

Ancient demographics, partible inheritance and distribution of wealth in classical Athens and Sparta: a comparative perspective

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Résumé

Cet article se propose d'expliquer le contraste remarquable entre les inégalités croissantes dans la distribution de la propriété dans la Sparte d'époque classique et la distribution de la propriété remarquablement égale en Athènes à la même époque. En comparant Sparte et Athènes, il se concentrera sur l'impact qu'exercent sur les courbes de mortalité les facteurs comportementaux, les mécanismes imposés par l'état et les conditions socio-économiques. Il fera valoir que, bien qu'il soit difficile d'exclure que les stratégies de fécondité et d'héritage, mises en oeuvre à Athènes et à Sparte, ont joué un rôle dans la génération d'une plus grande (in) égalité, la situation particulière à Athènes a pu résulter des mécanismes typiques imposés par l'Etat, qui réduisent les disparités de richesse, mais aussi du niveau relativement faible de l'inégalité des revenus dans la société athénienne.

Dit artikel beoogt een verklaring te vinden voor het opmerkelijke contrast tussen de toenemende ongelijkheid in bezit in het klassieke Sparta en de opmerkelijk graad van gelijkheid kenmerkend voor klassiek Athene. Bewust gebruik makend van een comparatieve aanpak zal het zich focussen op het belang van gedragsfactoren, door de staat opgelegde mechanismen en sociaal-economische omstandigheden. Het zal betogen dat, hoewel het moeilijk is om uit te sluiten dat vruchtbaarheids-en erfenisstrategieën, waarvan zowel in Athene als in Sparta gebruik werd gemaakt, een rol speelden in het genereren van meer (on) gelijkheid, de buitengewone situatie in Athene voornamelijk werd veroorzaakt door typisch Atheense door de polis opgelegde mechanismen die de ongelijkheid in rijkdom reduceerden en door het relatieve lage niveau van inkomensongelijkheid in de Atheense samenleving.

Ancient demographics, partible inheritance and distribution of wealth in classical Athens and Sparta: a comparative perspective

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Introduction

Whilst reflecting on the downward mobility which threatened heirs of the élite families of colonial New England, John Quincy Adams, prospective sixth president of the United States of America, proclaimed on the 2nd of August 1787: “The revolutions in private families are similar to those of States and Empires. There is scarce one family in Boston possest of great wealth, or having much political importance that can trace a genteel ancestry, or even such as lived comfortably and creditably, for three generations past. But nothing is more common than to see the descendants from honorable, and opulent families now in the greatest obscurity and poverty”.⁽¹⁾

Adam’s concerns might have been perfectly understood by an élite citizen of classical Athens, as the Athenian liturgical class is equally notorious for having been unable to perpetuate its families in the highest property class. In his catalogue of Athenian propertied families, Davies could identify only one family of which members are attested in the liturgical class for five generations (0.23%), five families attested for four generations (1.18%), 16 for three generations (3.78%), 44 for two generations (10.40%), and 357 (84.39%) for merely one generation.⁽²⁾ In part, this is due to the nature of the sources. No doubt many family trees remain hidden from view. Nevertheless, despite the fact that the poverty of the evidential base is a major factor here, the observed patterns can also be taken as a dim reflection of reality. Despite the Athenians’ apparent concern with lineage, which among others manifested itself in family tomb groups and in the practice of ritual offerings to great ancestors,⁽³⁾ Athenian élites cannot have been fully hereditary, not in the least considering the inevitable impact of ancient demography and the practiced inheritance system.⁽⁴⁾

The Athenians practiced, just as other ancient societies, a system of partible inheritance, which implied that, if a man died leaving more than one legitimate son, those sons inherited all his property equally. Although

(1) TAYLOR, 2007, DQA02d508.

(2) DAVIES, 1981, p. 85-87.

(3) See e.g. HUMPHREYS, 1980.

(4) For discussions of élite fragility and its linkage with partible inheritance in the Roman world and Roman Egypt, see HOPKINS, 1983; SALLER, 1994 and TACOMA, 2006.

they could agree to hold the property – or some part of it – jointly,⁽⁵⁾ it appears to have been most common to divide it into shares of equal value.⁽⁶⁾ This way, if there was more than one legitimate son, the death of an *oikos*’ *kurios* caused several *oikoi* to replace the previous one. In the well-known family described in Is. 11 and [Dem.] 43, for example, Bouselos of Oion is said to have had five sons surviving into adulthood: Hagnias, Euboulides, Stratios, Habron, and Kleokritos.⁽⁷⁾ After Bouselos’ death, the five sons had to divide the property among them, each receiving thus only one fifth of the wealth which their father had owned. The financial consequences of this type of inheritance system are bound to have been considerable, and this for families at both ends along the social scale. For families with only one son and heir, the situation was most opportune. For families with more than one son, however, the partible inheritance system was less favourable. The hazards of this type of inheritance system did not remain unnoticed at the time. Aristotle speaks at length about the dangers inherent in people having several sons who would inherit small portions of property, leading to poverty and possibly social conflict (*stasis*) (Arist. *Pol.* 1265a39-b1, 1270a23-25, 1270b4-6). The Athenian texts also contain examples taken from life, such as the life-story of the speaker in Demosthenes’ speech *Against Phainippos*, who inherited, as did his brother, 4500 drachmae from his father, and found himself uncomfortably close to the lower border-line of the ‘leisured class’ in a position which his father, with his 1 talent 3000 drachmae,⁽⁸⁾ had avoided by a fair margin.

At the same time, property of people dying without direct descendants went to close relatives, thereby concentrating property in less households. Thucydides (II, 53, 1-4) refers to those Athenians who, during the epidemic of 430 BC, suddenly became rich through inheriting the property of dead relatives. Obviously, people would have died anyway and their property would have been divided by others, even if there had not been any plague at the time. The increased mortality merely accelerated an ongoing process, which might be expected in any case to have had considerable force of its own. The fact that some men had very good chances through inheritance to share in the enjoyment of the assets of more than one estate was a seeming inequity sometimes complained about by disillusioned, would-be beneficiaries claiming close relationship to only a single estate. Much was at stake in the transfer of property through generations, and it comes as no surprise that inheritances formed a major battleground in Athenian law-courts. Not only do we have knowledge of Athenian laws on wills ([Dem.] 46, 14), intestate succession (Dem. 43, 51), the protection of orphans and heiresses, (Dem. 43, 54, 75), and challenging the award of an inheritance (43, 16), which all appear to have had their origins in the sixth century. The corpus of Attic law-court

(5) It was quite common for property to remain undivided in the joint ownership of the heirs (e.g. Is. 2, 28 ff.; [Dem.] 44, 10 ff.; Lys. 32, 4; Aischin. 1, 102) - in at least two known cases even after the death of one of the original heirs (Lys. 32, 5; Aischin. 1, 103).

(6) See MACDOWELL, 1978, p. 92-95; TODD, 1993, p. 218-221.

(7) For the remarkability of having five surviving sons and a discussion of the family sizes portrayed in Attic oratory, see SALLARES, 1991, p. 193.

(8) Following DAVIES, 1981, the concept ‘leisured class’ here refers to those with a fortune of ca. 1 talent. See OBER, 1989, p. 128-129 for alternative views.

speeches also contain a significant number of inheritance cases, in particular those composed by Isaios, which present us with a vivid picture of guardians being sued for embezzling the property of orphans, uncles making claims on the inheritance of relatives, and succession disputes dominating the lives of certain families for several decades. In effect, since ancient demographics caused patriline discontinuity to be a reality many Athenian families were exposed to, the transfer of property through generations was one important way of accumulating wealth, and this not only for sons inheriting from their own father.

In addition to its connection with élite fragility, partible inheritance system was at the time also linked with growing inequalities at the societal level. Thus in discussing the impoverishment of children born into large families in Sparta, Aristotle implicated the Spartan system of partible inheritance as a source of increasing inequalities in property ownership (Arist. *Pol.* 1270a11-18). This hypothesis has been tested by Hodkinson, who has by means of computer simulation undertaken a systematic examination of the combined effect of ancient demography and partible inheritance upon the distribution of land. The results of his examination suggest that there was an inherent trend towards the concentration of property in the operation of the Spartiate system of partible inheritance.⁽⁹⁾ “When families have different numbers of surviving children to share their property holdings, the inevitable result is the development of considerable inequalities in wealth”, thus Hodkinson.⁽¹⁰⁾ Yet, as will be discussed in this paper, such a trend cannot be identified for all Greek *poleis* practicing a system of partible inheritance. In fact, while this so-called inherent trend towards the concentration of property is in line with what is known about Spartan property holding in the fifth and fourth centuries BC, it does not tally well with the remarkably equal property distributions that have during the last couple of decades by various scholars independently been observed for Athens.

This contrast has in modern scholarship largely been overlooked, despite its importance for our understanding of the covariates in the relationship between ancient demographics, partible inheritance, and economic mobility across generations. What might have made outcomes in Athens distinctive from those in other ancient cities similarly plagued by high mortality, such as Sparta ? Explicitly comparing classical Sparta and Athens, this paper will seek to formulate an answer to this question by focusing on the importance of behavioural factors, state-imposed mechanisms and socio-economic conditions in shaping the impact of mortality patterns. It will argue that, although it is difficult to exclude that fertility and inheritance strategies, employed both in Athens and in Sparta, played a role in generating greater (in)equality whether or not cancelled out by other factors, the distinctive situation in Athens above all might have been engendered by typical Athenian

(9) In discussing the difference between partible and impartible inheritance, SMITH et al., 2010 (at p. 91-92) suggested that impartial inheritance in premodern societies more generally generated an even greater variance in second-generation wealth than did partible inheritance, and that this variance may have been important for developing and maintaining inequality. This hypothesis, however, requires further research.

(10) For the citation, see HODKINSON, 2000, p. 404.

state-imposed mechanisms reducing wealth disparities and by the relatively low level of income inequality in Athenian society.

The joint impact of ancient demographics and partible inheritance: Sparta versus Athens

As part of his research on property and wealth in classical Sparta, Hodkinson undertook by means of computer simulation a systematic examination of the combined effect of ancient demography and partible inheritance upon the distribution of land.⁽¹¹⁾ Starting from a fictional construct of initial equal distribution of land among a model population of 10,000 married couples, called Generation One, the computer simulation revealed that, although Generation One families started with equal holdings comprising one unit of land, by Generation Seven severe inequalities have become firmly established. The vast majority of families own holdings smaller, many much smaller, than the one unit held by the ancestors. In contrast, at the other end of the scale a sizeable minority of families are wealthier, and a tiny minority much wealthier, than their ancestors.⁽¹²⁾ For the purpose of the simulation, Hodkinson ran the programme using two different systems of partible inheritance. The first is the system of what he calls ‘universal female inheritance’, which he advocates for classical Sparta. Within this system, daughters inherited the entire property in the absence of sons and, when there were sons, a share possibly worth only half of a son’s share. The second is a system which he calls ‘residual female inheritance’, in which daughters inherit only as residual heirs in the absence of sons. It simulates what would have happened to the distribution of property, if daughters had inherited as heiresses but there had been no dowries of land given to other daughters on marriage.⁽¹³⁾ Although both systems of inheritance appear to convey a structural tendency towards property concentration, the system of residual female inheritance appears to produce an even more unequal distribution of land than the system of universal female inheritance.

Both Hodkinson’s modelling results are thus in line with Aristotle’s implication of the Spartan system of partible inheritance as a source of growing inequalities, linking it with demographic factors in his comments on the impoverishment of children born into large families (Arist., *Pol.* 1271a26-36).

(11) HODKINSON, 1992. For the simulation, Hodkinson has employed a Family Composition Distribution Model that “was calculated by means of binomial expansion on the simplifying assumptions of a stationary population with a sex ratio in which the replacement of all members of one generation with an equal sex ratio by the next takes place simultaneously and in which each child born has a 0.5 chance of surviving beyond the deaths of its parents” (Ibid. p. 28). See. p. 28 n. 9 for discussion.

(12) Cf. Ibid.; HODKINSON, 2000, p. 400-404. Rising inequality through inheritance across generations in a model starting from perfect equality, however, is not a perpetual process, since, as has been noted by PRYOR 2010, at some point in time, equilibrium is reached.

(13) The reality in Athens lay, of course, in-between, since, while only girls without brothers could inherit, most girls were dowered - although with much less of the family’s estate than their brothers inherited - with enough to support a socially acceptable standard of living for both themselves and their children.

In addition, they account for the sharp decline in the number of citizens, which had started during the fifth century BC, as this decline was to a certain extent due to widespread impoverishment within the citizen body.⁽¹⁴⁾ Remarkably, the situation in Athens at that time appears to have been from a totally different nature, as there are various indications coming from diverse directions that, by the Mediterranean standards of the time, wealth distribution in – especially fourth century – Athens was characterized by a remarkable equality.

In their studies of landholding in classical Athens, both Foxhall and Osborne have argued that around 7.5-9% of Athenian citizens owned about 30-35% of the land of Attika, while some 20% owned little or no land.⁽¹⁵⁾ Excluding those at the top and bottom of the distribution, this implies that approximately 60-65% of the land was in the hands of about 70-75% of the citizen population. Morris has pointed out that the resulting range of Gini coefficients – measuring inequality or concentration in a distribution, in this case of land – of 0.382-0.386, is remarkably low weighed against estimated distributions of land-holding for other ancient (i.e. Roman and late Roman Egyptian) and medieval societies, which makes him to conclude that, “landholding was unusually egalitarian in Classical Athens”.⁽¹⁶⁾

Attempts have also been made to sketch the total distribution of wealth – landed or not – among the citizen population in classical Athens. One of the most early contributions has been made by Davies,⁽¹⁷⁾ who has, as part of his PhD research in the 1960s, attempted to construct a property-distribution graph for the fourth-century Athenian citizen population. More recently, the distribution of private wealth among citizen families in fourth-century Athens has been mapped out and studied by Kron,⁽¹⁸⁾ and this from a comparative perspective. The results of his study are remarkable, as putting the data in their proper historical perspective reveals a distribution of wealth among the citizen population in Athens much like that of a mid-20th-century democracy.⁽¹⁹⁾ Although wealth was certainly not distributed with anything approaching perfect equality in fourth-century Athens, the richest one percent of the citizen population owned about 30 percent of all private wealth; while the top 10% owned ca. 60% of the wealth. This generates a Gini coefficient of citizen wealth inequality of 0.708; a coefficient which is comparable to

(14) HODKINSON, 2000, p. 399-441.

(15) See FOXHALL, 1992; 2002; OSBORNE, 1992, p. 22-27, for discussion.

(16) MORRIS, 1998, p. 235-236. See p. 236 for the citation. Both Foxhall and Osborne's figures are lower than any of the seven scores calculated by DUNCAN-JONES, 1990, p. 129-142 for different parts of the Roman empire ($G = 0.394 - 0.856$), and substantially lower than those calculated by BAGNALL, 1992 for four *nomes* of Late Roman Egypt ($G = 0.516 - 0.710$).

(17) DAVIES, 1981, p. 34-37.

(18) KRON, 2011 largely agrees with Davies' sketch of the wealth distribution curve, holding a different view on only a few minor points from the latter's reconstruction. Hence, he follows Hansen in believing that the population of fourth century Athens after the Lamian war will have been 31,000 adult male citizens rather than the 21,000 proposed by Davies.

(19) Ibid. p. 130, with HANSEN, 1985; 1988a; 1989. See RUSCHENBUSCH, 1981a; 1981b; 1984; 1988 for objections against rejections of the smaller figure.

that of the overall population of the USA in 1953-54 (0.71). This is perhaps less equal than Canada in 1998 (0.69), but more equal than Florence in 1427 (0.788) or the USA in 1998 (0.794), and much more equal than the USA or England in the early 20th century (0.93 and 0.95 respectively).⁽²⁰⁾ The picture drawn by Jones nearly half a century ago has in the past been contested, but can nowadays thus still be considered authoritative: “[Athens was] a society in which, except for a small group at the top, and a larger group of casual labourers at the bottom, wealth was evenly distributed, and the graduation from the affluent to the needy very gentle”.⁽²¹⁾

The fact that the prevailing trend of property concentration inherent in the Spartiate inheritance system does not tally well with Athens’ exceptional situation, raises the question why Athens was an outlier on this front. How, then, was Athenian society able to counter the structural tendency towards growing inequality and property concentration which, as can be inferred from Hodkinson’s modelling results, would theoretically have been a natural consequence of the interplay between ancient demographic dynamics and partible inheritance law?

The role of women, the *patrouchos* and the *epikleros*

Both Sparta and Athens practiced a system of partible inheritance, which implied that, if a man died, all his legitimate sons inherited an equal share of their father’s property. Although women did not participate in the division of their late father’s estate if there was an equally close male relative, they in both *poleis* often received what might be called a pre-mortem share of inheritance in the form of a dowry at the moment of marriage. In Athens, although a dowry seems not to have been a legal requirement (Lys. 19, 14; Is. 3, 28-29; 35-36), it was regarded as customary, at least among the social and political élite.⁽²²⁾ It appears that even the poorest citizens would try to give a dowry with their daughters, if necessary borrowing for this purpose.⁽²³⁾ The size of the dowry depended on the economic status of the family and the demands of the prospective husband, and could range from 5 up to 25% of a father’s estate. It was usually composed of money, furniture, and other mobile goods, but it could occasionally include also land.⁽²⁴⁾ In Sparta, the dowry might have been even more substantial: Hodkinson believes it might have reflected a daughter’s right to a share of the parental property one-half the size of a son’s share.⁽²⁵⁾

According to de Ste. Croix, the role of women in Athenian inheritance law helped preserve property within the family, which would otherwise have

(20) KRON, 2011. The distribution of wealth at Athens in a comparative perspective. Ibid. p. 179, 129-38.

(21) JONES, 1957, p. 90.

(22) On role of the dowry in Athenian society, see SCHAPS, 1979, p. 74-88; FOXHALL, 1989; SEALEY, 1990, p. 26-28; TODD, 1993, p. 215-216; HUNTER, 1994, p. 18-29; BLUNDELL, 1995, p. 115-116; COHN-HAFT, 1995, p. 14.

(23) MILLETT, 1991, p.62-63.

(24) SCHAPS, 1979, 74-88.

(25) HODKINSON, 1986.

accumulated in the hand of the rich. While in Sparta daughters could inherit in their own right and the *patrouchos* did not have to marry the next-of-kin, the Athenian *epikleros* did have to marry the next of kin. This, according to him, ensured that, in Athens, property was kept in the family and worked against automatic accumulation by the already rich through the process of marriage and inheritance, and resulted into the greater equality of property among citizen families. This, thus de Ste. Croix, 'is likely to have been one of the factors making the exceptional strength and stability of the Athenian democracy'.⁽²⁶⁾ He considers the fact that the Spartan *patrouchos* did not have to marry the next-of-kin, and thus will have been given in marriage to the richest husband a father could find for her, to have played an important role in the concentration of property in a few hands and the increasing inequality characteristic of Spartan society.

This explanation, however, is not entirely satisfactory. First, it does not allow for the possibility that the socio-economic status of potential marriage partners in Sparta may also have been influenced by limitations on the size of the pool of marriage partners, not that the socio-economic status of Athenian siblings might have tended to correlate: a rich *epikleros* may well have been more likely to marry a next of kin who 'happened to be rich' and a poor *epikleros* one 'who happened to be poor'. Second, it is remarkable that within Hodkinson's fictional simulation, the marriages of wealthy daughters are arranged in a controlled impartial fashion without regard to wealth: both daughters with large dowries and heiresses are matched up as much with poor and 'middling' men as with rich ones, allowing for some serious scope of upward social mobility – and thus the toning down of the actual degree of growing inequality – through marriage. This means that, even without the phenomenon of daughters, and *patrouchoi* more specifically, having been given in marriage to the richest possible husband, the combination of both ancient demography and the partible inheritance system can be expected to have had a significant impact on the distribution of wealth and property. Therefore, even if the *patrouchos* in the Spartan inheritance system played a role in the process of property concentration and increasing inequality, it will only have intensified an ongoing process and cannot be considered to have been the sole determining factor in the relationship between ancient demographics, partible inheritance, and economic mobility across generations in Sparta.

Fertility and inheritance strategies

In order to avoid fragmentation of the estate and thus the devaluation of the descendants' socio-economic status, the most rational objective presumably was to raise only one son and one daughter to adulthood and to arrange successful marriages for them.⁽²⁷⁾ The ideal of an indivisible *kleros*

(26) DE STE. CROIX, 1981, p. 102.

(27) It is remarkable that, according to Polybius, *The Histories*, Fragments of book XXXVI: V. The Macedonian War 17, it was precisely for this reason that population in Greece fell in his time.

was certainly well known and praised since early times. Hesiod was the first to highlight the dangers of the system of partibility and to recommend to have merely one son, in order to preserve the family property in total (Hesiod, *Op.* 5,376-380). In Plutarchean tradition, the same opinion is attributed to Lycurgus and Xenocrates (ps.-Plut., *Comm. in Hes.* 37; cf. the Plutarchean treatise *De fraterno amore*, in particular: *Mor.* 483d-e, 478dff.; 482d; 490e). In Plato's second-best state (in which, contrary to his first, he operated with privately owned land), only one son should inherit his father's *kleros* (primogeniture), regardless of how many sons the father had (*Leg.* V,740b). It is difficult to assess to what extent (particular groups of) Athenians and Spartiates, merely in order to minimize their children's chances of downward mobility, consciously sought to limit the size of their families.⁽²⁸⁾ The assumption that natural fertility was common practice before the fertility transition⁽²⁹⁾ has given rise to the *communis opinio* that classical antiquity too was characterized by a natural fertility regime.⁽³⁰⁾

The case of classical Athens has been studied by Sallares, whose monograph on the ecology of the ancient Greek world is the only scholarly work thoroughly discussing ancient Greek fertility. According to Sallares, high fertility in classical Athens was, besides as a means of countering the high infant mortality rate, much desired for the same good reasons as in other pre-modern societies, such as the desire for extra labour and the need for children to provide support in old age.⁽³¹⁾ Yet, just as in all other pre-transition populations, this argument does not entirely apply to the rich. On the contrary, although grown children were of value through possible marriages that could secure beneficial trans-family alliances, more children – both boys and girls – entailed more expense so as to provide them with a privileged lifestyle suitable to their standing in Athenian society. Sallares believes the Athenians were quite happy for their property to be divided between several children under the partible inheritance system and rejects the possibility of rich Athenians consciously seeking to limit the size of their families.⁽³²⁾ However, the fact that Athenian males were constantly preoccupied with maintaining the status and honour of family members, and the close link which was thought to be created between father and son in terms of material inheritance,⁽³³⁾ make it difficult to accept the idea that Athenians, and more specifically members of the Athenian élite, did not suffer from any status anxiety for their descendants. Moreover, various strategies other than family limitation, such as the practice of keeping property undivided in the joint ownership of the heirs, and endogamy within the bilateral kindred which substantially increased the chances of keeping hold of or re-uniting family property in one holding,

(28) Cf. FRIER, 1994, esp. p. 325 table 1.

(29) On the fertility transition, see YAUKEY, 1985, p. 188-96; LIVI BACCI and IPSEN, 1992, p. 113-23.

(30) For 'natural fertility', see HENRY, 1961; COALE and WATKINS, 1986; WOOD, 1994, p. 23-112. For the various levels of marital fertility in different populations, see SCHEIDEL, MORRIS and SALLER, 2007, p. 67, fig. 3.6. For a recent discussion of fertility control in the ancient world, see CALDWELL, 2004; HIN, 2011.

(31) SALLARES, 1991, p. 129-160.

(32) Ibid. p. 136.

(33) See COX, 1998, p. 78, for discussion.

can plausibly be interpreted as an indication that some prosperous Athenians did seek to evade the fragmentation imposed by the inheritance system.⁽³⁴⁾ Although this does not automatically entail that family limitation was a widespread practice among the Athenian élite, it is certainly plausible that some of them did experiment with family limitation.⁽³⁵⁾

Yet, fertility strategies are not typical Athenian. On the contrary, Spartan women, as has been reported by Cicero (*Tusc.* II, 36), refused to be burdened by continuous child production, despite the fact that this had been the long-range goal of their physical education.⁽³⁶⁾ It is not unlikely that avoiding the devaluation of their descendants' socio-economic status was an important incentive to regulate their fertility, just as attempts to maintain their descendants' property might have been an incentive for Spartiates to make use of marriage practices such as homogamy, close-kin marriage, uterine half-sibling marriage, polyandry and wife-sharing; a custom which, according to Xenophon, conveyed a double advantage: wives could run two households and men gained extra sons without breaking up the family's wealth (*Xen., Lac.* 1, 9). Especially the practices of wife-sharing and (adelphic) polyandry would have had the effect of constraining fertility, as well as the Spartiate custom of women typically marrying at a later age than in most Greek *poleis*, and these practices may well have been supplemented by more direct attempts of family limitation.⁽³⁷⁾ Indeed, the official incentives for Spartiates to bear additional sons, which Aristotle refers to (*Pol.* 1270a39-b6), may suggest that authorities noticed a general tendency among Spartiates to limit family sizes. In addition, it is possible that families struggling on the borderline of citizen status would have given priority to maintaining their mess contributions, thereby limiting the nutritional provision for female and younger members of the household, which may have affected rates of fertility and child mortality.⁽³⁸⁾

It is well-attested that in Athens, the long-established institution of adoption was consciously used to confine impoverishment caused by social fragmentation. Firstly, adoption distributed surviving sons throughout the citizenry, so that they could inherit the property and status of families without male heirs, and hence could be rescued from downward intergenerational mobility caused by the ill-fated reality of not being a sole heir. Secondly, the legacy which was tied in with adoption, benefitted, besides the adoptee himself, also the adoptee's potential biological brothers, since the latter now did not have to share their father's property with him. After all, as a consequences of his adoption he had lost his right to succeed to the inheritance left by his natural father and to inherit from his natural father's relatives.⁽³⁹⁾ Exemplary

(34) DAVIES, 1981, p. 77; COX, 1998, p. 31-37.

(35) There are enough historical parallels to support this possibility. From the sixteenth century and possibly earlier, well before the general fertility transition in Europe, the desire of Western European élite families to escape downward mobility made the rearing of more than two children per family into adulthood a luxury few could afford. For fertility control practiced by special groups, see LIVI BACCI, 1986.

(36) POMEROY, 2002, p. 63-66.

(37) Cf. LANE FOX, 1985, p. 221; HODKINSON, 2000, p. 370-373, 420, for discussion.

(38) Ibid. p. 420.

(39) Cf. RUBINSTEIN, 1993, p. 76-86.

is the story of Endios, who, as reported in Isaios 3 (*passim*), was adopted by his uncle Pyrrhos, as a consequence of which he and his brother did not have equally to divide the inheritance left by their father. As a result of the adoption, Endios lost his right to inherit from his natural father, which implied that his brother became the universal heir to his father's property. A similar account can be found in Demosthenes 43 (*passim*), where it is narrated that around 345 BC, Euboulides, son of Sositheos, was adopted by his maternal grandfather Euboulides, son of Philagros of Oion, in order to ensure the continuation of his grandfather's *oikos* for at least another generation. By accepting this adoption, he lost every right to the legacy of his natural father, which undoubtedly was to his brothers' advantage.⁽⁴⁰⁾

Yet again, adoption was certainly not a typical and exclusive Athenian practice. As in other Greek *poleis*, a Spartan landowner without any surviving natural sons could adopt a male from another family to be heir to his property (Her. VI, 57, 5).⁽⁴¹⁾ Unfortunately, it is impossible to assess how often adoption had been practiced in Sparta, not in the least since the necessary data are missing. It is not difficult to imagine how in "a society which thinks in terms of inheritance through the family",⁽⁴²⁾ using the words of Lacey, Spartiates without a surviving son were eager to choose a successor through adoption. Yet, this does not rule out a potential difference in the frequency with which adoption was used as long-term family strategy in Athens and Sparta. After all, the fact that men in Sparta and Athens might have faced slightly different levels of adult mortality, due to the specific characteristics of the much more restricted group of Spartiates, might have had an impact on the extent to which adoption was used as a means to escape patriline extinction at one side and impoverishment due to social fragmentation at the other side.

Despite the fact that fertility and inheritance strategies were not typical Athenian, we can, in a model where several underlying mechanisms might have interacted, therefore not exclude that these strategies played a role in generating greater (in)equality that was possibly cancelled out by other factors. People in both *poleis* appear to have employed them to evade fragmentation of their estate and thus the devaluation of their descendants' socio-economic status, but the extent to which these strategies were used and their long-term impact on distribution of property through inheritance is difficult to estimate.

State-imposed mechanisms reducing wealth disparities

With more certainty can be assumed that the distinctive situation in Athens was – whether or not next to other factors – engendered by a whole range of typically Athenian state-imposed mechanisms reducing the wealth disparities in Athenian society by causing both ends of the social scale to converge through economic redistribution.

(40) For the effects of the various procedures of adoption, see *ibid.* p. 45-55.

(41) HODKINSON, 2000, p. 82-83.

(42) For the citation, see LACEY, 1968, p. 201.

In Athens, the rich were expected to contribute enough of their surplus wealth to allow the democracy to function and the *polis* to carry out its foreign policy. They were taxed by various means, the most important being the liturgies, the *eisphora*, and the fines imposed by the popular courts. In some cases, these taxes might even have threatened the chances of the Athenian élite to perpetuate their families in the highest property class, thereby impeding property concentration.⁽⁴³⁾

The sources provide many testimonies by or about citizens from the upper ranges of society allegedly suffering from the inescapable cost of liturgies and the incidence of *eisphora*-payments.⁽⁴⁴⁾ Several of these statements, especially those presented in court, were intended to win the sympathy of the jury or should be interpreted as grumbling by the Athenian élite, but the surviving figures suggest that at least some of them cannot merely be dismissed as unsubstantiated complaints. As can be inferred from the evidence, an average festival liturgy cost between 1,200 and 3,000 drachmae, while a sole trierarchy, the most expensive liturgy, had a price-tag from 4,000 to 6,000 drachmae.⁽⁴⁵⁾ Weighed against the minimum liturgical census of 3-4 talents, these figures are far from trivial, and might have constituted a major part of a citizen's capital. Presumably only the most wealthy Athenians were capable of meeting extensive public expenditure without breaking into their reserves or running into debt (Is. 6, 38; Dem. 28, 17-18; 36, 41; 47, 54; Isokr. 15, 108-112; Dion. Hal., *On Isaios* 13).⁽⁴⁶⁾ The irregular and unpredictable levying of *eisphora* might similarly have implied a financial burden on the upper ranges of Athenian society, as the Athenian élite could apparently be summoned at short notice to pay large sums, as much as 3,000 or 4,000 drachmae (Lys. 19, 43; 21, 3). Moreover, it occasionally occurred that they were required to pay at the very moment when the equipping of a fleet or the recruitment of the army made further calls on them (e.g. Dem. 50, 8-9, 13, 17). It is thus not surprising that the ancient sources contain an impressive range of associated references to undervaluing or concealing the ownership of property, and dodging of liturgies, in order to minimize the contribution of their property to the *polis*.⁽⁴⁷⁾ In any case, as noted by Millett, the successive modifications in the organization of the liturgies and *eisphorai* might in itself be an indication of dissatisfaction with the way the system spread, or failed to spread, the burdens.⁽⁴⁸⁾

(43) For a more thorough discussion of these dynamics, see DAVIES, 1981, p. 77-87.

(44) For lamentations about the inescapable cost of liturgies, see Dem. 47, 54; 50, 8; Lys. 7, 31-32; 19, 29; 21, 12; 29, 4; Isokr. 8, 128, 12, 145; Xen. *Symp.* 4, 30, *Mem.* II, 1-6. For *eisphora*-payments, see Dem. 24, 128; 47, 54; 50, 8; Lys. 7, 31-32; 19, 29; 26, 22; 28, 3; Isokr. 8, 28; Xen., *Hell.* VI, 2, 1, *Sym.* 4, 30, *Mem.* II, 1, 6; Theophr. 26, 6.

(45) The surviving figures for the costs of various liturgies are set out in DAVIES, 1971, p. xxi-xxii.

(46) MILLETT, 1991, p. 67-71.

(47) DAVIES, 1981, p. 88-90; OBER, 1989, p. 215-216; CHRIST, 2007. For a detailed analysis of the so-called 'hidden economy' in classical Athens, see COHEN, 1992, p. 190-215.

(48) MILLETT, 1991, p. 68. For the evolution of the liturgies and *eisphorai*, see RHODES, 1982; MACDOWELL, 1986; GABRIELSEN, 1989; 1994, p. 173-217; CHRIST, 2007.

A similar pressure upon the rich might have been exerted by the punitive fines imposed by the popular courts. Since prosecution was used as a means of undermining a political opponent's public position, élites and other Athenians who engaged in public life were easily put on trial by litigants, thereby running the risk of being harmed financially through the resulting fine.⁽⁴⁹⁾ Pamphilos of Keiriadai, who had been hipparch in the Corinthian War (Lys. 15, 5) and was sent to Aegina as general in 389/388 (Xen., *Hell.* V, 1, 2-5), appears, after his failure there, to have been prosecuted for embezzlement (Aristoph., *Wealth* 174 with schol., citing Plato com. fr. 14). He was fined so heavily that, even after the confiscation of his estate, the sum of five talents remained unpaid until his death (Dem. 40, 22).⁽⁵⁰⁾ If this statement is correct, not only he, but also his sons would, until they were able to pay off their late father's debt, have been deprived of their civic rights (*atimia*) (APF 9667).⁽⁵¹⁾ Similarly, Agyrrhios of Kollytos, one of the most prominent political leaders of the 390s and early 380s, who was in 389 elected a general and succeeded Thrasyboulos in command of the Athenian fleet, was probably after the unsatisfactory peace of 387-386 prosecuted for embezzlement. Unable to pay his fine, he was imprisoned for many years (Dem. 24, 135).⁽⁵²⁾ Eventually, as we now do know, Agyrrhios reappeared in public life to be the man who proposed the grain-tax law of 374/3.⁽⁵³⁾

If we can believe Isokrates, even innocent Athenians were not free from the threat of impoverishment by prosecution. According to him, verdicts in the Athenian courts were determined τύχη μάλλον ἢ τῷ δικαίῳ (18, 10). Although this statement might be considered a cynical exaggeration, there is no doubt that in some cases, the persuasive skills of the prosecutor might have had as much as, or even more, impact on the jury as coherent reasoning based on facts, convincing enough to prove innocence in our judicial system. Moreover, it was not uncommon for Athenians, both critics and speakers in the courts, to grumble about the fact that the popular courts condemned rich citizens merely in order to have their property paid over to the treasury, from whence it could be used to pay the poor for political participation (e.g. Isokr. 15, 160; Lys. 19, 11; 27.1; 30, 22; Dem. 10, 44; Ar., *Knights* 1358-1361; Arist., *Pol.* 1304b-1305a, 1320a). One might suspect that, especially in times of economic distress, Athenian jurors might have been tempted to convict wealthy defendants in order to guarantee the solvency of Athens' treasury, not in the least because their own dicastic pay came out of these funds.⁽⁵⁴⁾

The Athenian liturgical system was in strong contrast with the absence of personal and property taxes for the mass of citizens. Rather than being taxed, they were indirectly subsidized by the rich when they were paid for hoplite service or rowing in the fleet, when they received state pay to serve

(49) The quantity of a fine was the subject of counter-proposals by the litigants, but generally appears to have been severe by our standards. Cf. TODD, 1993, p. 157-160.

(50) Although confiscation does not seem to have existed as a penalty in its own right, it could result from *apographe*. Cf. Ibid. p. 143.

(51) Ibid. p. 142-144.

(52) DAVIES, 1981, p. 80-82.

(53) Cf. STROUD, 1998, *RO* 26, for detailed commentary.

(54) Cf. JONES, 1957, p. 58-61; OBER, 1989, p. 200-201.

as magistrates, to attend the assembly, or to serve as jurors on the people's courts. The rich likewise also paid for other sorts of economic benefits for the masses, such as the *theorikon* and all kinds of subsidies for invalids, (war) orphans and widows. As remarked by Aristotle (*Pol.*, 1320a35-b17), this state-imposed system of economic redistribution was important for the social stability in a democracy like Athens. By reducing citizen poverty, it could counteract dissident ideas about enforcing economic equality.⁽⁵⁵⁾ At the same time, the system moderated property concentration, thereby playing a key role in the equalisation of the distribution of wealth and property in classical Athens.

In Sparta, in contrast, the measures the *polis* used to draw upon the private property of its citizens had little effect on the unequal distribution of property. The mess dues imposed a significant material burden, but this surplus levy applied equally to every citizen, rich or poor. Only the communal use of horses and hunting dogs operated one-sidedly in favour of poor citizens, but even this encompassed no real material loss to their owners. The *eisphorai*, introduced in the late fifth and early fourth centuries and the scope of which included other land besides that belonging to the Spartiates themselves, were met with strong resistance by the wealthy Spartiates. If we are to believe Aristotle, however, the latter were able to evade full payment of *eisphorai* with ease (Arist., *Pol.* 1271b11-15).⁽⁵⁶⁾

Levels of income inequality

In addition to the Athenian state-imposed system of economic distribution, the difference between the Spartan and Athenian situation can also be attributed to the relatively low level of income inequality in Athenian society.

Classical Athens was one of the very few societies in the period 1800 BC – 1300 CE in which daily wages were substantially above of the so-called subsistence-level customary wage range. For the second half of the fifth century, we have some evidence for daily wages of around 1 *drachma* for both skilled construction workers and military soldiers.⁽⁵⁷⁾ With a presumed wheat price of around 6 drachmae per *medimnos*, this translates to a daily wage of 8.7 litres and thus, when taking the 3.5 litres/day proposed by Scheidel as a baseline contribution by the head of a household, to a baseline-multiplier just above the 'middling' floor of 2.4.⁽⁵⁸⁾ The epigraphic sources report for the 320s daily wages for unskilled construction workers in Eleusis of 1.5 drachmae per day, and 1.25 to 2.5 drachmae for skilled workers. At that time, wheat was sold for 5 to 6 *drachmai* per *medimnos* (ca. 52 litres),⁽⁵⁹⁾ which translates to a daily wheat wage of 13-15.6 litres and a baseline-multiplier of 3.7-4.6, which comfortably falls within the "middling" range of 2.4-10 times

(55) Ibid. p. 192-247.

(56) See HODKINSON, 2000, p. 187-208, for discussion.

(57) LOOMIS, 1998, p. 38-44, 105-107, with MARKLE, 1985, p. 293.

(58) SCHEIDEL, 2010, p. 436.

(59) LOOMIS, 1998, p. 111-113, with MARKLE, 1985, p. 293-294.

subsistence.⁽⁶⁰⁾ These data suggest that, both in the later fifth century and, in particular, in the later fourth century, the average Athenian who was in unskilled or skilled labour might have been paid wages sufficient to elevate him to a decent, middling standard of living.⁽⁶¹⁾

Based on the available data about Athenian wages, Ober has, following the lead of Scheidel and Friesen,⁽⁶²⁾ developed two possible models of income distribution in late fourth-century Athens: a “pessimistic” distribution and an “optimistic” distribution. For each distribution model, Ober has assumed a total population for Athens of just under a quarter-million persons, of which about a third were slaves, and about a tenth were resident foreigners.⁽⁶³⁾ In the optimistic scenario, Ober assumes that most citizens and metic males, and even a small number of slaves (namely the *khōris oikountes*) would be able to earn at least one drachma per day on average. In the pessimistic scenario he assumes only about two-thirds of citizens, a minority of metics, and no slaves received regular wages at or above the one-drachma/day level. Ober’s exercise clearly shows that, compared to the Roman Empire,⁽⁶⁴⁾ late fourth-century Athens was characterized by a remarkable egalitarian income distribution, which enabled a substantial number of residents of fourth-century Athens to live far enough above subsistence to enable them to live decent lives.⁽⁶⁵⁾ This relative equality of income will have directly slowed down the structural tendency towards growing inequality and property concentration which under normal circumstances would have been a natural consequence of the interplay between ancient demographic dynamics and Athenian inheritance law.

In Sparta, in contrast, a citizen’s baseline income in principle derived from the rents of the land that had presumably once been given to his ancestors as part of a distribution of conquered lands.⁽⁶⁶⁾ As a consequence, ancient demographics and partible inheritance not only had a combined effect upon the distribution of land but also an impact on the Spartan income distribution, thereby reinforcing the structural tendency towards wealth inequality.

(60) SCHEIDEL, 2010, p. 437.

(61) Cf. Ibid. p. 455-456 and OBER, 2015, p. 95, for discussion.

(62) SCHEIDEL and FRIESEN, 2009.

(63) See HANSEN, 1985; 1988b; 2006, for Athenian demography in the fourth century.

(64) Based on the available data for Roman wages, Scheidel and Friesen have calculated that in the Roman empire as a whole, a ‘middling’ segment (2.4-10 x subsistence level) of around 6 to 12 percent of the population would have occupied a fairly narrow middle ground between an élite segment (>10 x subsistence level) of ca. 1.5 percent of the population and a vast majority close to subsistence level (1-2.3 x subsistence level) of around 90 percent of the population. Roman wages generally fell within the low ‘customary wage range’, causing most Roman labourers thus to remain at subsistence level. Cf. SCHEIDEL and FRIESEN, 2009.

(65) Ober has presented these distribution models for the first time in OBER, 2010. Based on the available evidence for Athenian wages, he has argued that, in addition to an élite segment of 1.1 percent of the total population, a fairly large group (42.2-57.8 percent) of citizens and metic males, and even a small number of slaves (namely the *khōris oikountes*) would have been able to earn at least one *drachma* per day on average, and so would have achieved middling status. According to his calculations, only 41.1-56.6 percent of the population would have led a life close to subsistence level, which is remarkably low comparing to the 90 percent calculated by Scheidel and Friesen for the Roman world.

(66) Cf. HODKINSON, 2000, p. 65-208.

A final thought: the role of income mobility as a possible equaliser of wealth distribution

It is possible that the remarkable low level of income inequality in Athenian society had an extra, more indirect impact on the distribution of wealth and property. In a society with a tiny élite and a large mob only just living above the level of bare subsistence, the percentage of people being able to reach a different position on the wealth distribution ladder than they or their parents had been born into, would be very low. In a society like classical Athens with a remarkably large ‘middling’ group, living far enough above subsistence to enable them to live decent lives, on the contrary, the amount of people disposing of the necessary reserves to invest – or to help others investing – in themselves might, compared with other premodern societies, have been relatively high. These investments, such as in education, in perfecting skills, in useful social relations,⁽⁶⁷⁾ or in profitable strategies or businesses, hereby, using the words of Ober in his most recent book, “deferring short-term pay-offs in favour of anticipated long-term rewards”,⁽⁶⁸⁾ might have functioned as important channels of income – and thus economic – mobility.

To study the scope of income mobility in a society, one has to measure how many people occupy a different position on the income distribution from that into which they or their parents were born. However, such data are not available for classical Athens. While historians of the Middle Ages or Early Modern Period have often highly detailed documents, such as census records and tax registers, at their disposal, such documents are lacking completely for classical Athens. Thus most of our evidence for property holding has to come from forensic speeches disputing an inheritance or from inscriptions recording inventories of confiscated property,⁽⁶⁹⁾ which in many, if not most, cases represent only a small part of the person’s total estate. In only a few cases do we have what purports to be a complete or even substantially complete inventory of the wealth of an individual,⁽⁷⁰⁾ and it is clear that these inventories of wealth are by no means representative for the property holding of all Athenian inhabitants – or even of a whole socio-economic status group within Athenian society. In addition, this information provides us merely with a snapshot of a particular individual’s property at a certain point in his life and gives us no information at all about possible fluctuations in wealth over lifetime or between generations. The available evidence for income is equally problematic. Although primary sources contain some figures for wages, the fragmentary nature and the uneven distribution of the evidence, most of which comes from the public sector, constitutes a serious obstacle if one wants to draw clear conclusions concerning the scope of economic mobility in Athenian society.

(67) For the importance of social relations in Athenian society, see DEENE, 2014.

(68) OBER, 2015, p. 293.

(69) Unfortunately, these inscriptions are often lacunose, while many types of moveable property are especially liable to have been removed, hidden, or transferred to a friend or relative to avoid confiscation.

(70) Cf. DAVIES, 1971; KRON, 1996.

What we do know, however, is that, sustained by the existence of the large mining area of Laurion and the even larger urban markets of Athens and the Piraeus, large groups of Athenians were engaged in profit-generating activities, which, with the necessary investments, had the potential of resulting in income mobility; activities such as the production of cash crops, market-orientated livestock farming, exploitation of woodland resources, leasing slaves, running of slave-manned workshops, letting urban dwellings, investing in commerce and – to a lesser extent – banking.⁽⁷¹⁾ With a large group of people disposing of the necessary reserves to make the necessary investments, the scope of this kind of economic mobility might have been significant enough to contribute to making property concentration in Athens much less pronounced than the mortality side of demography combined with partible inheritance would predict. The problem of economic mobility, however, is clearly beyond the scope of this paper and requires fuller treatment elsewhere.

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SUMMARY

This article seeks to explain the remarkable contrast between the increasing inequalities in property ownership in classical Sparta and the remarkably equal property distributions that various scholars have observed for classical Athens. Explicitly comparing Sparta and Athens, it will focus on the impact on mortality patterns of behavioural factors, state-imposed mechanisms, and socio-economic conditions. It will argue that, although it is difficult to exclude that fertility and

inheritance strategies, used in Athens and in Sparta, played a role in generating greater (in)equality, the distinctive situation in Athens was mainly the outcome of typically Athenian state-imposed mechanisms that reduced wealth disparities, and of the relatively low level of income inequality in Athenian society.

Social equality – demography – Classical Athens - Sparta

RÉSUMÉ

Cet article se propose d'expliquer le contraste remarquable entre les inégalités croissantes dans la distribution de la propriété dans la Sparte d'époque classique et la distribution de la propriété remarquablement égale en Athènes à la même époque. En comparant Sparte et Athènes, il se concentrera sur l'impact qu'exercent sur les courbes de mortalité les facteurs comportementaux, les mécanismes imposés par l'état et les conditions socio-économiques. Il fera valoir que, bien qu'il soit difficile d'exclure que les stratégies de fécondité et d'héritage, mises en œuvre à Athènes et à Sparte, ont joué un rôle dans la génération d'une plus grande (in)égalité, la situation particulière à Athènes a pu résulter des mécanismes typiques imposés par l'Etat, qui réduisent les disparités de richesse, mais aussi du niveau relativement faible de l'inégalité des revenus dans la société athénienne.

Egalité sociale – démographie – Athènes Classique – Sparte

SAMENVATTING

Dit artikel beoogt een verklaring te vinden voor het opmerkelijke contrast tussen de toenemende ongelijkheid in bezit in het klassieke Sparta en de opmerkelijk graad van gelijkheid kenmerkend voor klassiek Athene. Bewust gebruik makend van een comparatieve aanpak zal het zich focussen op het belang van gedragsfactoren, door de staat opgelegde mechanismen en sociaal-economische omstandigheden. Het zal betogen dat, hoewel het moeilijk is om uit te sluiten dat vruchtbaarheids- en erfenisstrategieën, waarvan zowel in Athene als in Sparta gebruik werd gemaakt, een rol speelden in het genereren van meer (on)gelijkheid, de buitengewone situatie in Athene voornamelijk werd veroorzaakt door typisch Atheense door de *polis* opgelegde mechanismen die de ongelijkheid in rijkdom reduceerden en door het relatieve lage niveau van inkomensongelijkheid in de Atheense samenleving.

Sociale gelijkheid – demografie – Klassiek Athene – Sparta