lesser mortals and they could invoke only the moral value of justice and godly retribution but could not, as yet, invoke the decision of institutionalized courts of justice.

In addition, a series of scholars have argued that the protection of property rights was further reinforced during the Archaic period in Greece, from the eighth century BCE and afterwards, due to the increase of the population and the necessity for new arable land to be cultivated by the new incoming workforce. Borders were established in order to effectively confront cases of trespassing of land (Donlan, 1989: 22–24; Lyttkens, 2006, 2013; Raauflaub, 1993: 74, 1997: 52).

The situation towards the establishment of the protection of property rights seems to have been further changed by the end of the Archaic Age, during the sixth century and the Classical period, linked to shifts of power between the various social groups living in the city-states (Lyttkens, 2006). By the sixth century the principle of 'isonomia' (equality before the law) was established in many city-states, some authors considering it a stage in political developments before democracy and after oligarchies and tyrannies.[8] Equality before the law is one of the elements of democracy, but does not mean or presuppose equality

8 Birgalias (2009) analyses 11 city-states having effectively established the principle of 'isonomia' during the sixth century BCE and he argues further about another seven possible cases.

of political rights, for which the ancient Greeks coined another term 'isokratia'. Then, what kind of equality before the law did this principle invoke? Equality between citizens concerning penal and civil disputes. During the same period, we have the first written laws in some city-states, such as those of Draco and Solon in Athens.

One of the earliest instances of, at that time, revolutionary change, was the abolition by Solon of personal debt, 'seisachtheia' (Forrest, 1966; Thompson, 1978). Previously, citizens could secure loans by giving their own bodies as collateral. If they could not pay back the loans, they were liable to be enslaved by the creditor, who could sell them in order to recuperate his loan. By abolishing this, Solon introduced a basic and inalienable property right, namely, that citizens were the sole proprietors of their bodies and their labour.

Piketty (2014: 158–161) pointed out, in a similar context, that with Lincoln's 1863 Emancipation Proclamation, slaves were no longer objects of alienable property, could not be used as collateral, and they were no longer capital. Thus, the owned human component of the value of total US (ex-slave) capital assets was reduced to zero. This raises the issue raised by Hodgson (2015a: 188–190, 195) of the difference between labour and capital in their possibility to be used as collateral for loans. When slavery is permitted, or in the case of the pre-Solonian contracts which foresee enslavement in the case of non-payment of the debt, labour and capital are similar as assets. Else, they are dissimilar.

Thus, 'freedom from enslavement denies the employee opportunities from obtaining loans using labour assets as collateral'. This is exploitation through unequal collateralizability (Hodgson, 2015a: 356–357). We conclude that in the Solonian case, as with the abolition of slavery in France, Great Britain, the USA, etc., non-market considerations predominated, such as moral issues and values, and in Solonian Athens, considerations focused on social cohesion, unrest, threat of revolution and upheavals. In these cases, it seems that the destruction of property rights is justified under the consideration of some higher order of values, such as freedom, justice, human equality, etc.

Related to this, someone could argue that Solon, by abolishing collaterals on the bodies of those that owed money to their lenders (the affluent aristocrats) reduced the ability of the wealthy to secure their loans, thus, actually, violating or causing limitations on their property rights.[9] However, we have to bear in mind that this was an extraordinary and special case. Solon did what he did not because he wanted to violate property rights, but due to the general social outcry which could lead, if measures of relief (debt bondage and abolishment) had not been taken, to the overall disintegration of Athenian society. Thus, the Solonian 'seisachtheia' was introduced due to the extraordinary sociopolitical environment. It was an extreme measure and not a common political practice.

9 We owe this comment to one of the referees.

Under 'isonomia', other rights were also secured, such as the right to own property (houses, land, flock, etc.) which could not be expropriated by anybody. 'Isonomia' was not introduced because of the benevolence of some farsighted political reformers, but was based on a shift of political power within the city-state, and this had to do with changes in the art of war.

The fall of the Mycenaean world led to a fragmentation of political entities: in place of, at the most, 100 Mycenaean city-states in Greece during the Archaic and Classical Age, there were over 1,000 (1,035 according to the Copenhagen 'Poleis' Inventory, Hansen, 2006), at least 700 of which were situated in the area covered by the previous Mycenaean Kingdoms. This means that every Mycenaean Kingdom was succeeded on the average by five or more new city-states.

These smaller city-states had weaker central authorities were economically poorer and the ruling aristocrats could no longer afford the very expensive Dendra-type armour[10] that Mycenaean aristocrats had. They were almost continuously at war with their neighboring states, usually over land disputes (on this point see, among others, Kyriazis, 2012; Kyriazis and Paparrigopoulos, 2014; Lyttkens, 2013). New solutions for defence had to be found and they were. The inhabitants of the community became its defenders, gradually taking over the task from the previous 'military specialists', the Mycenaean aristocrats, in a first step towards the establishment of citizen militia.

We have a parallel and mutually reinforcing military and economic development: small farmers becoming warriors with a strong incentive to fight, the desire to preserve their own land. This again must have given them a strong notion of personal property. A personal property notion and the military capacity to defend it seem to be the cornerstones for the establishment of property rights.

During the Archaic Age, military developments continued and culminated in the emergence of a particular type of heavy infantry warrior, the 'hoplite',[11] and a particular battle formation, best suited for this type of warrior, the 'phalanx'. In the phalanx the warriors stood side by side, in a tight formation, usually eight ranks deep. It had a compact appearance but also great strength when charging, something like a human battering ram (Hanson, 2009; Raauflaub, 2007).

Hoplite equipment, of which the cost was born by the hoplite himself, was relatively expensive[12] and the need to devote time to training in the phalanx transformed the hoplites into a separate class, since only a minority could

10 Such Mycenaean armour was recovered from a tomb in Dendra, today's Argolis, and is exhibited in the Archaeological Museum of Nafplion. Made of bronze it reminds one strongly of the 14–15th century AD European knights' plate armour.

11 So called for his defensive weapon, the large, round hollow shield, the 'hoplon', which covered both the warrior carrying it and the right side (the unprotected, spear-carrying side) of the warrior standing next to him in the phalanx formation.

12 Raauflaub (2007: 129) has calculated that a landowner had to own a farm of between 9 and 13 acres to be able to afford hoplite equipment. See also Lyttkens (2013: 31).

afford this equipment. The phalanx formation was complete by the middle of the seventh century BCE and dominated Greek battlefields. The citizen-farmer-hoplites gradually became conscious of this shift of power in their favour and of their personal worth.

The phalanx formation imbued hoplites with a strong sense of equality, called 'isotis' and interdependence, since in the phalanx all fought in the same ranks (general, officers, and simple hoplites) with the same equipment and dependent on the other warriors for protection, personal survival, and victory. Hoplites were equal in battle and relatively equal in economic standing, since all had to have sufficient means to afford the financing of their expensive military equipment. This military equality led to a sense of political equality, in a first step as 'isonomia' and then, in some cases 'isokratia', one of the basic principles of democracy (Kyriazis and Paparrigopoulos, 2014).

This shift of power manifested itself in many of the Greek city-states by upheavals and revolutions during the seventh/sixth centuries. Aristocratic factions fought against one another for predominance and, looking for allies, turned to the hoplites for support (Acemoglu and Robinson, 2000). There is no sufficient extant information to reconstruct how this support was won, but it must have consisted in what the hoplites mostly needed and cherished: Guarantee of the inviolability of their property and security against the threat of expropriation. This they acquired in the granting of 'isonomia', written laws specifying it and courts to defend their property rights.

This became clear also in the battle cry of the Greeks during the Persian wars. They were extolled to fight for 'their altars and hearths'. 'Altars' symbolized city and religion. 'Hearths', being the fireplace in each house, meant fighting for their houses, in other words, their property. This is an additional indication of established property rights, and is unique in history up to that time. Soldiers of the great ancient empires, Babylonian, Egyptian, Hittite, Assyrian, Persian, etc., might be urged to fight for their countries, but never for their property, because, we argue, they had no clearly established and secure property rights.

According to our interpretation of events we have, in the case of ancient Greece, a bottom up procedure of legislation (and in particular, legislation protecting property) which evolved from custom and, *de facto,* to written laws backed by state authority and courts, to *de jure* property rights. Social and military developments brought about shifts of power between social groups which culminated in written laws. The particular example of Solon's legislation seems also to validate the thesis that law involves conflict resolution, powerful (and new) institutions and the transcendence of mere customary arrangements (Hodgson, 2009: 146).[13]

13 This seems also to agree with von Hayek's (1973: 72) view that law is coeval with society, but not that it is a spontaneous order. Social developments in Athens, but also in many other city-states such as, e.g., Corinth, Mytilene, Miletos, etc. brought about legislators ('wise citizens') who introduced formal

The emergence of property rights in the formative period of the Greek city-states vindicates Hodgson's views[14] that property rights are not just 'economic rights' through possession as per Barzel (2015) and Allen (2015). The ancient Greek example shows a development from property rights based solely on force (e.g., possession) to property rights based on notions of justice, equality, fairness, backed by religion and morals. These notions, as made explicit both in Homer and Hesiod, precede the formal introduction of legal rights, which were introduced and gradually reinforced during the late Archaic (6th century BCE) and Classical period.

In other words, property rights had emerged during the Homeric Greek era, up to eighth century BCE Archaic Greece, but that they were as yet not totally secure: there was some kind of 'unwritten law' based on customs and social values, related to *de facto* property rights protection even before the emergence of the official law. Fustel de Coulanges ([1894] 1980: 180) argued that up to that time laws had emerged as something ancient, immutable, and venerable.

4. Property rights in Classical Athens

Property rights and their protection were further refined during the period of democracy in Classical Athens (510–322 BCE). Ancient sources offer many cases which illustrate property rights during this period. In order not to make the analysis too lengthy, this paper focuses on some very characteristic examples.

Firstly, we focus on the Athenian Naval Law (Themistocles' Decree) of 482 BCE. In 482 BCE, Themistocles, the leading Athenian politician of the period, foreseeing a second Persian invasion[15] proposed to the Athenian Assembly to use the proceeds from the Lavrion silver mines for the construction of 100 plus 100 trireme warships during a two-year period. The proposal was accepted and 100 wealthy Athenians were entrusted by the state, as kind of contractors-entrepreneurs, to build one trireme each, at a cost of one talent (6,000 drachmae). The entrepreneur received the amount as a loan, giving his personal property as a guarantee for the good use of the funds.

This was the reason why only rich Athenians were chosen as contractors. Once the ship was built, if found satisfactory, it was accepted and it was deemed that the contractor had fulfilled his obligations. The loan was transformed into payment, the contractor being exonerated from his obligation to the state. If

law as devices of conflict resolution. In this sense, we may characterize the fifth century BCE as the 'age of new law' (Burn, 1968).

14 See the debate on this, in *Journal of Institutional Economics*, vol. 11, issue 4, December 2015 and the contributions of Hodgson (2015b, 2015c), Allen (2015), Barzel (2015), and Cole (2015).

15 The first Persian invasion of 490 BCE ended with an Athenian victory at the battle of Marathon.

found deficient, the contractor had to undertake all necessary ameliorations, suggested by the experts, before the ship passed inspection again and was accepted, after the deficiencies were rectified (Gabrielsen, 1994; Kaiser, 2007).

The above case is one of the earliest examples that describe an institutional arrangement for private–public collaboration concerning public goods (provision of defence) which is connected to property rights protection. What is shown here is actually a contract between the state and each of the 100 contractors, specifying property rights and their transfer. First, the contract specified the tasks of each 'signatory'. The state entrusted the contractor with the construction of a warship and advanced him a loan of one talent. The contractor received the loan and undertook the fulfilment of the contract, giving as collateral of the loan, his personal liability.

Obviously, such a contract could only be valid if clear property rights existed. The contractor was the undisputed owner of his property, and pledged it as a guarantee for the good fulfilment of the contract. Presumably, the warship under construction was his personal property as long as it had not been accepted by the state. Once the warship was built and accepted, e.g., the contract had been fulfilled, there was a second transfer of property rights. The warship became the property of the state, the loan was transformed into payment (transformation of the loan into property of the contractor) and the contractor was again the sole owner of his property, e.g., the 'mortgage' of his property for the good fulfilment of his part of the contract was void. This example shows that property rights were fully developed in early Classical Athens.

Secondly, about one century later, the otherwise unknown Nicophon introduced his Monetary Law, which was accepted by the Assembly. Under its provisions, all 'good' (meaning of correct silver content) foreign coins could circulate in the Athenian economy together with Athenian drachmas and traders, etc., could use foreign coins for their transactions without having to change them into Athenian money. This reduced transaction costs and facilitated trade and exchange. In cases of doubt about the 'purity' of the contents of the foreign coins (and as a state guarantee against fraud) the office of the 'tester' (called 'dokimastis') was introduced.

The 'tester' was a state official with an office (presumably a bench) in the market places in Athens and the harbour of Piraeus. If one of the private contracting parties had doubts about the purity of the foreign coins, he could bring them to the 'tester' who, by some means, examined their purity. If found to be authentic, the transaction could proceed with state guarantee (Engen, 2005; Johnstone, 2011: 11–12; Ober, 2008: ch. 6). If found impure (e.g., in the case of fraud) the coins were confiscated. The law of Nicophon again reduced transaction costs and generated, by its existence and provisions, trust (Engen, 2005; Ober, 2008, ch. 6). Again, Nicophon's law illustrates the existence of contracts between private persons (traders, etc.) and specifies the transfer of clearly established property rights.

First, the contracting parties have specific property rights, the first with his/her coins, the second presumably with the goods he/she wishes to sell. The contract or agreement provided for the transfer of properties, e.g., coins for goods, as in any market transaction. What was new was the state guarantee for the protection of property against possible fraud.[16] Thus, due to laws such as this, the official 'tester' provided security for the transfer of property rights by guaranteeing that the coins were pure.

The Athenian economy flourished during the Classical period, even during the fourth century after the loss of the empire. State revenues reached 1,200 talents during the period of Lykourgos (338–332 BCE), a very high sum for the era, comparable to those of the period of Pericles, when Athens benefited from the contributions of the empire's members (Amemiya, 2007; Kyriazis, 2009: 114).

The popular courts resolved disputes on property transfer arising from contracts (as, for example, maritime loans) between private individuals, but also tax issues. One such example was the 'antidosis' procedure. In the case of a wealthy Athenian being charged with a 'liturgy',[17] which was always related to the value of his property, if he believed that another Athenian should be charged because he was wealthier than himself, he could introduce an 'antidosis' procedure, an exchange both of property (rights) and the 'liturgical' charges being levied on them (Isoc. Per. Ant; Dem. Against Phaenippus; Karayannis, 2007: 36; Lyttkens, 2013: 112; Ober, 2008: 129–130).

In addition, according to modern literature, the protection of commercial agreements and contracts is pivotal so that commercial transactions become credible (see Cvitanic and Zhang, 2012; Hodgson, 2003, 2015b; Mitchell, 2013). This is strongly related to the existence (or not) of a regime that protects property by law and under legitimate procedures backed by the state, which is the legal institutional mechanism that safeguards property rights that are related to commercial action.

Cohen (1973: 158–198) mentions a variety of cases of property rights that have to do with maritime law. He argues that at some point during the fourth century BCE special maritime courts were set up in Athens to deal with commercial cases ('dikai emporikai'), apparently replacing an earlier system of such cases 'nautodikai'.

According to de Ste Croix (1974), maritime loans were used extensively throughout the ancient world. Millett (1991: 189) argued that in order to pay for

16 This 'triangular' relationship between a buyer, a seller, and the state (as the institution which offers the necessary legitimacy in the commercial transaction being thus the 'superior authority') had already been conceptualized by Commons (1924: 87), one of the key figures of the old Institutional Economic School of thought. In some other recorded cases, written contacts in the presence of witness could be drafted, in others presumably, the transaction occurred as a simple sale on the market.

17 Liturgies were a very special type of taxation and service levied on rich Athenians as, for example, 'trierarchy' (see Gabrielsen, 1994; Kaiser, 2007; Kyriazis, 2009).

the cargo being taken on board ship, the merchant ('emporos') or ship-owner ('naukleros') borrowed money for the duration of the trading voyage (which could be either one-way or a return voyage as well). This loan and interest were paid back to the lender from the proceeds of the sale of the cargo, providing that the cargo was safely delivered to its recipient. For this reason and due to dangers during the trip (pirates, storm, shipwreck, etc.) interest rates were high, varying between 12.5% and 30%. As a safeguard to the lender against fraud, the cargo, or the ship itself, could be pledged as 'security' by the lender (Xen. *Poroi* 3.9; Millett, 1983: 36).

A very characteristic case concerns a loan of as high as 3,000 drachmae offered by an Athenian and an Euboean to two Pamphylians (indicating thus that the Athenian state also recognized the legality of commercial transactions between Athenians and non-Athenians). The shipment (3,000 jars of wine) had to be loaded in a port in Chalcidice (in northern Greece) and then proceed through the Bosporus straits to the Black Sea where it had to be delivered and then return to Athens with a new cargo. The interest was agreed to be as high as 22.5% (Cohen, 1973: 158–198).

Ancient sources (such as Plato, *Laws* 953e) offer many similar cases where, according to Cohen (1973: 129–136) and Millett (1991: 259–260), there is no doubt that the use of written contracts was standard commercial practice. Cohen (1973: 93) also argues that in cases where trials concerning 'dikai emporikai' took place, jurors ('dikastai') were specially chosen from those with experience to handle such kind of cases. Such cases were judged within a month, so that justice was provided rapidly among litigants (ibid.: 9–40).[18]

A comment must be offered as far as banking is concerned, since banking activities are strongly related with the enforcement of contracts and the protection of property. In Athens, there were a series of wealthy men who could offer various banking services to Athenian and foreign citizens. Banking services covered a wide range of economic activities, such as offering loans, safekeeping of valuables (possibly acquired as security for loans) whereas their merchant owners traded elsewhere, arranged the payment of merchants' creditors in their absence to their associates and acted as guarantors in favour of an economic agent.

They could also provide witnesses for business deals, keep contracts of arrangements, and offer currency exchange. Cohen (1997) and Shipton (1997) offer various passages (Dem. Phor. 36; Dem. Ag. Tim. 49, etc.) and epigraphical evidence (IG 11^2 2741, 11. 5–6) to support this thesis. During the fourth century, the wealthiest Athenians were no longer landowners, but 'entrepreneurs'

18 The fact that jurors with special capabilities were chosen and that justice was to be provided rapidly is a key practice in ensuring efficiency when judicial procedures and trials are taking place in modern societies. These two elements (expertise and speed in providing justice) are considered as modern basic prerequisites to ensure egalitarian justice and transactional cost reduction.

(Kyriazis, 2009). Thirty bankers are known to us by name, such as Passion and Phormion (Cohen, 1997).[19]

Furthermore, during the fourth century, many extant forensic speeches by Athenian orators illuminate court proceedings having to do with property rights. For example, the famous orator Lysias wrote 230 forensic speeches, 34 of which have been preserved, that are related to property rights, such as: Speech 18, 'On The Property of the Brother of Nicias', (ca. 396 BCE, dealing with the confiscation (or not) by the state of the property of a rich man called Nikias), Speech 19, 'On the Property of Aristophanes' (ca. 388–387 BCE dealing with the confiscation (or not) of the property of Aristophanes), and Speech 24, 'On the Refusal of a Pension' (written probably soon after 403 BCE, in favour of a disabled man who was accused of deceiving the state medical authorities, so as to receive a pension as a state compensatory payment).

Demosthenes, as well, wrote, among others, a speech with the title 'Against Timocrates' which had to do with his attempt to influence the Athenian popular assembly to abolish a law that offered benefits and 'special manipulation', to three wealthy men that abused public money. According to him, such a policy was against the common good. In other words, it created negative externalities to the economic base of society as a whole, to use a modern economic term.

Another source, Plutarch (Par. L. 'Solon', 21), mentions that after the reforms of Solon, the famous Athenian lawgiver '*made property belong to its legal owner*'. In addition, Aristotle (Pol. 1263a, 10–18; 1302b, 1–10) regarded common ownership of goods (Greek: 'koinoktimosinae') as detrimental to economic activity and prosperity because he thought that it caused friction among the individuals and deterred the stimulus to undertake greater effort so as to acquire goods privately. Thus, according to Aristotle, private property should be secured.

Moreover, Karayannis (2007: 31) argues that in Athens, during the Classical period, there existed an institutionalized system of protection of property rights. Forfeiture of property by the state was very rare and happened only for specific and very serious reasons, when it was considered to be a threat to the existence of the state, such as high treason, abuse of public money, etc. It is very important to mention that every penalty imposed by the state on illegal individual behaviour was implemented only after the sentencing of the individual through judgment by public courts.

Karayannis (2007: 84) mentions a case where an Athenian citizen sued the Athenian state because of property (land) that the state wanted to confiscate.

19 There is a vast recent bibliography which revisits significantly the older, basic Finley's (1973) model (which, indeed, had a great influence in previous decades) about the backwardness of the ancient Greek economy, including banking. For these recent views which argue that, in some aspects the ancient Greek economy had many 'modern' characteristics, see among others (Amemiya, 2007; Bergh and Lyttkens, 2014; Bitros and Karayannis, 2008; Economou *et al.*, 2015; Engen, 2010; Halkos and Kyriazis, 2009; Kyriazis, 2009; Lyttkens, 2013; Mackil, 2013; Ober, 2008, 2011, 2015; Saller, 2002).

The citizen-individual believed that he had legal rights to demand and add this land to his overall property. In another case that concerned issues that had to do with economic and civil rights, a citizen sued his neighbour when he suffered an economic externality because of damage that a wall was causing to his cultivation by allowing rain water to ruin the cultivation. Protection of property rights in Athens went so far as to giving the owner of a house the right to even kill a burglar if he caught him in his house (Kyrtatas and Rangos, 2010: 203).

There are various other cases analysed both by ancient orators, historians, and modern scholars that offer arguments in favour of the existence of a system of protection of private and public properties not only in ancient Athens, where most written sources originate, but also in the rest of ancient Greece as an integrated whole. Here, for the scope of our research, we have offered some characteristic examples.

A general comment must also be made in this point, concerning the procedures of attributing justice in public courts, because they are obviously related to the enforcement of the law and property rights.[20] It is known that litigants were required to provide all the documentary evidence, such as contracts and bills to the judges. The Athenian state had laws which were inscribed on large stone blocks erected in various public areas of Athens, as in the Areopagos court and in the Acropolis. Beginning at the end of the fifth century, copies were kept in public buildings: many would have been located at the office of the magistrate whose duties were related to a certain type of case.

In the fourth century, a large collection of official documents including laws were located in the 'metroon', an ancient Greek temple dedicated to a mother goddess. A special institutional body called 'nomophilakes' (meaning 'guardians of the laws') was responsible for the safety and protection of those written laws from forgery, loss or damage of the inscribed passages being written on them, etc., and for this purpose, they had full access to the 'metroon', also known as 'nomophylakion' (Sickinger, 2004; Lanni, 2006).

The nomophilakes' other main duty was to supervise the compatibility of the decisions of the Athenian popular assembly, with the pre-existing law of the Athenian state. In cases where a decision (for any issue), taken by the people did not conform to the law in force, the nomophylakes could deny the legitimacy of this decree. This, according to our view, is actually a kind of a 'checks and balances' bearing in mind Buchanan and Tullock's (1962) concept. This means that there was an officially established system of laws (being previously decided by the Athenian Assembly) according to which the jurors offered their verdict. Lanni (2006) argues that verdicts were not regularly recorded; however, jurors were encouraged (even by the litigants themselves) to base their verdict on pre-existing decisions.

20 Harris and Rubinstein (2004) and Lanni (2006) provide an extensive analysis concerning the Athenian judicial system.

Finally, women!, Although in general, the position of women was not equal to that of men[21] (women did not have voting rights), they still enjoyed a variety of freedoms in the Athenian society. This can be testified through many ancient sources, images on vessels, sculptures, and honorary columns. A typical responsibility of a married woman was to manage efficiently her 'oikos' (house) (Arist. Polit. 1278b; Xen. Oec. 2.12, 3.15, 7–9; Leshem, 2016).

However, free women could work and earn money (either independently, with their husband, or as employees) through various jobs in small industries (perfume stores, clothing, agriculture, cuisines, bakeries, etc.; Johnstone, 2011: 22). There were cases where women are described as successful businesswomen, such as Artemis of Piraeus who had a famous boutique, or another woman with the same name who managed a flourishing business in building materials and Archippe, who successfully managed the bank of her husband and successfully secured a part of her property after a judicial dispute with Apollodoros who tried to confiscate a part of her property valued as high as 3,000 drachmas (Cohen, 2002: 110). Thus, the courts recognized the property rights of women.

Women in Classical Athens and the rest of Greece could have land property but not directly.[22] If a father died and had no male offspring, his daughter(s) had considerable *de facto* rights on the family's property 'but she did not become a legal owner' (Schaps, 1979: 4). In any case, during her marriage, a daughter legally received a dowry, but then was excluded as a potential heir to any other belongings of her previous family and, at the end, the land dowry passed to her husband's ownership.

In case of her husband's death (and in case there were no children), a woman's dowry could be returned to her patrimonial family, or alternatively, be given to her new husband if she chose to marry again. In case of her husband's death, she could become 'epikleros' meaning that she could manage the land property of her husband, till her male offspring came of age 18 years and could then inherit

21 A woman could not represent herself in court alone. She had to be accompanied by her father or brother if she was not yet married and by her oldest son if she was a widow. However, a woman's testimony was accepted by jurors in courts. A woman had the right to abandon her husband if he was behaving badly or torturing her. Finally, women had the right to actively participate in many public festivals provided they were accompanied by their husband (Sakellariou, 1999: 137).

22 As has already been mentioned, some important exceptions to the general rule were the oligarchic Sparta, as well as Gortyna in Crete (which again did not have democracy), where women had equal property rights as men concerning land and all other type of property. In Sparta 2/5 of land belonged to women. In Gortyna even more, 46% of land, and in the region of Thessaly (central Greece) about 1/3. Women's ownership of land is also attested for the islands of Tenos and Kios (see Arist. Pol. 1270a 23-5; Fleck and Hansen, 2009; Schaps, 1979). An explanation concerning the beneficial land property status for Sparta might be the militaristic socio-political organization of the state. Men, normally till their 60th year of age, were always trained in military camps, in order to be ready for battle and fight effectively as professional state soldiers (Sekunda, 1998). This meant that they had less free time for other aspects of life; thus, women *de facto* replaced them in their duties.

his/their father's property (Sakellariou, 1999: 137; Schaps, 1979: 5). Although their rights concerning land were inferior to men, women undeniably had the right of inheritance concerning movables, but less than what a male heir could obtain. Women had also undeniable rights to own and administer money. Many inscriptions have been found concerning movables, belonging either to wives, or even 'hetairai' (a version of Greek 'high class' prostitute, comparable to Japan's 'geisha') during both the Classical and the following Hellenistic era (Foxhall, 2002: 211–212; Schaps, 1979: 9–16).

As a final comment in this section, we argue that during the Classical era, an efficient regime of property rights protection in Classical Athens was established. Also gradually, many other Greek city-states established clearly defined property rights, as well as courts, to make them more secure, such as the Greek federal states of the Aetolian and the Achaean Leagues (in central and south mainland Greece) between the Late Classical and the Hellenistic period of Greece.[23]

Gagarin (2013: 221) writes that the Greeks began to enact laws around the middle of the seventh century BCE, and from that time on legislation became widespread and played an important role in the development of the polis and its increasing authority, especially in the Archaic period. He adds that:

> The Greeks wrote virtually all their laws down on more or less durable materials – usually stone, bronze, or wood – and displayed them prominently in a central civic space, usually in the agora or in some sacred area in the city. Each city had its own laws, though naturally there were similarities among the laws of different cities, similarities that were greater for cities that were closely related to one another, geographically, ethnically, or historically [. . .] the enactment of legislation was a common feature of almost all Greek cities and was carried out on a broader scale in Greece than in any other premodern society.

Lastly, rich Athenians' complains that they could be plundered in a political trial, conducted by jurors coming mainly from the pour masses. Ober (1989) mentions this issue on his *Mass and Elite* in Classical Athens. This relation concerning legal aspects and property rights cannot be understood unless the working of Athenian democracy is made clear. Under Athenian democracy, the protection of democracy itself and of common or public good issues was the responsibility of citizens. Any citizen who believed that another citizen abused his official position (as a general, 'trierarch', member of the 'Boulai' [the Council of the 500 men], 'tamias' [finance minister] or simple proposer in front of the Assembly) could sue him and this could lead to a trial.

23 Property rights in ancient Greece during the Hellenistic period (322–146 BCE) were further advanced in the sense that they were further extended from the city-state level into that of the federal organization as the historical cases of the Achaean, the Aetolian and the Boeotian Leagues denote (Economou and Kyriazis, 2016; Economou *et al.*, 2015; Mackil, 2013). We propose a further analysis concerning property rights during the Hellenistic period in a forthcoming paper.

Since only Athenians took over 'liturgies' (the most expensive being the upkeep of a trireme warship, 'trierarchy') they were more liable to be sued. Still, it seems that trials, when they occurred, were relatively fair. We do not have evidence of rich Athenians being fined unjustly. Athenians complained more of being charged with high indirect taxation (through liturgies) than of unfair court judgements. The fact, also, that no rich Athenians willingly left Athens, whereas many wealthy non-Athenian Greeks immigrated to Athens (e.g., Kephalos of Syracuse, a very rich entrepreneur, and numerous bankers) indicates that they did not fear an unjust abuse of their property rights. Famous trial cases concerning issues of public common good are those depicted in the speeches 'On the Crown' of Aischines (accuser) and Demosthenes (defendant) the latter, being one of the world's masterpieces of oration.

5. Conclusions

We have analysed the origins and evolution of property rights in ancient Greece. They evolved gradually but were already firmly established and secured in the Classical period. We have indicated that property rights and their protection evolved due to shifts in power relations. During a first period, the emergence of the hoplite warriors-free farmers, who became the mainstay of defence for the city-states, was linked to the emergence of equality before the law, which included property rights and their protection. Gradually, equality before the law extended to all citizens and even foreign residents, linked to democracy.

During the Classical period, property rights and their protection were among the basic ingredients and advantages of forming democratic federations. The Athenian democracy and the Greek democratic federations indicate that property rights can evolve and contribute more to the smoother functioning of an economy when they are being developed under a liberal democratic regime. Recent research (Amemiya, 2007; Halkos and Kyriazis, 2009; Ober, 2011, 2015; Saller, 2002) has shown that Greek city-states were prosperous and had, albeit slow, economic growth. As in later periods, clearly defined and secure property rights contributed to prosperity and growth.

Thus, our analysis of the evolution of property rights in ancient Greece gives further support to the thesis that economic growth is correlated to the rule of law and the protection of property (Acemoglu and Johnson, 2005; Barro, 1997).

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