

Princeton/Stanford Working Papers in Classics

Sex and empire: a Darwinian perspective

Version 2.0

May 2006

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Abstract: This paper draws on evolutionary psychology to elucidate ultimate causation in imperial state formation and predatory exploitation in antiquity and beyond. Differential access to the means of reproduction is shown to have been a key feature of early imperial systems. (This revised paper replaces Version 1.0 posted in November 2005.)

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SEX AND EMPIRE: A DARWINIAN PERSPECTIVE

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‘For the end of a policy would not be, in the eyes of the actors or their historians, simply to conquer others and bring all into subjection. Nor does any man of sense go to war with his neighbors for the mere purpose of mastering his opponents; nor go to sea for the mere sake of the voyage; nor engage in professions and trades for the sole purpose of learning them. In all these cases the objects are invariably the pleasure, honor, or profit resulting from these undertakings.’ (Polybius 3.4)

‘It is certain that with almost all animals there is a struggle between the males for the possession of the female. This fact is so notorious that it would be superfluous to give instances.’ (Darwin 1871: 259)

1. Human nature and ancient empires

1.1. *Power and fitness*

Why empires? Or, more generally, why power? In his landmark study of the sources of social power – the first part of which is largely dedicated to the subject of our volume, ancient empires –, Michael Mann steers clear of motivational models of human behavior. ‘We can take for granted the motivational drive of humans to seek to increase their means of subsistence. That is a constant.’¹ But why do humans seek to increase their means of subsistence? Is that a goal in itself? To Mann, it does not matter: one seeks power as a ‘generalized means’ (Talcott Parsons’s phrase) ‘for attaining whatever goals one wants to achieve’. The nature of these goals does not require further analysis: ‘If I talk sometimes of “human beings pursuing their goals”, this should be taken not as a voluntaristic or psychological statement but as a given, a constant into which I will inquire no further because it has no further social force’. No attempt is made to identify ultimate causes underlying proximate motivation. In my view, this approach not only impoverishes our vision of human behavior but effectively prevents us from understanding and explaining the recent history of our species.²

This volume focuses on empire, power and exploitation. From Mann’s perspective, exploitation is a way of pursuing the unquestioned goal of increasing the means of subsistence by exercising power. But why should exploiters want to increase their means of subsistence? This question is not nearly as pointless as it has been made to seem. From an evolutionary perspective, resources are of no value in and of themselves. They acquire intrinsic utility only in as much as they are instrumentalized in enhancing

¹ Mann 1986: 5. Cf. already Mann 1977: 286: ‘I make two assumptions which I will in no way justify here: that mankind is restless and greedy for more of the good things of life, and that essentially this is a quest for greater material rewards.’

² Mann 1986: 6. For a striking illustration of the resultant superficiality of sociological and historical attempts to explain the phenomenon of imperialism, see the survey in Doyle 1986: 22-30, 123-8.

inclusive fitness, defined as ‘the reproductive success of individual genes, including that of identical copies which are present in near kin’.³

Humans, like all other complex organisms on this planet, are hydraulic vehicles generated by self-replicating molecules linked up in genes, the basic particulate units of inheritance that are passed intact from one generation to the next. These vehicles, the phenotypic expression of the underlying genotype, have evolved for the purpose of protecting those biomolecules from environmental hazards, and have come to facilitate their interaction with the outside world, primarily for the sake of energy consumption, and – in sexually reproducing species – for the purpose of replication. In the latter case, the phenotypical – i.e., physical and behavioral – properties of these vehicles determine the replicating germ cells’ chances of meeting others in order to reproduce. Since genetic survival – i.e., successful replication – is contingent on scarce energy resources, reproductive processes inevitably involve competition, which in turn drives evolution in response to natural selection. Natural selection, equivalent to the differential reproduction of genotypes, ultimately selects for reproductive success. As a result, the behavior of organisms is adaptive if it increases the chances of reproductive success. Because genetic survival is by definition the only *raison d’être* of organisms, their evolved behavior has been conditioned by this reproductive imperative. Thus, organisms can be said to have been designed by natural selection to operate successfully in a competitive environment in ways that contribute to the replication of their genes.⁴

In sexually reproducing species, competition for resources is ultimately equivalent to competition for mates. Owing to sexual asymmetries in gamete size and reproductive physiology, females and males in diploid species differ markedly in terms of their reproductive strategies. Female lifetime reproductive success is constrained by a fixed number of gametes and by prolonged gestation and placental nurture and subsequent lactation. All these features constitute very considerable parental investment of energy resources. By contrast, males are limited in their reproductive performance not so much by physiological features as by competitors. Whereas the mean reproductive success of all males in a generation must equal the reproductive success of all females, variance in reproductive success may greatly differ between the sexes. Unlike females, males may increase their reproductive success significantly by depriving competitors of mating opportunities. This difference is crucial in determining reproductive behavior. In all species, the sex that invests less will compete more for mating opportunities,⁵ because the sex allocating a smaller proportion of reproductive effort as parental effort benefits more from competing for mate quantity. Therefore, males gain more reproductively from gathering a harem of females than females would gain from gathering a harem of males. This is why polygyny is so common in mammals, where females are high obligate investors.⁶ In about 95 per cent of mammalian species, some males monopolize sexual access to more than one female, usually through intensive inter-male competition. In polygynous species, variance in reproductive success is much higher for males than for females. Thus, while male resources increase fertility at the ‘high’ end of reproductive variation – resource-rich males mate with more and/or more fecund females –, females’ resources avert failure at the ‘low’ end, as they only require sufficient resources to raise viable offspring.⁷

³ Badcock 1991: 71.

⁴ Classic surveys include Wilson 1975; Dawkins 1982, 1989. Badcock 2000 and Buss 1999, 2005 explore the impact of this selection process on human behavior. Genes are not the only replicators that are subject to selective pressures: memes (now defined by the *OED* as ‘elements of a culture that may be considered to be passed on by non-genetic means’ – i.e., learning) compete and proliferate in similar ways. However, while it is true that genetic and memetic fitness need not coincide (e.g., Dawkins 1989: 193-4; Dennett 1995), it has commonly been assumed that memetic reproductive success is contingent upon its consequences for genetic fitness (e.g., Cavalli-Sforza and Feldman 1981; Lumsden and Wilson 1981; Durham 1991), and this principle must necessarily be correct in the long term. For an ambitious discussion of the complementarity of memetic and genetic evolution, see now Blackmore 1999. (For biological alternatives to genetic replication, cf. Woolfson 2000.)

⁵ Trivers 1972.

⁶ But cf. Hrdy 1997, 2000, for some qualifications.

⁷ Access: Borgerhoff Mulder 1992: 353. Variance: Low 2000a: 55 fig. 3.3, 66.

Typically, resources, status and power co-vary with reproductive success for males. Because male variance in reproductive success is high, great expenditure and risk may be profitable. Among humans, where men use resources to gain reproductive advantage, this merely increases variance in male reproductive success.⁸ Male fitness differentials range from differences in mating success – such as the number of wives and their reproductive value (above all, age), the frequency of extramarital matings, and the incidence of remarriage – to differential marital fertility, differential child survivorship, and the differential allocation of reproductive chances to offspring. Dominance, status and wealth have all been positively associated with a variety of mechanisms promoting male reproductive success, including the number of serial or simultaneous conjugal unions, the number of extramarital liaisons, age at first marriage or reproduction, spouse's age at first reproduction, interbirth intervals, and probability of cuckoldry.⁹ Thus, a growing number of studies have established a strong correlation between cultural and reproductive success. In general, the acquisition of symbolic capital – honor, prestige, power – translates to the accumulation of material capital, which enhances reproductive success.¹⁰ As E. O. Wilson put it in his seminal work, 'to dominate is to possess priority of access to the necessities of life and reproduction. This is not a circular definition; it is a statement of a strong correlation observed in nature'.¹¹ Chagnon is right to remind us that in evolutionary time, struggles among humans were more likely over the means of reproduction than over the means of production.¹² However, with the rise of sedentary agriculture, these two tend to converge.

1.2. Human history and primate models

In human history, we would expect customs and institutions to reflect these underlying mechanisms. At the same time, it would be difficult to appreciate the impact of this biological infrastructure except within an explicitly Darwinian conceptual framework. An evolutionary perspective provides the only comprehensive model of the behavior of all organic beings, including *Homo sapiens*.¹³ And in fact, evolutionary approaches have made considerable headway in a variety of disciplines.¹⁴ Perhaps

⁸ Low 1993. For a telling example of the principle of higher male than female variance in reproductive success in a human population, see Daly and Wilson 1983: 89 fig. 5.6. See also below, section 2.2.

⁹ Betzig 1988: 5.

¹⁰ For quantitative assessments of this positive correlation between successful competition, status, resources and reproductive success, see esp. Chagnon 1979; Irons 1979; Essock-Vitale 1984; Faux and Miller 1984; Kaplan and Hill 1985; Mealey 1985; Turke and Betzig 1985; Flinn 1986; Hughes 1986; Borgerhoff Mulder 1987, 1988; Hewlett 1988; Voland 1990; Cronk 1991; Roskraft, Wara and Wiken 1992; Low 1994; Casimir and Rao 1995. For the importance of fighting prowess, see e.g. Chagnon, Flinn and Lelancon 1979; Chagnon 1988. See also Kaplan 1985 on Hill 1984. Betzig 1986, 1992b, 1993, 1995 provide qualitative surveys. For theory, cf. Harpending and Rogers 1990.

¹¹ Wilson 1975: 287.

¹² Chagnon 1979: 375.

¹³ I agree with MacDonald 1988: 336 that 'at the present time sociobiological theory is the only theory that is powerful enough to provide an explanatory framework for the descriptive data generated by cross-cultural and historical studies of human development'. For classic works, see Wilson 1978; Alexander 1979, 1987. Convincing challenges to evolutionary approaches to the study of human behavior in its various manifestations, including culture, have yet to appear: much of the existing work is driven by ideological bias (e.g., Rose, Lewontin and Kamin 1984; Rose and Rose, eds. 2000; for a rebuttal, see Alcock 2001) and/or fuzzy rhetoric (most recently, Malik 2000). Kitcher 1985 stands out for an incisive critique of inadequate methods but likewise fails to invalidate the underlying interpretive framework. Segerstrale 2000 surveys the debate. Irons and Cronk 2000: 12-13 notice a 'tidal shift' from a priori indictments of 'sociobiology' in the 1980s to a growing acceptance of Darwinian interpretations in a variety of academic fields in the 1990s. This development is well reflected in the rapidly expanding bibliography of pertinent scholarship at <http://www.hbes.com>.

¹⁴ E.g., Barkow 1989; Buss 1994; Chisholm 1999; Low 2000a.

unsurprisingly, acceptance and success have varied with the proximity of different fields to the life sciences.¹⁵ Hence, the more an academic field has traditionally been governed by modes of discourse that are hostile or oblivious to science and reductive reasoning, the slower progress has been.¹⁶ In the social sciences, anthropologists have more readily embraced Darwinian concepts than historians have been willing to do.¹⁷ In view of established traditions, this may hardly occasion surprise, but is nevertheless impossible to justify. No-one will want to claim that simple, 'primitive', 'tribal' societies – the 'savages' of yesteryear – are somehow closer to the animal kingdom and therefore more suitable for the application of evolutionary concepts than 'civilised' complex societies. All people are animals, regardless of their cultural environment. As a consequence, there is no obvious reason why an evolutionary perspective should not be of comparable utility (or lack thereof) in either field. The explanation must doubtless be sought in the institutional structure of academic production that favors certain modes of enquiry in some compartments but discourages them in others. History, post-historic turn, is now surely one of the least receptive areas.¹⁸ Ancient history, conventionally chained to literary criticism, is no exception, even though the 1990s have witnessed the publication of a fair amount of pioneering work.¹⁹ In any event, arbitrary firewalls cannot fail to narrow the horizon of historical research:

'To break this seamless matrix of causation – to attempt to dismember the individual into 'biological' versus 'nonbiological' aspects – is to embrace and perpetuate an ancient dualism endemic in western cultural tradition: material/spiritual, body/mind, physical/mental, natural/human, animal/human, biological/social, biological/cultural. This dualistic view expresses only a premodern version of biology, whose intellectual warranty has vanished.'²⁰

For Gellner, logical coherence is a sign of conceptual progress: 'the failure to bring findings from diverse fields together into one unified picture is in our society a sign of insufficient advance in one field or the other or both, but not of some inherent insulation of diverse phenomena'.²¹ In our case, 'insufficient advance' will primarily be encountered in the humanities.

There is no more immediate form of exploitation of humans than that which directly involves their bodies, and given the nature of bodies as agents of reproduction, sexual exploitation can reasonably be

¹⁵ Cf. Liebermann, Reynolds and Friedrich 1992.

¹⁶ See Maxwell, ed. 1991, for a cross-disciplinary survey which is now much in need of updating. Cf. also Betzig 1997a.

¹⁷ E.g., Chagnon and Irons, eds. 1979; Betzig, Borgerhoff Mulder and Turke, eds. 1988. For history, see in general Betzig 1991, 1992a and Wettlaufer 2002; for individual studies, Boone 1986; Betzig 1986, 1992b,c, 1993, 1994, 1995, 2002, 2005; Kroll and Bachrach 1990; MacDonald 1990, 1994, 1995; Weisfeld 1990; Hager 1992; Bergstrom 1994; Johnson and Johnson 1997; Käär *et al.* 1998; Hill 1999; Wettlaufer 2000; see also Volland, ed. 1992. The only extended debate known to me is Johnson and Johnson 1991, 1993, 1995; Hekala and Buell 1993, 1995. On religion, see Reynolds and Tanner 1995; Boyer 2001; on war, van der Dennen and Falger, eds. 1990. In his diatribe against sociobiology and genetic determinism, Lewontin 1992: 90 points out that practitioners in that field mostly draw on evidence from simple and modern cultures but 'do not look much at the historical record of European society, of which they seem to be quite ignorant'. This charge was valid then, and progress has been slow since. See Herlihy 1995 and Wettlaufer 2000, 2002 for rare contributions by professional historians interested in evolutionary approaches.

¹⁸ Irons and Cronk 2000: 13 single out cultural anthropology for its increasingly lonely rejection of evolutionary perspectives, arguing that as 'the study of behavior has largely been supplanted in cultural anthropology by the study of meaning', its 'continued biophobia ... is related ... to the focus on meaning'. (Kuper 1999 offers a trenchant critique of the current emphasis on cultural determinism in anthropology. For a first attempt to reconcile cultural relativism with evolutionary theory, see Cronk 1999.) The same is true of postmodernist historiography, largely for the same reason. Cf. more generally Hinde 1987.

¹⁹ Betzig 1991: 134-5, 1992b,c, 1993, 2005; Sallares 1991; Scheidel 1996a,b, 2004; Weiler 1993; Burkert 1996. Cf. also MacDonald 1990.

²⁰ Tooby and Cosmides 1992: 21.

²¹ Gellner 1989: 61-2.

defined as the ultimate and quintessential form of human exploitation. If ancient imperialism facilitated exploitation, we must address the question of whether or how it facilitated the exploitation of reproductive capacity. How might the beneficiaries of empire increase their mating success in order to enhance their inclusive fitness? We may crudely distinguish between two complementary and overlapping ways of achieving this goal: by direct appropriation of the means of reproduction – that is, by obtaining or monopolizing access to fecund females, controlling their bodies by means of marriage or purchase –, or indirectly, by appropriating the means of production so as to acquire symbolic and material resources that facilitate access to mates whose bodies are not subject to permanent control, as in the case of prostitution or extramarital liaisons. It will be immediately apparent that this distinction is one of degree rather than substance, in that the means of ensuring direct control are similar to or identical with those conducive of occasional matings, namely status, wealth and power.

These links between access to resources and access to females can be traced back to our primate ancestors:

‘In intermale reproductive competition, males seek to monopolize either females or resources that are crucial to female reproduction. The spatiotemporal distribution of resources should determine which of these strategies is most effective, partly through its effect on resource defensibility, which is considered a key influence on patterns of aggressive competition. In line with this argument, we suggest that the object of intergroup aggression should be predictable by resource alienability – i.e., the extent to which resources can be profitably seized. Thus, fruit trees used by territorial monkeys are alienable, because territorial boundaries can shift. (...) Again, individual females are not alienable from a female-bonded nonhuman primate troop, because females are unwilling to leave their female kin. They are alienable, however, in species in which females transfer. This framework accounts for the association between male-male cooperation and female transfer, and it suggests that if material resources of sufficient value (i.e., importance to reproduction) are alienable, competition over females should give way to competition over material resources.’²²

The same mechanisms are encountered among humans.²³ Manson and Wrangham test their hypothesis by comparing human societies with few or no alienable resources to those with valuable objects or land that can be seized. They find that in 42 foraging societies, the presence of alienable resources was significantly associated with conflict over resources. At the same time, polygyny and wealth are strongly correlated in societies where alienable resources are available.²⁴

²² Manson and Wrangham 1991: 374 (references omitted).

²³ Separate field studies have now established a coherent pattern of raiding behavior among chimpanzees, our closest genetic relatives: it entails furtive incursions of bands of adult males into neighbouring ranges for the sole purpose of violent and sometimes fatal attacks on isolated males which, if sufficiently successful and frequent, result in the forcible incorporation of fecund females into the victorious band and may even lead to the dissolution of neighbouring groups (Wrangham and Peterson 1996: 5-21). In this context – i.e., in the absence of extrasomatic wealth –, no exploitative arrangements are feasible, and the growth of aggressive/expansionist bands is constrained by low size thresholds for group fission. Under roughly similar ecological conditions, comparable intra-group cooperation and raiding practices can be observed in simple human groups (*ibid.*, 63-82, and cf. Boehm 1992. Keeley 1996, on the character of primitive warfare in general, is consistent with this model). Thus, human aggression appears to be directly rooted in our evolutionary past (going back to the shared ancestors of hominids and chimpanzees: cf. Wrangham and Peterson 49-62). The earlier notion of a behavioral hiatus (in terms of aggressiveness) between great-ape and middle-range human societies – i.e., for most of hominid evolution –, interpreting observed similarities between the two as homologues rather than the result of uninterrupted evolutionary progression (Knauff 1991), is less economical and suffers from a dearth of reliable information on hominid behavior.

²⁴ Manson and Wrangham 1991: 375.

Applied to the theme of this volume, this scenario suggests that males cooperate in hazardous ventures because, ultimately, they stand to improve their reproductive success and inclusive fitness. Since humans in complex, sedentary societies are able to control territory and storable surplus, we expect them to compete primarily over territory and material resources because these will facilitate access to mates.²⁵ In these societies, females are highly transferable, both in the context of consensual virilocal marriage (the most common pattern of animal dispersal in primate and other mammalian species) and in cases of forcible seizure and claustration (for marriage, concubinage and slavery). It is clear that competition over females and over resources are not mutually exclusive: rather, capture of females remains an option on top of seizure of resources, especially at the initial, often violently disruptive stage of conquest.²⁶ This model is universally applicable and guarantees that the basic behavioral preconditions for territorial expansion are automatically present in any human society.²⁷

By contrast, the actual incidence of corresponding activities, such as offensive inter-group aggression and imperialist expansion, as well as success and failure, are determined by unrelated environmental factors. In his pathbreaking survey of human development since the inception of agriculture, Diamond demonstrates that geographical divergence in ecological conditions (such as the availability of domesticable plants and animals) as well as geomorphological features (such as the relative isolation or openness of different regions) ultimately account for the most fundamental variations in human social and cultural development.²⁸ Thus, complex exploitative systems first arose in the ecologically most favored parts of the planet, such as the Near East, India and China, only belatedly in the Americas, and not at all in marginal zones such as Australia. In this way, ecological constraints have mediated the universal drift of human social organisation towards increasing complexity.²⁹ This emerging consensus on the nature of the ultimate determinants of human cultural diversity permits us to relate a phylogenetic constant, such as evolved behavioral propensities, to behavioral variables, such as the specific *style* of differential reproduction and sexual exploitation in a given ecological niche at a particular stage of civilisational accomplishment – in this case, ancient empires.³⁰

²⁵ It deserves notice that territorial expansion is already a pervasive feature in *pre-state* warfare: Keeley 1996: 108-12. For a model of early resource competition, see Durham 1976.

²⁶ Cf. Nishida 1991. With regard to low-complexity societies, Keeley 1996: 125-6 stresses the ‘interchangeable character of exchange and war’: ‘Trade, intermarriage, and war all have the effect of moving goods and people between social units. In warfare, goods move as plunder, and people (especially women) move as captives. In exchange and intermarriage, goods move as reciprocal gifts, trade items, and bride wealth, whereas people move as spouses. In effect, the same desirable acquisitions are thus attained by alternative (but not mutually exclusive) means.’ I would add that at the level of complex socio-political systems, access to more distant transferable individuals (again, especially women) who would not otherwise have been available (e.g., through marriage), and the ability to extend plunder by means of regular taxation, provide further incentives to imperial expansion.

²⁷ It is possible that socio-economic changes introduced by the ‘Agricultural Revolution’ have been particularly conducive to male aggression and inter-group conflict: see, *cum grano salis*, McElvaine 2001, a somewhat eccentric ‘biohistorical’ survey of sexual politics in human history that misrepresents contemporary evolutionary thinking (30-2; for a state-of-the-art summary of gene-environment interaction, compare Thornhill and Palmer 2000: 1-30).

²⁸ Diamond 1998.

²⁹ Delineated by Wright 2001.

³⁰ The Diamond/Wright model of differential cultural evolution addresses the problem identified by Sahlins 1976: XI, that ‘biology, while it is an absolutely necessary condition for culture, is equally and absolutely insufficient: it is completely unable to specify the cultural properties of human behavior or their variations from one human group to another’. Their perspective also vindicates the cultural-evolutionist approach to the study of human societies (e.g., White 1959; Johnson and Earle 2000) that is now often considered ideologically undesirable.

1.3. *Proximate mechanisms and ultimate causation*

At this point, perhaps belatedly, it may be expedient to address the common objection that sexual urges are not known to prompt humans to engage in warfare or exploitation of resources. Immanuel Kant distinguished three passions – for possession, for power, and for honor – but not for offspring. The tempting question to what extent this omission is explicable in terms of his personal psychology would miss the point since his observation is in any event irrelevant to the issue of adaptation. As Robin Dunbar puts it,

‘Individuals may be persuaded to engage in warfare by any number of motives (...). Which (if any) of these mutually incompatible explanations is the case is irrelevant to whether or not warfare is functional in biological terms. That question is answered solely in terms of whether or not warfare increases or decreases the actor’s inclusive fitness (or, as a proximate measure, gives the actor access to resources that will influence his/her ability to reproduce). (...) Non-biologists thus fall into the common trap of assuming that explanations in terms of “selfish genes” have something to do with motivations. In practice, the same functional effect can be produced by many different motivations in as many different cases.’³¹

This is an important clarification, especially for historians used to probing representations and teasing out meanings. It is unnecessary and unhelpful to examine claims and ideologies associated with imperialism and exploitation when we are interested in ultimate causation.³² The crucial difference lies between proximate causation (the mechanism that brings something about) and ultimate causation, which concerns adaptive significance entailing reproductive consequences. In other words, it does not matter whichever motives ostensibly determine behavior, given that the consequences of this behavior for inclusive fitness are subject to natural selection, and that natural selection favors adaptive behavior. Irons suggests ‘as a hypothesis that in most human societies cultural success consists in accomplishing those things which make biological success (that is, a high inclusive fitness) probable. While cultural success is by definition something people are conscious of, they may often be unaware of the biological consequences of their behavior.’³³

This is not to say that perceived motivation is wholly irrelevant: if the finding that contemporary American men on average think of sex every five minutes during their waking hours is valid cross-culturally, the average man (depending on mean life expectancy) will think of sex between 2.5 and 5 million times in his post-pubescent lifetime. By implication, all men who ever lived on earth must have thought of sex approximately 50 quadrillion times. It is hard to imagine that this persistent reflex (which squares superbly with evolutionary theory) has been of no importance to conscious motivation. Even so, Darwinian theory can only be empirically corroborated by observed or attested behavior.

Needless to say, this is inevitably a tall order for the student of ancient history: in this case, human behavior cannot be directly observed but must be tenuously reconstructed from invariably highly fragmentary and often biased sources. For this reason alone, it is essential to concentrate on broad patterns of behavior rather than discrete events or phenomena. For much of ancient history, sweeping cross-

³¹ Dunbar 1991: 378-9. In the same context, he also makes the similarly important point that ‘that a behaviour pattern can be shown to be adaptive does not mean that it will necessarily be exhibited by all members of a given species; nor does it imply that it cannot be modified by learning or socialisation. Evolutionary explanations about adaptiveness are always context-specific: they depend on the precise balance between costs and benefits. Since these may differ not only between members of the same social group but also between groups living in different environments, the expression of a given trait will vary (...) *even if it does* have a significant genetic basis.’

³² Cf., however, Meyer 1990, for the importance of psycho-cultural processes. The interplay of universal behavioral propensities, ecological variation (see previous section), and memetic evolution (see above, n.*) that determines levels of endemic aggressiveness and expansionism in different societies still awaits detailed analysis. For a wide-ranging critical survey of modern explanatory models of ‘primitive’ warfare, see van der Dennen 1990.

³³ Irons 1979: 258,

cultural surveys are the only way to identify such patterns.³⁴ This explains the format of the following sections of this paper.

Yet before I move on to ancient imperialism, one further potential source of confusion merits comment. Darwinian theory predicts that natural selection favors the evolution of behavioral traits that tend to create opportunities for increasing inclusive fitness. The wording is crucial: opportunities do not necessarily lead to the desired results. By the standards of recorded human history, evolution moves at a glacial pace: thus, favored behavioral traits can only be adaptive in the context of the 'environment of evolutionary adaptedness' (EEA). They do not necessarily have the same effect in the fast-changing conditions of the recent past. Therefore, what we are looking for is not merely evidence that imperial success increased the reproductive success and inclusive fitness of primary beneficiaries (although studies of contemporary populations have of course repeatedly shown that such evidence does exist in abundance³⁵), but evidence of the fact that imperial success enabled these beneficiaries to engage in behavior that would ordinarily promote reproductive success. Male competitors for fecund females are conditioned to seek out sexual gratification rather than children *per se*, but because procreation is positively correlated with sexual intercourse, the net effects on reproductive success tend to be similar. Even so, the distinction between sex and reproduction is of considerable importance. This is best brought out by the observation that in modern western societies, social status is frequently (though not invariably) unrelated to reproductive success.³⁶ Using proxy measures for cultural success (education, though not income), Vining even argues for a negative correlation between wealth and fertility.³⁷

Looked at more closely, however, this apparent lack of fit between theory and data is easy to explain.³⁸ For example, it has been shown that extremely wealthy men are still in the habit of boosting lifetime reproductive success by means of higher rates of remarriage, thus outreproducing the general male population.³⁹ More importantly, Pérusse finds that while social status may now often be dissociated from *actual* male fertility, it is still significantly related to *potential* fertility, as estimated from copulation frequency: in fact, status is by far the most important factor accounting for variance in this proximate determinant of reproductive success and inclusive fitness. This suggests that in the absence of modern means of fertility control, paternity tests and socially imposed monogamy, cultural success would on average still translate to higher reproductive success.⁴⁰ Moreover, lifetime fertility is an imperfect measure of inclusive fitness. Allowing for long-term effects, low fertility in high-status environments need not be indicative of low fitness: cultural success may well serve to enhance inclusive fitness in the long run.⁴¹ Thus, Rogers devises a model that stresses that heritable wealth has reproductive value independent of fertility as long as it increases the reproductive chances of offspring, and suggests that wealth and fertility may be of roughly equal value in estimating inclusive fitness.⁴² This observation goes

³⁴ For problems of evidence, see below, sections 2.3.3 and 3.5.3.

³⁵ See above, n.*.

³⁶ Low 1994: 224-5.

³⁷ Vining 1986.

³⁸ Cf. also Low 2000b.

³⁹ Essock-Vitale 1984, on the 'Forbes 400' of 1982.

⁴⁰ Pérusse 1993. Irons 1997: 49 argues that since human status striving evolved in an environment featuring resource polygyny and inefficient birth control, it was adaptive for men to compete for status *per se*, since it was bound to pay off reproductively. Only today, as these conditions have changed, status striving *per se* does not automatically predict reproductive success, or might even interfere with it. For sophisticated models of how modern incentives to parental investment and consumption may invert the traditional correlation of status with reproductive success, see now Kaplan 1996; Kaplan and Lancaster 2000. For a different perspective, cf. Abernethy 1999. Foster 2000 considers the limits of modern fertility decline.

⁴¹ Rogers 1990; cf. Mace 1998.

⁴² Rogers 1995: 94.

a long way in explaining low fertility in privileged groups.⁴³ Harpending and Rogers consider the possibility that under conditions of density-dependent population regulation, such as might exist in a stratified society in which the lowest social stratum constitutes a demographic sink, a strategy favoring offspring quality might result in higher long-term fitness. Most recently, Boone and Kessler have proposed an alternative model that seeks to explain reduced fertility as part of an evolved strategy to maximise long-term fitness in the face of periodic ecological crises.⁴⁴ As I will show in section 1.5, these attempts to account for reproductive restraint are of particular interest in the present context.

1.4. Determinants of polygyny

For men, polygyny has traditionally been the most commonly desired mating pattern in human history. In two samples of cultures from the Human Relations Area Files (HRAF), 77 per cent (n=250) and 76 per cent (n=563) practised some form of polygyny, respectively, whereas only 17 and 21 per cent were strictly monogamous.⁴⁵ However, in polygynous societies, the majority of all unions are monogamous: plural marriage is usually limited to high-status (i.e., wealth and/or advanced age). According to a recent survey of published work, the actual incidence of plural marriage in polygynous societies has ranged from 2 to 50 per cent in various twentieth-century African and Asian populations.⁴⁶ A rate of 25 to 35 per cent appears to have been a common upper limit. Marital data for 15 African countries from 1966 to 1977 show that the average plural family included 2 to 2.5 wives, with only a small proportion of unions involving three or more wives.⁴⁷ Comparable stratification can be observed in Mormon polygamy: 15 to 20 per cent of marriages in a sample of 6,000 prominent Mormon families were polygamous; of 1,784 polygamous men, 66.3 per cent had two wives, 21.2 per cent had three wives, 6.7 per cent had four wives, and fewer than 6 per cent had five or more. However, leaders benefited disproportionately from this practice: the founder of the sect, Joseph Smith, has been credited with 27, 48, or 84 wives.⁴⁸ Socio-economic status is a major determinant of Mormon polygamy.⁴⁹ The same pattern can be found at the opposite end of the developmental spectrum: in one Melanesian sample, 9 per cent of 663 men had more than one wife, but only 1 per cent more than two.⁵⁰

Polygamy rates for men and women differ. Thus, the proportion of all married women married polygamously is usually significantly higher than the corresponding proportion of all men: at the very least, there will always be twice as many polygamously married women in a given group as there are polygamously married men. This imbalance can be illustrated with reference to a group of Australian Aborigines in which 94 men were monogamously married and 58 (or 38.2 per cent) were polygamous. However, 170 of 264 married women lived in polygamous unions, or 64.4 per cent.⁵¹ Under these circumstances, in populations with a balanced adult sex ratio, many adult men would be deprived of spouses. Offensive warfare serves to alleviate this problem: not only may casualties skew the adult sex ratio in favor of women, but military success enables the victors to transfer additional women to their own group. Both mechanisms help reduce the social tensions arising from inequalities in access to mates and foster in-group cohesion and cooperation. Thus, imperial success that renders possible the appropriation

⁴³ Undocumented extramarital fertility is another significant variable: see above, for Pérusse 1993, and below, section 3.1.

⁴⁴ Harpending and Rogers 1990; Boone and Kessler 1999.

⁴⁵ Murdock 1967, 1981. On how to measure polygyny, see Low 1988. Westermarck 1921: 1-51 gives a rich if dated survey of polygamous practices around the globe.

⁴⁶ Altman and Ginat 1996: 482-3 n.7.

⁴⁷ Welch and Glick 1981.

⁴⁸ Foster 1984: 210 (stratification), 151 (Smith).

⁴⁹ Faux and Miller 1984; Mealey 1985.

⁵⁰ Westermarck 1921: 19.

⁵¹ Badock 1991: 133.

of out-group women (either directly by capture or indirectly via the appropriation of mate-attracting resources) simultaneously favors polygyny among the male beneficiaries of this success and reinforces their imperialist motivations.

Polygyny cannot be seen as a single syndrome ‘but is produced by diverse strategies under a range of different conditions and comprises different systems of meaning and function’.⁵² Even so, it is possible to identify the most critical variables underpinning polygynous practices. White and Burton relate the occurrence and intensity of polygyny to warfare for plunder, the taking of (female) captives, and male labor migration.⁵³ In an ambitious study designed to test these and alternative assumptions and to assess the relative importance of different explanatory variables, Bretschneider codes data from 186 societies of the Standard Cross-Cultural Sample (SCCS). While White and Burton maintain that warfare for plunder and the capture of women are positively correlated with levels of polygyny, Bretschneider introduces military success as a further variable, predicting that it would amplify this effect. He also predicts that population size is positively correlated with offensive external warfare, and thus polygyny.⁵⁴ The data strongly support these assumptions.⁵⁵ It deserves notice that in the cluster of warfare/demography predictors, Bretschneider finds no significant correlation between male mortality in warfare or difference in marriage age and polygyny. Hence, it seems that military aggression alone does not favor polygyny: success is an essential ingredient. Although Bretschneider is concerned with multiple marriage – ‘when war for plunder/captives is present and militarily successful, female captives tend to be integrated in the winning society through marriage’ –, the observed correlations can logically be expected to hold for the seizure of territory and resources (as opposed to mere plunder) and the enslavement of women (as opposed to marriage) as well.⁵⁶ In fact, White and Burton regard all conditions which increase access to resources needed for supporting large households as facilitating polygyny; these include expansion into new territory through success in war and migration to unoccupied lands. Bretschneider argues that this argument is supported by the finding that militarily successful war for plunder and captives is a good predictor of polygyny.⁵⁷

White and Burton hold that warfare for plunder increases wealth differentiation among men and thus raises polygyny rates among the wealthy.⁵⁸ They also note that if social differentiation among men is associated with higher levels of polygyny, plunder should increase polygyny even in the absence of captured wives. In apparent contrast, Bretschneider finds that ‘when war for plunder and captives is frequent, wealth differences among men will levelled out, more than a few wealthy men may be able to marry polygynously and a pattern of “general” polygyny is likely to exist’.⁵⁹ These two positions are not as contradictory as it might seem. In small and weakly differentiated – often ‘tribal’ – groups, universal participation in communal warfare will result in widespread polygyny in the event of substantial military success. In highly stratified complex large-scale systems, such as ancient empires, however, participant-beneficiaries are unlikely to constitute more than a fairly small minority of the total population, and strong hierarchical privileges may skew the distribution of resources and captives even further in favor of rulers and elites.

According to a popular view, polygyny may under certain circumstances create household wealth. However, Bretschneider finds little support for the White’s concept of ‘Wealth-Increasing Polygyny’ (or ‘Polygyny with Autonomous Co-Wives’), according to which residential autonomy of multiple wives predicts a polygyny pattern in which the addition of each wife increases the likelihood of the acquisition

⁵² White 1988: 558.

⁵³ White and Burton 1988.

⁵⁴ Bretschneider 1995: 40-1.

⁵⁵ *Ibid.* 121-4; cf. 128.

⁵⁶ *Ibid.* 120-1 (lack of correlation), 124 (quote).

⁵⁷ *Ibid.* 171.

⁵⁸ White and Burton 1988: 875.

⁵⁹ Bretschneider 1995: 124.

of another, given that added co-wives augment wealth.⁶⁰ The other main category, ‘Male Ranked Polygyny with Related Co-Wives’, requires husbands to generate the wealth to support one or more wives, and husbands and wives co-reside.⁶¹ With this type, the requirements are mostly on the husband to attract and support additional wives, and polygyny does not vary positively with female contribution to subsistence. This latter scenario was clearly dominant in ancient imperial societies that practised polygamy.⁶² Moreover, plow agriculture is negatively correlated with polygyny,⁶³ which helps explain why polygyny was more widespread in the African savannah than in the Mediterranean or the Near East, where only the wealthy could afford to adopt this custom. This model does not logically require co-wives to be related (cf. above), nor is it contingent on the existence of formal marital unions: any form of accumulation of dependent women in a household will be ‘male ranked’, i.e., correlated with male status and resources. In important respects, ‘Male Ranked Polygyny’ is equivalent to ‘resource-defense polygyny’, a concept used in the study of animal species in which males monopolize resource-rich sites that attract aggregations of females.⁶⁴

1.5. Ancient empires and Darwinian predictions

The main question is, How do ancient empires conform to the predictions of the primate model of competition over females and/or alienable resources? Imperialism is an extension of intergroup aggression in general, implying a more elaborate and formalised system of operations and control but ultimately serving the same objective. If all groups can be expected to compete for reproductive success, empires differ only in terms of scale. Crudely put, success and attendant power should result in improved reproductive success for those who are heavily invested in the imperialist project. The establishment and exploitation of empires requires a high level of social cooperation and hierarchical stratification. Hence, the reproductive benefits of successful imperialism can be expected to vary with the degree of involvement – de facto or symbolic – of the beneficiaries in the building, maintenance and exploitation of empires.

In highly hierarchical and despotic societies, benefits are most likely to be concentrated at the top. Imperial expansion affects both the size and the complexity of successful states: growth in size favors the creation of new layers of hierarchy which are likely to add to reproductive inequality.⁶⁵ This may create tensions between elite monopolization of resources and sex partners and the need for cooperation in maintaining the imperial system. In these societies, we would expect imperialism to benefit primarily rulers and aristocracy, and secondarily essential maintenance personnel, such as soldiers and officials. We would expect increases in reproductive success to be correlated with the social and political hierarchy, and cultural success to translate directly to inclusive fitness. In hierarchical societies in which the large majority of the population is regularly excluded from political or even military participation, we would expect such benefits to be limited to a relatively small segment of the total population. Under these circumstances, imperial exploitation would tend to increase inequality in reproductive success by privileging groups closely involved in the system, and even within the population of all beneficiaries channel a disproportionately large share of resources and mating opportunities to those at the very top of

⁶⁰ Bretschneider 1995: 177-9; White 1988: 549-50.

⁶¹ White 1988: 550-2.

⁶² This model does not logically require that co-wives are related, nor is it predicated on the existence of formal marital unions.

⁶³ Bretschneider 1995: 171.

⁶⁴ Emlen and Oring 1977. Bretschneider 1992 shows why the two other main concepts of polygyny (‘male dominance polygyny’ and ‘female defense polygyny’) are not applicable to humans. By contrast, his criticism of the ‘polygyny threshold’ model (187-9) merely raises procedural issues.

⁶⁵ Cf., e.g., Betzig 1993: 53.

the social pyramid. All these predictions are corroborated by empirical evidence from ancient Near Eastern empires and comparable political entities from around the world. This correlation between despotism and reproductive inequality will be explored in section 2.

In more egalitarian societies, by contrast, we would expect the concentration of resources and females in elite circles to be attenuated or at the very least concealed in order to promote social cohesion and participation of the citizenry in imperialist activities. Nevertheless, resource inequality would still predict differential reproductive success. In the context of socially imposed monogamy, a characteristic feature of egalitarian societies, differential mating success needs to be achieved by a variety of extramarital mating mechanisms from concubinage to slavery and prostitution. Relevant evidence from the Greco-Roman world will be analysed in section 3.

In sum, I hope to show that in terms of differential reproduction, these two types of ancient empires differ more in style than in substance. Differences in social and political organisation shape the institutions that mediate between cultural and reproductive success: royal and aristocratic harems and lawful polygamy in the Near East, concubinage and chattel slavery in the classical Mediterranean. In each case, however, their ultimate function was the same: to convert imperial power into inclusive fitness.

In humans, owing to singularly protracted childcare, a premium has been placed on post-partum parental investment. As a consequence, female mate choice is governed by the desire to obtain resources from long-term mates, an objective which conflicts with the desire for multiple fertilisation in males.⁶⁶ While it is in the interest of fathers to invest in their offspring, primarily in the context of stable pair-bonds, it is likewise in their interest to maximise reproductive output. We may therefore predict that ideally, human males should seek to have it both ways, that is, to limit the number of children receiving parental investment in accordance with paternal resources, and simultaneously to seek out opportunities for further fertilisation without corresponding long-term investment, enhancing what I propose to call ‘marginal reproductive success’. In this, shifting balances of effort, risk and outcome play a crucial role.

I will argue that mixed strategies along these lines are very much in evidence in the ancient societies under review. These empires developed cultural institutions and legal norms that not only facilitated the sexual exploitation of women but at the same time allowed beneficiaries – above all, high-status men – to strike a balance between lifetime reproductive success (i.e., the desire to maximise offspring quantity) and estate preservation in the interest of inclusive fitness (i.e., the desire to maximise offspring quality, by limiting paternal investment in acknowledged offspring and the number of heirs).⁶⁷ As for the latter, privileged groups have long been known to reduce their marital fertility out of status anxiety, defined as ‘a strong commitment among married couples to the preservation of the material basis for their own high social status and to the transmission of that status to their children’.⁶⁸ Since differential reproductive success regularly co-varies with social status, and heritable wealth facilitates intergenerational status preservation, from an evolutionary perspective ‘strong commitment’ of this kind is only to be expected among high-status families.⁶⁹

Again, the question of conscious motivation does not strictly speaking enter the equation. It would be unnecessary to ask whether Assyrians or Persians or Romans deliberately organised their households or devised laws in ways aiming to maximise their reproductive benefits from imperial success and thus increase inclusive fitness. All that needs to be shown in this context is that such institutions and norms were adaptive in the sense that they successfully mediated between cultural and reproductive success. I

⁶⁶ Buss 1994.

⁶⁷ For cross-cultural correlation of male inheritance bias with polygyny, see Hartung 1982, confirmed by Cowlshaw and Mace 1996: 89.

⁶⁸ Johansson 1987: 463.

⁶⁹ For an earlier discussion of the difference between gene transmission and the social creation of heirs and successors, see Betzig 1993: 57-67.

will show that in the major ancient empires, this was regularly the case. Even apparent constraints, such as Greco-Roman monogamy, can readily be accommodated within this explanatory framework.⁷⁰

2. Despotic empires

2.1. *Despotism and differential reproduction*

As we have seen in section 1.4, the incidence of polygyny is strongly correlated with successful warfare and appropriation of resources. In principle, two basic conditions are necessary for polygyny to arise: females must be ‘economically defendable’, and polygyny is more feasible – and sensible in Darwinian terms – when female sexual cycles are asynchronous.⁷¹ Both conditions are particularly well met in highly stratified human societies. Levels of polygyny vary with population size: in small foraging groups, like the Inuit, good hunters and fighters may gain primary sexual access to two or three women; local leaders, like Yanomamö headmen, to as many as ten; supralocal leaders, like Trobriand chiefs, to as many as a hundred; and heads of complex states, like the Inca, may keep thousands. Dickemann notes ‘the capacity of human groups to control the labor of other, unrelated, individuals allows the development of harem polygyny far beyond the bounds that any individual family, however extended, could support’.⁷² As a consequence, ‘the bigger a polygynist’s harem, the more likely he is to depend on exploitation’.⁷³ This association between hierarchy, despotism and polygyny is very strong in a world sample of 104 politically autonomous societies studied by Betzig.⁷⁴ This linkage is easy to understand in Darwinian terms:

‘Darwinian theory predicts that to the extent that conflicts of interest among individuals are not overridden by common interest, or by an overpowering force, they will be manifested, and they will, ultimately, be reproductively motivated. Where such conflicts exist, men and women are expected to exploit positions of strength in resolving them to their own advantage, and they are expected to turn that advantage to proportionate means to reproduction. *Hierarchical power should predict a biased outcome in conflict resolution,*

⁷⁰ The following analysis of empirical evidence is strictly reductionist; I focus on factors that I consider to be of crucial significance from an evolutionary perspective, and exclude all features and implications that I do not consider essential to my argument. As a result, only men are envisaged as actors pursuing their reproductive goals, while the consequences of their actions for the reproductive success and inclusive fitness of their female mating partners – though of considerable interest in principle (cf., e.g., Hartung 1982; Clutton-Brock 1988: 472-3) – will not receive further consideration; this is one of the topics that would merit attention in a more expansive discussion of my subject. The issue of female mate choice is already subsumed within the standard correlation of cultural and reproductive success; in other scenarios, when non-consensual sexual relations suspend female choice, mate choice has no social force. I focus exclusively on heterosexual relationships: homosexual intercourse has no reproductive potential and is therefore irrelevant in the context of this study. Again, a comprehensive account of sexual exploitation would also need to explore the Darwinian dimension of non-reproductive relations. (Cf., e.g., the finding that in cross-culturally, polygyny is positively correlated with tolerated male homosexuality at certain ages: Cvorovic 2001.)

⁷¹ Dickemann 1979: 173-4.

⁷² Ibid. 174.

⁷³ Betzig 1991: 135.

⁷⁴ Betzig 1986, esp. 94-6, 134-6; 1994: 21 table 1. In Betzig’s 1997b: 400 curt summary, ‘despotism explains differential reproduction’. For an economic model of the correlation between inequality and polygyny, see Grossbard 1980: 329-30. Summers 2005 surveys research on the evolutionary ecology of despotism.

*which should in turn predict size of the winner's harem, for men, a measure of success in reproduction.*⁷⁵

As noted before, the ruling elites will have to strike a balance between their desire to monopolise resources and the necessity to maintain sufficient levels of cooperation. In Betzig's summary, 'exploitation will exist to the extent that subordinates are constrained by ecological benefits, whereas cooperation will exist to the extent that dominants are constrained by social benefits'.⁷⁶ When individuals group to take advantage of high quality territory, differences in fighting ability will emerge as dominance hierarchies, and dominants will be free to extract fitness benefits from subordinates.⁷⁷ Human societies are notable for their division of labour: subordinates raise dominants' fitness directly, as workers but also – or above all – as procurers and defenders of resources (i.e., soldiers and administrators). If a dominant's fitness increases with the mean fitness of the group, then a subordinate's service in resource acquisition or defense should be rewarded accordingly, if not proportionally. Where a subordinate's services are essential and irreplaceable, dominants will be impelled to concede fitness benefits, such as access to resources and mates. In this case, fitness benefits conceded are most likely to translate into reproductive success.⁷⁸ Imperial systems inevitably depend on the participation and collusion of different groups from elite commanders and local mediators/intermediaries (such as local elites) to soldiers and officials. The burden of providing fitness benefits to these varied strata falls on out-groups, both members of ethnic-core populations whose services are less essential for the imperial project and members of subject populations.

In humans, owing to a variety of physiological and social checks (such as concealed ovulation, infertility, the incidence of conception and implantation, miscarriage, and infidelity), even successfully polygynous men are severely constrained in their reproductive success by the fertility of their mates. Thus, regardless of socio-economic status, only men with extensive and well-guarded harems are able to raise their average lifetime fertility beyond a score or so.⁷⁹ For this reason, progressive accumulation and monopolisation of sex partners is bound to pay off in reproductive terms, and cultural and legal institutions that put no numerical limit on the number of women under the control of individual men are therefore most adaptive, but only in so far as inequality in reproductive success does not interfere with the requirement to share resources with subordinates, as noted above.⁸⁰ Here, the exploitation of outsiders rendered feasible by successful imperial expansion offers unique opportunities in reconciling the conflicting goals of accumulation and redistribution of fitness benefits: enabling rulers and nobles to monopolise women on a grand scale, it also leaves room for the rewarding of essential subordinates that is commensurate to the real or perceived value of their contribution.⁸¹

⁷⁵ Betzig 1986: 9 (italics in original).

⁷⁶ Betzig 1994: 28.

⁷⁷ Cf. Vehrencamp 1983, on animals.

⁷⁸ Betzig 1994: 30-1.

⁷⁹ Einon 1998: 423. Moreover, in the absence of substantial extrasomatic wealth and attendant formalised privileges, very high status may adversely affect reproductive success (cf., e.g., Dunbar 1995; Packer *et al.* 1995; Mueller and Mazur 1998). This problem is unlikely to arise in highly stratified complex societies such as premodern empires.

⁸⁰ Cf. also Hartung 1999. Elite focus on access to women characterised by youth and/or physical attractiveness – attributes correlated with high fecundability – enhances the fitness benefits of differential reproduction (on cross-cultural uniformity in standards of beauty, see, e.g., Kenrick and Keefe 1992; Cunningham *et al.* 1995; Singh and Luis 1995; for variation with regard to body mass, cf. Anderson *et al.* 1992). This preference is well attested in the record: see Betzig 1993: 54-6, and below, ***.

⁸¹ Needless to say, the distribution of fitness benefits among subordinates need not be envisaged as the direct allocation of mates. Given the correlation between cultural and reproductive success, access to the material benefits accruing from the exploitation of the resources of empire will ultimately have the same effect.

2.2. Comparative evidence

In her cross-cultural study of despotism and differential reproduction, Betzig attempts ‘to determine how often power has been used to the end of reproduction (...) throughout the course of history and before’. Her subsequent work revisits this issue in considerable detail.⁸² These substantial surveys of pertinent evidence could easily be extended by numerous additional sources. In this context, a few telling instances will suffice.

Dahomey, a powerful African empire of the nineteenth century, is in many ways a typical case.⁸³ The royal harem allegedly consisted of thousands of ‘wives’, constantly replenished by war captives selected by the king. Even allowing for some hyperbole, the genetic consequences of royal privilege were perceived to be considerable: as Herskovits notes concerning the capital, ‘it had seemed as though in the city of Abomey at least, it would be difficult to find Dahomeans who were not descended from royalty’. In general, the reproductive hierarchy paralleled the social hierarchy: village chiefs had more wives and children than commoners.⁸⁴ In the kingdom of Asante, at the end of the nineteenth century, the number of wives in multiple marriages would range from 2 to 1,000. The king himself was credited with 3,333 spouses, a symbolic figure that is nevertheless suggestive of the order of magnitude and of the unquestioned association of cultural with reproductive success.⁸⁵ In 1848, a missionary recounted a tour of the palace of the Asante king: ‘During our progress through the harem, one lady was introduced to us by the king as his favorite wife, his declared standard of estimation being, much to our amusement, the large number of children she had borne him’.⁸⁶ Kings of Uganda and Loango would be credited with 7,000 wives each.⁸⁷ In Yoruba society, concubinage drew on thousands of female slaves. Influential men – landowners and warlords – always had multiple wives, some hundreds; this caused an extremely uneven distribution of the female population in society.⁸⁸ Among the Azande in Nilotic Sudan around 1900, only a minority of men were bigamists, and fewer still married to more than two women. However, village chiefs would boast 30, 40 or 100 wives, and the king more than 500.⁸⁹

The medieval Khmer kings were endowed with five wives and several thousand concubines, the latter subdivided into several classes. Physical attractiveness was noted as a selection criterion.⁹⁰ Elaborate ranking systems of this kind are typical of particularly large and centralistic empires with intensive ruler worship. Under the Western Zhou dynasty in ancient China, the emperor had access to one queen, 3 consorts, 9 wives of second rank, 27 wives of third rank, and 81 concubines.⁹¹ The sexual purpose of this arrangement is thrown into sharp relief by the fact that the court-ladies recorded the menstrual cycle of these women and scheduled their congress with the emperor. In the upper classes, men had only a single principal wife (without the option of remarriage), but the bride would introduce her maids into her husband’s household as his future secondary wives or concubines.⁹² In this case, the nexus between wealth and polygyny and likewise between dependent service and sexual exploitation is crystal-clear. The latter is further underlined by the example of Huan, the Duke of Qi in the seventh century BC, who supposedly established a private brothel with thousands of women in his own palace.⁹³ More power invariably translated into bigger harems. According to the *Ta-lo-fu*, a sex manual of the T’ang period, the

⁸² Betzig 1986: 4. Later work includes 1992b, 1993, 2002, 2005.

⁸³ Herskovits 1938; cf. Betzig 1986: 70-1.

⁸⁴ Herskovits 1938: 45 (harem), 38 (quote), 10 (chiefs).

⁸⁵ Betzig 1986: 75.

⁸⁶ Klein 1981: 207.

⁸⁷ Westermarck 1921: 21.

⁸⁸ Lovejoy 1983: 174-5.

⁸⁹ Betzig 1986: 74.

⁹⁰ Zhou Dagan, *The Customs of Cambodia* 6, in Smithies 2001: 31.

⁹¹ Van Gulick 1974: 17.

⁹² *Ibid.* 20-1. On polygynous concubinage in ancient China, see also Hinsch 2002: 39-40, 85-6.

⁹³ *Ibid.* 65 n.2.

recent restoration and expansion of imperial might had increased the scale of sexual exploitation at the top:

‘Nine ordinary consorts every night, and the Empress two nights at full moon, this was the ancient rule, and the Ladies-in-waiting kept a careful record of this with their vermilion brushes. But at present the women in the seraglio of the Nan-mei Palace, three thousand in number, all together approach the Emperor displaying their charms. Is this not because the bodies of all these myriad women are reserved for this one man?’⁹⁴

Commercial prostitution is traced back to either the seventh or the third centuries BC, coinciding in any event with imperial expansion and the increasing prosperity of a middle class insufficiently wealthy to keep additional women on a permanent basis.⁹⁵ The trickle-down effect of imperial wealth and its impact on sexual behavior is readily discernible behind this development.

In the Inca empire, the Inca’s women were kept in depots scattered across the country. At the age of 8 to 10, large numbers of girls, known as *manacona*, were taken from their places of origin to live and serve in the *aclla huasi*, or ‘Houses of the Chosen Women’. They were reviewed in the capital, Cusco, and divided into various categories according to their social origins, physical attractiveness, and aptitudes. The *yura aclla*, blood-relatives of the Inca, were consecrated to the cult of the Sun, and expected to remain chaste. The next-highest layer was made up of the *huayrur aclla*, the most beautiful girls, from whom the Inca selected his secondary wives. Those virgins passed their time in textile manufacturing and food processing. Once called by the king to serve their reproductive function, they worked in the palace as servants until they were allowed to return home. The *paco aclla* were earmarked for the chiefs whom the Inca wished to reward, while the *yana aclla*, lacking background or beauty, became the servants of the others.⁹⁶

This system is noteworthy for three reasons. First, it highlights with almost brutal clarity the direct connection between political power and reproductive privilege. Second, it provides illustration of the principle that the privileged sought to preserve their status for future generations while maximizing their genetic contribution to the next generation: whereas the queen, usually a close relative (sometimes even a sister) of the king, produced legitimate heirs, and the children of concubines related to him up to the fourth degree enjoyed special privileges, all other concubines produced bastards following the status of their mothers. Thus, status privileges and hence material resources were reserved for a minority within the Inca’s offspring. And third, the graded redistribution of *paco aclla* among different strata of the elite exemplifies the need of rulers to bestow fitness benefits upon essential subordinates in accordance with their contribution to the management of the exploitative structure. In 1613, Felipe Guaman de Ayala reported that under the Incas, principal nobles had been allotted 50 women each; leaders of vassal nations had been allowed 30; provincial governors, 20; lower-level chiefs (depending on the number of their subordinates), from 3 to 15.⁹⁷

The contemporaneous Aztec empire generated similar modes of sexual exploitation and hierarchies of reproductive privilege: while royal harems reputedly contained thousands of women and top aristocrats accumulated hundreds of concubines, lesser nobles had to make do with correspondingly fewer consorts. Not surprisingly, several Aztec emperors were credited with over 100 children each.⁹⁸ Provincial tributes included young women to be impregnated by elite males, and imperial revenue enabled the state to provide wetnurses who took care of the offspring of nobles for the first five years of

⁹⁴ Quoted *ibid.* 206.

⁹⁵ *Ibid.* 65.

⁹⁶ Garcilasco de la Vega 1871: 297-301; Rostworowski de Diez Canseco 1999: 176.

⁹⁷ Betzig 1986: 77.

⁹⁸ *Ibid.* 42, 46.

life.⁹⁹ Later on, a Franciscan observer would claim that ‘since the lords and chiefs stole all the women for themselves, an ordinary Indian could scarcely find a woman when he wished to marry’.¹⁰⁰

Fitness benefits usually bunched at the very top. Ismail the Bloodthirsty, king of Morocco (b. 1672, d. 1727), is reputed to have fathered at least 888 children. This total may seem hard to believe, since in 40 years of reproductive history, owing to the various physiological constraints noted above, Ismail is unlikely to have been responsible for more than 200 to 400 live births.¹⁰¹ This calculation also casts doubt on the claim that the Nizam of Hyderabad became father 4 times in the space of 8 days, with 9 more expected the following week.¹⁰² Nevertheless, there can be no doubt that large harems provided unique mating prospects for individual men. Dickemann observes that ‘given nine-month pregnancies and two- to three-year lactations, it is not inconceivable that a hardworking Emperor might manage to service a thousand women’.¹⁰³ Islam allows 4 legitimate wives but puts no limit on the number of concubines. Consequently, the caliph Al-Mutawakkil (847-61) could be credited with 4,000 concubines and the emir Abd Ar-Rahman II (822-852) with 6,300. Ottoman harems are said to have ranged from 200 to 1,200.¹⁰⁴ I have already referred to some comparable African examples. Sources from India from the fifth century BC to the sixteenth century AD talk of royal harems holding up to 12,000 or 16,000 women.¹⁰⁵ In all these cases, even if concubines were put to economically productive work, they were more likely to be a drain on resources than profitable assets, especially since they had to be maintained in some style.¹⁰⁶ Moreover, claustration was deemed necessary to ensure paternity.¹⁰⁷

It is worth noting that despotic polygyny is not exclusively confined to highly stratified societies of a relatively remote past. By the early 1990s, the North Korean dictator Kim Il-sung and his son and successor Kim Jong-il had reputedly acquired around 100 mansions and villas. These residences hosted the so-called ‘Mansion Special Volunteer Corps’, a retinue of young women selected for their physical attributes. Supposedly numbering in the thousands, these women were organized in the *kippeunjo* (‘Happy Corps’), comprised of actresses and singers, and the *manjokjo* (‘Satisfaction Corps’) and *haengbokjo* (‘Felicity Corps’), which were more straightforwardly charged with the provision of sexual favors. A special party unit was said to scour schools all over the country for beautiful girls and persuade parents to volunteer their daughters’ services. Officials might offer up potential concubines as gifts to their supreme leaders. Women were discharged after their early twenties. In addition, the *kwabu-jo*, a corps division made up of attractive widows, was established to extend sexual services to senior associates of the regime.¹⁰⁸

A recent survey of Y-chromosomal DNA in 16 contemporary Central Asian populations provides the most dramatic example to date of the covariance of political power and reproductive success. About 8 per cent of all men in this region (equivalent to 0.5 per cent of the current world population) belong to a Y-chromosome lineage that originated in Mongolia approximately one millennium ago and can plausibly be linked to the paternal ancestors of Genghis Khan (b. c.1162, d. 1227), a ruler who established control over a vast territory stretching from the Caspian Sea to the Pacific Coast. This is consistent with historical references to massive predatory polygyny at Genghis’ court and those of his male-line descendants

⁹⁹ Durán 1952: 131; Padden 1967: 20. Cf. Carrasco 1999: 203 for another example of elite reproductive privilege in the Aztec empire.

¹⁰⁰ Motolinía 1951: 202.

¹⁰¹ Thus Einon 1998. But cf. Gould 2000.

¹⁰² Cooper 1916: 158.

¹⁰³ Dickemann 1979: 175-6.

¹⁰⁴ Ibid. 175.

¹⁰⁵ Summarized by Betzig 1993: 41.

¹⁰⁶ For a good example of this principle, see Joshi 1995: 38-9, on the multiple wives of the Rajputs, an Indian warrior caste, who not only did not work at all but also required attendance.

¹⁰⁷ Betzig 1986: 78-82 and 1993: 48-52.

¹⁰⁸ Martin 2004: 196-201.

(known as the ‘Golden Family’) who continued to dominate the region for generations.¹⁰⁹ In addition, an analogous study discovered another unusually common Y-chromosomal lineage in northeastern China and Mongolia which may arguably be associated with the Manchu Qing dynasty that ruled China from 1644 to 1912.¹¹⁰ These, however, are merely the most extreme instances of a broader trend that has repeatedly been documented in studies of Y-chromosomal and mitochondrial patterns in present populations: for instance, it can now be shown that while the majority of male Icelanders descend from Scandinavian settlers, the majority of Icelandic women have Gaelic ancestry, which reflects the privileged access to the women of medieval Ireland enjoyed by Viking raiders and conquerors. Similarly, in the same period, successive waves of male invaders from Germany and Scandinavia created new Y-chromosomal lineages in the most affected parts of Britain that reduced the odds of genetic survival of the indigenous male population.¹¹¹ Sex-specific surveys of genetic descent thus confirm the premise that on average, males experience greater variance in reproductive success (i.e., inclusive fitness) than women, and allows us to link this phenomenon to competition over power and resources.

2.3. *Ancient Near Eastern empires*

2.3.1. *Mesopotamia, Syria and Palestine*

The major complex societies of the Fertile Crescent and Iran fit the same mould. Owing to the vagaries of source preservation, some of the most detailed and evocative evidence comes from two of the lesser powers in the region. The archive of king Zimri-Lim of Mari reveals that next to his principal queen, the ruler had several secondary wives (one for each of his five palaces) as well as numerous concubines, who shared common quarters separated from the regular wives. Many of the latter appear to have been of foreign origin, particularly war-captives. In a letter to his principal queen, Zimri-Lim asked her to select new women for his harem: ‘choose thirty female-weavers – or however many who are choice and attractive, who from their toe nails to the hair of their heads have no blemish’. Having changed his mind, he announced in a subsequent missive that he himself was going to pick the right ‘girls for the veil’.¹¹² As Lerner aptly notes, ‘the wife’s cooperation in the matter is taken for granted, and her husband’s sexual use of the captive women (...) is assumed as a routine matter’.¹¹³ Other letters show that ‘singers’ served as ‘girl-friends’ of the king, competing with his queen for his attention. The scale of royal polygyny appears to have been a function of the kingdom’s power: thus, the number of palace women rose from 44 under Yasmah-Addu to 232 under Zimri-Lim, in part thanks to human booty from the conquest of the city of Kahat.¹¹⁴

A few centuries later, in the kingdom of Arrapha, the kings maintained palaces in several cities. For the palace in Zizza, 31 and 35 concubines are attested, while as many as 48 may have present at one point.¹¹⁵ Further harems are known from the capital, Nuzi, and the city of Anzukur. At Nuzi, one prince is known to have kept a principal wife plus 7 to 9 further women in one household and 2 to 4 in another, several of them together with their children. Private citizens, by contrast, would have a second

¹⁰⁹ Zerja *et al.* 2003. For the context, see, e.g., Sailor 2003.

¹¹⁰ Xue *et al.* 2005. At least 1.6 million men belong to this group. Note that by the beginning of the twentieth century, the officially recognized Qing nobility alone had grown to over 80,000 members.

¹¹¹ Helgason *et al.* 2000 (Iceland); Capelli *et al.* 2003 (Britain).

¹¹² Batto 1974: 21-8.

¹¹³ Lerner 1986: 71.

¹¹⁴ Stol 1995: 135. On the harem at Mari, see Durand and Margueron 1980; cf. also Durand 1985. Despite some reservations against the application of the Arabic term ‘harem’ to ancient Near Eastern societies, especially regarding the implied severity of female (Westenholz 1990: 513-6), there can be little doubt about the existence of the institution as such. Cf. also Lesko and Ward in Lesko, ed. 1989: 44-5 (on Egypt).

¹¹⁵ Mayer 1978: 112.

wife only if they could afford to do so.¹¹⁶ Unfortunately, nothing seems to be known about the mating opportunities of soldiers and bureaucrats.

Resource polygyny can be traced back to Sumerian culture. That there is no evidence of harems in Pre-Sargonic Sumer but only from the Ur III period onwards highlights the correlation between imperial expansion and the accumulation of women in the hands of the powerful.¹¹⁷ For the Ur III empire, many royal consorts are known by name. While the legal texts of that period know only of monogamous relationships, terms for secondary wives and concubines are attested in literary texts, pointing to more varied social practice, presumably in elite circles.¹¹⁸ The law already recognised the possibility that a slave woman could lawfully be raised to the status of wife.¹¹⁹ Informal sexual relations with slave women – slavery had become widespread in the Ur III period¹²⁰ – are not mentioned in these texts: we may assume that they were of no relevance in a legal context. Sexual access to slave women had been an unquestioned prerogative of their owners since from the very beginning.¹²¹

Harem-like institutions are repeatedly attested in Mesopotamian sources.¹²² Unfortunately, a group of Middle Assyrian documents known as ‘harem edicts’ are badly broken.¹²³ Harem size was sensitive to military success and imperial expansion. In the twelfth century BC, king Shilhak-Inshushinak of Elam, having taken the city of Karindash, proclaimed that ‘all the descendants of the king of Karindash, his wives, concubines and relatives were rounded up and taken into exile’. In 671 BC, following the conquest of Egypt, the Assyrian king Asarhaddon transferred the harem of the Ethiopian king Taharka to Assyria.¹²⁴ Similar activities were attributed to Pharaohs and Persian kings (see below, sections 2.3.2-3).

The Old Testament highlights the same link between imperial growth and royal polygyny. In a long line of biblical characters, beginning with Abraham, his wife Sarah and her maid Hagar in *Genesis* 16, parallel relationships are invariably attributed to men in leadership positions.¹²⁵ In fact, the biblical tradition traces a gradual upscaling process parallel to increasing stratification, from moderately promiscuous patriarchs to more polygynous judges and on to kings with their substantial harems. Monarchs in particular were thought to have operated on a novel scale: *Deuteronomy* 17.14, 17 warns the Israelites that a king might take too many wives (and amass too much gold and silver). David, even when his authority was limited to Hebron, had six wives, and later added others; the sources grant him eight named wives and additional unknown ones, plus concubines.¹²⁶ Solomon supposedly accumulated a huge harem of 700 wives and 300 concubines.¹²⁷ This expansion was clearly imagined to have been a function of imperial success: ‘now king Solomon loved many foreign women, together with the daughter of Pharaoh, women of the Moabites, Ammonites, Edomites, Sidonians, and Hittites’.¹²⁸ The 18 wives and 60 concubines of Rehoboam, Solomon’s less powerful son, – responsible for 28 sons and 60 daughters –

¹¹⁶ Morrisson in Lesko, ed. 1989: 183.

¹¹⁷ Cf. Stol 1995: 135.

¹¹⁸ Neumann 1987: 132, 135.

¹¹⁹ *Codex Urnammu* 25-6; Neumann 1987: 135-7.

¹²⁰ Siegel 1947.

¹²¹ Cf. Lerner 1986: 76-100.

¹²² See Seibert 1974: 41-51, on women in palaces, especially 41-4 and 50-1 on ‘harems’. Cf. above, n.**.

¹²³ Stol 1995: 135 and n.83.

¹²⁴ Seibert 1974: 50-1.

¹²⁵ Hamilton 1992: 565 and Betzig 2005, with reference to Esau (three wives and five sons: *Genesis* 26.34, 28.9, 36.2), Jacob (two wives, two maids and 12 sons: *Genesis* 29.15-30, 35.22-6), Gideon (many wives and 70 sons: *Judges* 8.30-1), Jair (30 sons: *Judges* 10.4), Ibzan (30 sons and 30 daughters: *Judges* 12.9), Abdon (40 sons and 30 daughters: *Judges* 12.14).

¹²⁶ 1 *Samuel* 18.17-30, 25.38-43; 2 *Samuel* 3.2-5, 5.13. For concubines, see 2 *Samuel* 5.13, 16. 20 of his children are known by name: 2 *Samuel* 5.13-16; 1 *Chronicles* 3.5-9, 14.3-7.

¹²⁷ 1 *Kings* 3.1, 11.3; *Proverbs* 31.10; *Ecclesiastes* 2.8.

¹²⁸ 1 *Kings* 11.1.

seem modest in comparison.¹²⁹ In this context, the historical reliability of these passages is of secondary importance: what matters here is that the biblical tradition faithfully mirrors the Near Eastern model of royal polygyny and the almost mechanical quantitative correlation between power, resources, and reproductive success. Religious language cast royal polygyny as a divine reward that could be as easily withdrawn as it had been bestowed: ‘I anointed you king over Israel, (...) and I gave you (...) your master’s wives into your bosom. (...) I will take your wives before your eyes, and give them to your neighbor, and he shall lie with your wives in the sight of this sun’.¹³⁰

Among commoners, polygamous relationships were the subject of several Old Babylonian marriage contracts.¹³¹ On these occasions, however, we never find more than two women involved.¹³² The *Codex Hammurabi* protected a wife against a second co-wife, and the latter was only to be accepted if the former proved barren, while still considered inferior.¹³³ Otherwise, in the absence of special circumstances (such as infertility, sickness or misconduct of the first wife), the existing wife first had to agree to the second union. The sources reflect multiple status differentiation, between wives and slave concubines, or between a slave-wife as second wife and a slave concubine in lieu of a second wife.¹³⁴ Slave women may have been encouraged to establish sexual relations with their owners by stipulations of the *Codex Hammurabi* providing for their freedom along with that of their children upon the owner’s death. However, such children needed to be adopted first.¹³⁵

In Assyrian law, by contrast, the wife had no explicit rights vis-à-vis her husband: only the wife was capable of committing adultery, never the husband.¹³⁶ Wives were not entitled to inherit from their husbands.¹³⁷ Slave women were sharply differentiated from proper wives: in public, wives were veiled, which was strictly forbidden to slaves.¹³⁸ Concubines were often chosen from slaves.¹³⁹ It has been suggested that the term for concubine, *esirtu*, is etymologically derived from the term for ‘captive woman’.¹⁴⁰ Attitudes to polygyny appear to have changed over time, in step with growing imperial success: while Old Assyrian marriage contracts occasionally envisage the possibility of a second wife only to rule it out, Middle Assyrian law considers the presence of two wives normal practice, one ‘in front’ and one ‘behind’.¹⁴¹ Later on, Assyrian merchants active in Kanesh in Anatolia were allowed to take local women – so-called ‘slave girls’ – as secondary wives while their regular wives stayed at home.¹⁴² This provision affords us an all too rare glimpse of the fringe benefits of imperial success for subordinates: as members of the dominant group, Assyrian merchants commanded the clout or resources

¹²⁹ 2 *Chronicles* 11.21. His own son Abijah had to make do with 14 wives, 22 sons and 16 daughters: 2 *Chronicles* 13.21.

¹³⁰ God to David in 2 Samuel 12.7-8, 11, highlighted by Betzig 2005.

¹³¹ Westbrook 1988: 103-11.

¹³² Ibid. 103; Seibert 1974: 16; Wilcke 1984.

¹³³ Korosec 1938: 281, 284.

¹³⁴ Westbrook 1988: 109, 111.

¹³⁵ Seibert 1974: 16-17, 21; Saggs 1995: 106.

¹³⁶ Korosec 1938: 287, 290.

¹³⁷ Driver and Miles 1935: 135.

¹³⁸ On veiling, see *ibid.* 126-34. Veiled slave women had their ears cut off: *ibid.* 131, 409.

¹³⁹ Contenau 1954: 18.

¹⁴⁰ Driver and Miles 1935: 127-8, 479.

¹⁴¹ Stol 1995: 130 and n.42-3 (Old Assyrian), 129 (Middle Assyrian). See Driver and Miles 1935: 232-3, for the interpretation of the term *urkittu* as second wife in terms of rank, not in time. It deserves notice that the Assyrian practice of mass deportations of defeated populations appears to have had little to do with this: although deportees may have run into several millions (Oded 1979: 19-22), they were often skilled men or complete families rather than unattached women (*ibid.* 22-5). Technically the property of the king, captives were distributed among civilian officials and soldiers (*ibid.* 111-4), though apparently primarily as labourers. The fact that deportees were not classified as slaves may be of crucial importance here (*ibid.* 85): one might speculate that women who had lost their husbands were enslaved and transferred separately; these women could then be turned into concubines.

¹⁴² Neumann 1987: 136-7; Stol 1995: 129-30.

to acquire mates from among less privileged populations in peripheral regions. In this way, mating opportunities were transferred from the male population of these areas to the Assyrian visitors. We will come across similar mechanisms in the case of Greek colonists and Roman soldiers (see below, section 3).

In her study of Neo-Babylonian marriage contracts, Roth finds that the introduction of a second wife was repeatedly deemed a cause for divorce. Even so, the presence of a co-wife did not always result in the dissolution of the previous union: in one case, in keeping with the tradition set by the *Codex Hammurabi* (see above), a married but childless man was allowed to take a second wife. Outside the sphere of formal unions, married men had considerably more leeway. These marriage contracts contain no adultery clauses for husbands, only for wives.¹⁴³ In this period, cohabitation of a married man with a slave woman was acceptable as long as it did not reduce the share of property inherited by the wife. The owner's children with a slave woman, unless adopted, remained slaves. Thus, no legal obligations arose from sexual relations with one's own slaves. Many slave women were either hired out to brothels or to individuals as personal concubines.¹⁴⁴ Brothels were known as 'the place where they know slave women'. Documented pay scales allow us to gauge the socio-economic status of the patrons. Rent for a slave concubine amounted to 18 liters of barley per day, a considerable outlay compared to the daily remuneration of an adult worker of 6 liters. A monthly fee of 10 shekels of silver would have been forbiddingly high for an adult worker with an annual income of 12 shekels. The leasing of concubines was clearly an upper-class pleasure.¹⁴⁵ Once more, resource polygyny was a correlate of wealth and status. We can only speculate that Persian domination may have reduced the ability of Babylonians to acquire surplus women, thereby driving up the cost of polygyny.

2.3.2. Egypt

In Egypt, most of the evidence of resource polygyny dates from the period of imperial expansion during the New Kingdom. Royal polygamy is only attested from the New Kingdom onwards, but may of course have existed before. In that period, the consorts of the Pharaoh were divided into the 'principal wife' and the supplementary 'king's wives', the latter differentiated into royal and non-royal spouses.¹⁴⁶ Again, imperial success promoted polygyny. The practice of diplomatic marriages with foreign noblewomen peaked in the New Kingdom: thus, in addition to his principal wife, Amenophis III kept two princesses from Syria, two from Babylonia, one from Arzawa and two from Mitanni (one of the last two having being accompanied by no fewer than 317 ladies-in-waiting).¹⁴⁷ Amenophis II brought from Palestine to Egypt 232 sons but 323 daughters of princes, plus 270 female court singers.¹⁴⁸ In an extant letter, Amenophis III informed a vassal prince in Palestine that he had dispatched an officer 'to fetch beautiful women' for the pharaonic court, urging him to 'send very beautiful women, but none with shrill voices'.¹⁴⁹ The most conspicuous case by far is that of Ramses II, who is known to have fathered approximately 90 sons and daughters.¹⁵⁰ However, the recent discovery of the labyrinthine tombs of the

¹⁴³ Roth 1989: 12, 41-2, 15.

¹⁴⁴ Dandamaev 1984: 133, 411. For examples of lease contracts, see 134-5.

¹⁴⁵ Ibid. 135 and n.73. For comparable leases in ancient China, see above, section 2.2.

¹⁴⁶ Robins 1993: 27.

¹⁴⁷ Redford 1984: 36, 134. See more generally Robins 1993: 30-6.

¹⁴⁸ Seibert 1974: 51.

¹⁴⁹ Redford 1984: 36-7. For similar transfers, see above, section 2.3.1, and below, 2.3.3.

¹⁵⁰ Kitchen 1982: 252, listed in Gauthier 1914: 80-113; for discussion, see Kitchen 97-112.

sons of Ramses may raise this tally even further. The royal women were housed in harems, an institution attested since the Old Kingdom.¹⁵¹

The spread of polygyny beneath the royal level is difficult to determine. Many documents are ambiguous, making it hard to decide whether multiple wives associated with individual men were held simultaneously or serially. Pertinent evidence is available from the Old Kingdom onwards.¹⁵² In a survey of 12 cases from the Middle Kingdom, one scholar concludes that ‘it is likely that we should recognize the limited existence of polygamy in the official classes of the Middle Kingdom’.¹⁵³ Although some of these wives may have been partners in consecutive monogamous unions, examples such as the tomb of Mery-‘aa from the First Intermediate Period which identifies his six wives make it hard to accept that this interpretation should always be preferable to the view that some unions were in fact polygamous in nature.¹⁵⁴ Robins cautiously suggests that ‘it seems possible that among the elite at least, the taking of more than one wife may have occurred but was not particularly common’.¹⁵⁵ Commoners, as usual, must ordinarily have been monogamous.¹⁵⁶

In any event, formal polygamy was not the only option. Though concubines are difficult to identify terminologically, they undoubtedly existed in upper-class circles.¹⁵⁷ In some tomb chapels of the Eighteenth Dynasty, children appear who were borne by women other than the wife. Slave women were available for sexual relations. In one text, a son specifically asserts that he did not have sexual intercourse with the female servants of his father; it appears to have been his respect for the prerogatives of his father that made his restraint noteworthy. Even in the absence of clear-cut evidence, it seems plausible to conclude that illegitimate children arising from such unions did not normally inherit.¹⁵⁸

2.3.3. Persia

The Persian empire of the Achaemenid dynasty (sixth to fourth centuries BC) exceeded all previous Near Eastern empires in terms of size and power (see above, Chapter 3). In later centuries, the Parthian Arsacid dynasty (third century BC to third centuries AD) and the Persian Sasanid dynasty (third to seventh centuries AD) managed to maintain significantly smaller but nevertheless far-flung supra-ethnic polities. These three successive ‘Persian empires’ (not counting the interlude of the Macedonian-run Seleucid kingdom) provide ample evidence of the traditional correlation between imperialism, despotism and differential reproduction. Cultural institutions favored polygyny: Mazdean (‘Zoroastrian’) religion was not opposed to multiple marriage or concubinage.¹⁵⁹ Late Pahlavi texts picture polygynous elite households, ‘great houses bustling with women and fast chariots, with spread-out rugs and piled-up cushion heaps’.¹⁶⁰ According to *Yasht* 17.10, ‘the women are sitting on the lovely couch with the cushions; they adorn themselves with clips, with square ear-rings and a necklace decorated with gold: “When will the master come to us? When will we have the pleasure of experiencing love with our bodies?”’¹⁶¹ Late traditions even credited Zardusht/Zoroaster himself with three wives.¹⁶²

¹⁵¹ Reiser 1972; Seipel 1977; Robins 1993: 39-41; Tyldesley 1995: 179-207 (with a dutiful critique of modern projections of images of the Ottoman harem onto Pharaonic Egypt: 179-80; as noted above, n.***, and below, n.**, arguments of this kind are missing the point).

¹⁵² Kanawati 1976.

¹⁵³ Simpson 1974: 104.

¹⁵⁴ Ibid. 100-1. Cf. Tyldesley 1995: 49-50.

¹⁵⁵ Robins 1993: 65.

¹⁵⁶ Allam 1975: 1167.

¹⁵⁷ Robins 1993: 61-2. See Manniche 1987: 21, for a governor with concubines and their children.

¹⁵⁸ Robins 1993: 65-7.

¹⁵⁹ E.g., Mazahéri 1938: 133-43.

¹⁶⁰ *Yasht* 10.30; Schwartz 1985: 656.

¹⁶¹ Seibert 1974: 43.

The polygynous marriage and mating customs of the Achaemenid kings are particularly well attested.¹⁶³ The multiple marriages of Dareios' I may primarily have served political purposes.¹⁶⁴ Later on, Artaxerxes I had 17 sons, 5 of whom are known by name; we also know the names of his queen and of three secondary wives.¹⁶⁵ Artaxerxes II was credited with no fewer than 115 sons by concubines in addition to his three legitimate sons.¹⁶⁶ Artaxerxes III was said to have killed 50 or 80 of his brothers when his father died.¹⁶⁷ According to various Greek authors, large numbers of concubines lived at the royal court, supposedly running into hundreds.¹⁶⁸ The sexual component of their duties was no secret: described as the most beautiful women of Asia, they participated in feasts and hunts, and guarded the king's sleep at night. According to one source, every night the king chose one of them as his consort.¹⁶⁹ These harems were considered considerable assets and physical proximity was valued: thus, after Dareios's III defeat at Issos, Alexander was able to capture large numbers of royal women who had accompanied the king on his campaign.¹⁷⁰ Similar retinues are attested for Sasanian kings: Odaenathus of Palmyra was said to have captured the 'concubines' of Shapur, and Galerius the 'wives' of Narses.¹⁷¹

Briant and Brosius argue that many of these women, of foreign descent but apparently of high social rank, had been captured during military campaigns and transferred to the palaces.¹⁷² After the defeat of the Ionian uprising, 'the most beautiful girls were dragged from their homes and sent to Dareios's court'.¹⁷³ What might otherwise be dismissed as Greek fabrication is corroborated by a report in a Babylonian chronicle that after the sack of Sidon in 345/44 BC, Artaxerxes III transferred to Babylon large numbers of captive women, who 'entered the palace of the king'.¹⁷⁴ The romantic tale of Esther, set under Xerxes I, is also premised on the notion that imperial power and despotism translates to reproductive opportunities:

'Let beautiful virgins be selected for the king, and let the king appoint commissioners in all the provinces of his kingdom to gather together every beautiful young virgin to the acropolis of Susa, to the house of the women under the authority of Hegai, the king's eunuch who is in charge of the women; and let him give them their beauty treatment.' (*Esther* 2.2-3)

While this may seem like a fairy-tale out of *The Thousand and One Nights*, Briant reminds us of the equivalent practice of the Chinese Tang emperors to levy tribute in the form of young women and have attractive candidates gathered by their agents throughout the empire.¹⁷⁵ The collection of *manacona* in the Inca empire provides another parallel (see above, section 2.2). The correlation between harem size and imperial power still obtained in the late Sasanian period: Xusraw II, arguably the wealthiest Sasanid king,

¹⁶² Klima 1966: 567-8.

¹⁶³ Briant 1996: 289-97; Brosius 1996: 36-7.

¹⁶⁴ Briant 1996: 144-5.

¹⁶⁵ Prásek 1910: 171; Ktesias 44.

¹⁶⁶ Prásek 1910: 217; Justin 10.1.1; Curtius Rufus 10.5.23.

¹⁶⁷ Prásek 1910: 220; Justin 10.3; Curtius Rufus 10.5.23.

¹⁶⁸ The attested numbers may well be symbolic: 300 (Heracleides *FGrHist* 689 F 1) or 360 (Deinon *FGrHist* 690 F 27; Diodorus Siculus 17.77.5; Curtius Rufus 3.3.24, 6.6.8; Plutarch, *Artaxerxes* 27.1; Dikaiarchos *FHG* II p. 240 F 18, in Athenaios 13.557b). Briant 1996: 292 defends the tally of 360 with reference to the calendar of 360 days (plus 5 intercalated days) then in use in Persia. Parmenion was said to have captured 329 royal concubines (Athenaios 13.608a). On the controversy over the location of the harem at Persepolis, see Brosius 1996: 31. For a critical discussion of female claustration in this context, see Briant 1996: 295-7.

¹⁶⁹ Diodorus Siculus 17.77.7. Briant 1996: 294-5 discusses the sex lives of the Persian kings.

¹⁷⁰ Arrian 2.12.3-8; Curtius Rufus 3.13.12-4.

¹⁷¹ *Historia Augusta*, Valerian 7; Eutropius 9.25. Cf. below, on Surenas.

¹⁷² Briant 1996: 290-1; Brosius 1996: 32.

¹⁷³ Herodotus 6.32.

¹⁷⁴ Briant 1996: 291.

¹⁷⁵ Briant 1996: 291-2.

could be credited with 12,000 women or, alternatively, with 3,000 concubines and thousands of female servants and musicians.¹⁷⁶ The historical tradition also reflects the considerable demand for eunuchs created by huge royal harems. Thus, 500 castrated boys were reportedly included in Babylonia's annual tribute to the early Achaemenid court.¹⁷⁷ At the end of fifth century BC, when the rebellious city of Calchedon on the Bosphorus was punished by mass castration of the local boys, the victims were subsequently sent to king Dareios II.¹⁷⁸

From the Achaemenid to the Sasanian periods, polygyny was practised on a proportionately smaller scale among the ruling elites. According to Herodotus, 'every man has a number of wives, and a much greater number of concubines', a claim later echoed by Strabo concerning the Parthians, who 'marry many wives and keep at the same time a number of concubines, for the sake of having many children'.¹⁷⁹ While this scenario of universal polygyny cannot be taken at face value, it may well be representative of privileged members of Iranian society.¹⁸⁰ Persian nobles, especially satraps, imitated royal polygynous custom.¹⁸¹ Surenas, the victor of Carrhae, was said to have been accompanied by 200 carts for his concubines.¹⁸² Most of the evidence comes from the Sasanian period. Ammianus offers a slightly less indiscriminate account: while the Persians of his day had numerous concubines, they contracted few or many marriages 'according to their means' (Amm. 23.6.76).¹⁸³ In reality, resource inequality must have prevented most Persians from establishing polygynous households. The critical variable of wealth appears to be alluded to in a passage in the *Frahang i Oim*, envisaging someone 'with a co-wife, he who has a fortune'.¹⁸⁴ Only Sasanian nobles were probably regularly polygamous,¹⁸⁵ even keeping their own harems (*shabestan*). Technically, polygamy was legal in the Sasanid period.¹⁸⁶ Sasanian law reckons with one or two principal wives (the latter in separate households) and secondary wives.¹⁸⁷ As usual, only the principal wife or wives and their children could inherit. The lesser co-wives included slaves and war captives. This nexus between military success and polygyny is already in evidence in the Achaemenid period: a woman from Kos who defected to the Greeks after the Persian defeat at Plataea had reportedly been turned 'by force' into the concubine of the Persian noble Pherendates, and the Persian Autophradates was said to have acquired a Macedonian woman in a similar way.¹⁸⁸

Literary critics and cultural historians weaned on deconstructions of 'othering' and diatribes against the perils of 'orientalism' will be skeptical of my ostensibly uncritical use of Greek references to Persian polygyny as evidence for social history. It is true that the archetypal motif of the woman-grabbing

¹⁷⁶ Klima 1957: 104.

¹⁷⁷ Herodotus 3.92.1.

¹⁷⁸ Arrian *FGrHist* 156 F 79-80 as interpreted by Bosworth 1997 (esp. 300).

¹⁷⁹ Herodotus 1.135; Strabo 15.3.17.

¹⁸⁰ Brosius 1996: 64 n.39 notes that we know very little about non-royal marriages in Achaemenid Persia from primary sources. Hence, the absence of polygamy in these texts cannot be used as an *argumentum e silentio*.

¹⁸¹ For examples, see Herodotus 9.76.1; Xenophon, *Hellenica* 3.1.10; Plutarch, *Themistocles* 31.2. For satrapial courts as copies of the royal court, see Briant 1996: 357-9.

¹⁸² Plutarch, *Crassus* 21. See Brosius 1996: 89-90 for further references (Herodotus 7.83.2, 9.76.1; Xenophon, *Anabasis* 1.10.2; Aelianus, *Miscellaneous Histories* 12.1). Plutarch, *Themistocles* 26 refers to a particular type of closed vehicle used by Persians to move their wives and concubines, who were otherwise locked up at home.

¹⁸³ Ammianus 23.6.76.

¹⁸⁴ Klima 1966: 567.

¹⁸⁵ Mazahéri 1938: 135; Klima 1966: 567.

¹⁸⁶ E.g., Klima 1966: 567-8; Perikhanian 1983: 647. In Christensen's 1944: 322 somewhat sweeping summary, 'la famille était fondée sur la polygamie'.

¹⁸⁷ Klima 1957: 95. The later law code *Madigan i Hazar i Dadestan* refers to bigamy with two fully legitimate (and presumably equal) wives (*padixshayiha*): Klima 1966: 567. Christensen 1944: 323 points out that we do not know how many principal wives a man could have; two is the minimum.

¹⁸⁸ Herodotus 9.76; Plutarch, *Moralia* 339a.

enemy goes well with the caricature of debauched despots surrounded by harems and slavish courtiers. These features are indeed familiar ingredients of the ‘orientalist’ vision, which can be traced back to Ktesias and his tales about the Achaemenid court.¹⁸⁹ As I will show below (section 3), for the Greeks of the classical period not only despotism but also polygyny were marks of the ‘barbarian’. According to a recent critic, the Roman literary tradition of the Parthians – aligned with the Medes/Persians of the Greek sources – constructed the Orient as a ‘märchenhafte Gegenwelt’, pervaded by oriental despotism, fabulous wealth, extravagant luxury, effeminate lifestyle and unbridled sexuality, as expressed in polygamy.¹⁹⁰ And indeed, we would be ill-advised to accept any of the passages of classical literature referred to above as unbiased or reliable. Likewise, it does not matter that the ancient tradition is consistent over space and time: after all, this might simply reflect the persistence of successful clichés. What does matter, however, is the match between the Greco-Roman sources and primary Near Eastern evidence on the one hand (section 2.3.1-2), and between the former and comparative evidence from other despotic empires on the other (section 2.2). These convergences suggest that significant structural properties of the putative oriental counter-world constructed by Mediterranean authors coincide far too closely with information transmitted from within these and comparable societies to have been ‘constructed’ from scratch or distorted beyond recognition.¹⁹¹ Rather, Greek and Roman authors are likely to have situated their accounts within a real-world framework of Near Eastern despotism, rigid hierarchy and social stratification, and concentration of material and sexual resources at the top of the social pyramid, which could then be embellished for increased entertainment value and harvested for moralizing or xenophobic value judgements.¹⁹² Therefore, ‘outside’ literary references to differential reproduction in the Persian empires are of illustrative value in as much as they are compatible with independent ‘inside’ evidence, even if individual episodes or details are distorted or invented.

Incidentally, the Sasanian evidence casts light on the social tensions associated with reproductive inequality. It seems that despite the ongoing appropriation of foreign women, elite polygyny skewed reproductive opportunities to such an extent that marriageable women were lacking in the lower classes.¹⁹³ Poor Persians must have been traditionally monogamous,¹⁹⁴ but sometimes not even that. In the 490s AD, king Kavad, then an inexperienced teenager, tried to enforce communal access to women. His efforts appear to have been directed against the aristocracy, seeking to dilute aristocratic lineages.¹⁹⁵ In this context, he also passed a law limiting the accumulation of women in noble harems (excluding his own).¹⁹⁶ As a result, he was deposed by his nobles and only restored with foreign help. In the 530s, Mazdak, a religious and social reformer, went a step further by preaching community of women and property in general.¹⁹⁷ The tradition, confused as it is, suggests that Mazdak did not aim for abolition of private property or the family, only for redistribution, claiming that ‘whoever had a surplus in respect of

¹⁸⁹ Sancisi-Weerdenburg 1987: 43-4.

¹⁹⁰ Schneider 1998: 106-7.

¹⁹¹ The unwillingness to distinguish between actual structural features of Eastern societies and the spin put on them by western observers undermines fashionable critiques of ‘orientalism’. Kabbani 1994 is a typical example, taking issue with lurid accounts of sexual languor in Ottoman harems. For the historian, it is the existence of this institution (and its implications for social and political structure, as examined above, section 2.1) that ought to matter, not the manner in which it is represented in colonialist sources. Cf. also Pierce 1993, ‘debunking’ the image of the Ottoman harem.

¹⁹² It merits notice that even the most novelistic scenes in authors like Ktesias, dealing with ‘harem intrigues’, undoubtedly reflect realities of polygynous courts: see Ben-Barak 1987, for the ancient Near East, or Ogden 1999, on Hellenistic monarchies (see below, section 3.4).

¹⁹³ Klima 1957: 105.

¹⁹⁴ Christensen 1944: 322.

¹⁹⁵ Crone 1991: 21-3, 30.

¹⁹⁶ Klima 1957: 239.

¹⁹⁷ I follow the revisionist chronology proposed by Crone 1991, separating Kavad’s measures from those of Mazdak under Xusraw I.

landed property, women or goods had no better right to it than anyone else'.¹⁹⁸ Women were clearly seen as property, unjustly concentrated in the hands of the few. Crone may be right to hold that Mazdak's goal was 'not simply that women hoarded in princely harems should be redistributed',¹⁹⁹ but this demand provided a starting point that proved appealing to the underprivileged masses. King Xusraw I had to crush the resulting popular movement with great bloodshed. This episode highlights the precarious nature of the balance between fertility maximisation among the ruling class and the need to share fitness benefits with subordinates. In the case of the late Sasanian empire, reproductive benefits accruing from imperial expansion and exploitation appear to have been monopolised by the elite and, one suspects (though no evidence is available), essential helpers, such as the military, whereas even in Persian society proper, commoners found themselves at the wrong end of transfers of reproductive capacity.

2.3.4. *Imperialism and differential reproduction*

All the major states reviewed in section 2.3 shared cultural and legal institutions that facilitated the translation of cultural success – imperial power and wealth – into reproductive success. One might be tempted to argue that these institutions enabled elites to engage in polygyny regardless of imperial success. However, imperialism clearly affected the scale of reproductive inequality. While in the twelfth century BC, long before the apogee of the Assyrian empire, the Assyrian king Ninurta-tukul-Ashur controlled about 40 wives, the Sasanian king of kings Xusraw II could be credited with up to 12,000 consorts.²⁰⁰ As noted above, successful expansion increased the number of palace women in Mari from 44 to 232, whereas the rulers of the less powerful kingdom of Arrapha had to make do with a few dozen per palace. The most prolific Pharaoh, Ramses II, ruled at a time of almost unprecedented imperial expansion. The kings of Israel could be portrayed as moving from seven-plus wives under David to 700 under Solomon and back down to 18 after the division of the realm. Similarly, the number of concubines attributed to Khmer rulers dropped from 3-5,000 under the Angkorian empire to 2-300 in the more modest post-classical period.²⁰¹

This correlation between imperial and reproductive success is only dimly reflected in sources concerning the general population. Thus, it may or may not be coincidence that polygynous relationships are not attested for the smallish Sumerian city-states of the first half of the third millennium BCE but emerge in the Ur III period. It is also interesting to observe that in Old Babylonian and Old Assyrian law, as well as in Nuzi, bigamy is usually rejected in marriage contracts, unless justified by special circumstances, whereas documents from the more powerful Middle Assyrian empire take the presence of two wives as a given, and that large numbers of wives and concubines could be ascribed to wealthy members of the still more powerful Persian, Parthian and Sasanian empires.

Slavery was a major means of facilitating fitness transfers. Large-scale seizures of out-group women most immediately benefitted the rulers, as with Zimri-Lim's request to his wife to select new inmates for his harem, and the growth of his harem after the taking of Kahat; Shilhak-Inshushinak's appropriation of the wives and concubines of the king of Karindash; Asarhaddon's transfer of the Egyptian ruler's harem; Amenophis's III capture of Palestinian princesses and singers; and Dareios's I and Artaxerxes's III seizure of the women of Miletus and Sidon, respectively. At the same time, and perhaps more importantly, slavery likewise enabled less exalted circles to partake in the sexual exploitation of empire. Regardless of constraints on the number of legitimate wives, the number of slave concubines was only limited by the resources of their owner (or lessee, as in Neo-Babylonian society). From the perspective of the owner, sexual relations with slave women had the advantage of leaving the

¹⁹⁸ Tabari, quoted by Crone 1991: 24.

¹⁹⁹ Crone 1991: 25.

²⁰⁰ Seibert 1974: 51.

²⁰¹ Coe 2003: 139, 214.

heritable estate untouched: the offspring of such unions was not normally entitled to an inheritance. Thus, the sexual exploitation of slave women is consistent with the two-tier model of reproduction proposed in section 1.5: while the number of potential heirs and successors was limited through monogamous or bigamous marriage norms, congress with slave women ensured ‘marginal reproductive success’ which was characterised by the dissociation of intergenerational gene and resource flows.

The observed association between the growth of disposable surplus among the beneficiaries of empire and the concomitant increase in reproductive opportunities is perfectly in keeping with Darwinian predictions. In view of the constraints put on male lifetime fertility by female reproductive physiology,²⁰² reproductive self-restraint in the face of growing resources would not have made sense for the beneficiaries of imperial exploitation. Rather, they needed to seek to increase their reproductive chances by balancing the requirements of long-term fitness preservation (by means of channeling heritable resources into a small number of ‘legitimate’ children by one or a few principal wives) with the desire to maximise ‘marginal reproductive success’ (by means of accumulating concubines as/or domestic slaves).

Mazdak’s agitation illustrates the adverse consequences of disparities in the transfer flows of females and material resources. Thus, if privileged groups derive material benefits from imperial exploitation that are not fully matched by the centripetal transfer of dependent women from subject populations, increased elite wealth is likely to exacerbate reproductive inequality even within the imperial core population. Drawing on transferred resources, elites will then attract additional women from within the lower strata of their own society, thereby depriving low-status men of the in-group of mating opportunities. It appears that in some cases at least, the availability of highly mobile mates, such as female slaves, was insufficient to relieve competitive pressures within the in-group. *A fortiori*, this unresolved tension between political factors favoring differential reproduction and the social need for co-operation was a particularly sensitive issue in less despotic and more egalitarian societies, to which I now turn.

3. Mediterranean empires

3.1. Socially imposed monogamy

‘Until the spread of Christianity, prescriptively monogamous societies were exotic exceptions’.²⁰³ From the onset of reasonably reliable written documentation, the citizens of Greek city-states and the Roman *res publica* are known to have contracted strictly monogamous marriages. The fact that despite the recent surge of scholarly interest in Greek and Roman family history, this extraordinary circumstance is still taken as a given rather than recognised as a significant phenomenon in need of enquiry and explanation will best be taken as powerful evidence of the abiding conceptual and analytical isolation of ancient history as an academic subject.²⁰⁴ It is equally striking that modern attempts to understand the unusually egalitarian nature of the early Greek *polis* or the strong cohesion of Roman Republican society appear completely oblivious to the social implications of monogamy. In actual fact, Greco-Roman monogamy was highly unusual. Greeks and Romans were not only surrounded by polygynous cultures – from the Celts, Germans, Thracians and Macedonians to the Persians, Egyptians and various North African peoples,²⁰⁵ but eventually succumbed to the pressure of polygynous neighbours – the Macedonians in the

²⁰² Einon 1998.

²⁰³ Van den Berghe 1979: 48.

²⁰⁴ The longest discussion of Greek monogamy and polygamy I am aware of is that of Erdmann 1934: 87-103, who likewise fails to consider monogamy a noteworthy institution.

²⁰⁵ Friedl 1996: 28-9 lists references to polygynous societies in the orbit of Greek and Roman culture. For Thrace, see Herodotus 5.5, 5.16, minus his fanciful embellishments, also Euripides, *Andromache* 215; for the Celts, see

case of classical Greece, the Germans in the case of the Western Roman empire, and the Arabs in the case of much of the Byzantine empire.²⁰⁶ In the Homeric epics, the Greeks even celebrated the feats of polygynous heroes set in their own past (see below, section 3.3).²⁰⁷

Whence monogamy? In general, we may distinguish between ‘ecologically imposed’ and ‘socially imposed’ monogamy, depending on whether it is ecological conditions or customs and laws that do or do not permit polygamy. Alexander and associates speculate that even allowing for concubinage and extramarital sex, ‘the net effect of rules prescribing monogamy is almost certainly a significant depression in the variance of male reproductive success relative to that in stratified societies which do not prescribe monogamy’.²⁰⁸ In other words, socially imposed monogamy (SIM) interferes with the translation of cultural into reproductive success, and therefore requires explanation. For instance, SIM has been argued to be an adaptive response to the increased importance of competition between coalitions, levelling the reproductive opportunities for men, thereby reducing competitiveness and increasing the likelihood of cooperation in the face of extrinsic challenges.²⁰⁹ However, MacDonald rejects the assumption that complexity and success of states are predicated upon SIM; China is one of the most obvious examples to the contrary.²¹⁰ Unfortunately, his own survey of Greco-Roman SIM is descriptive rather than explanatory in nature. With respect to post-Mycenaean Greece, the evidence indicates ‘a rather sudden change to an egalitarian social system based on monogamy, endogamy, misogyny, and a deemphasis on heterosexual relationships’, which had the effect of ‘deemphasizing sexual competition among males and promoting political cohesion and high levels of altruism’.²¹¹ It remains doubtful to what extent the loss of complexity in the Dark Ages, commonly associated with the subsequent formation of the *polis*, can account for SIM: after all, even small and undifferentiated groups (such as Inuit or Yanomamö) are known to have practised resource polygyny.²¹² If anything, Roman SIM is even more difficult to explain, given that it survived major political, economic and social change. Greeks and – for all we can tell – Etruscans were monogamous; but even if we allowed for significant formative Greco-Etruscan influences on early Rome, this would merely shift the question back in time.²¹³

On a theoretical level, MacDonald contemplates ‘a role for coercive processes in which wealthy males are prevented by social controls from optimizing their reproductive success’. Other factors may also have come into play: ‘In light of the preponderance of intensive polygyny among the stratified societies of the world, SIM must be seen as a low-probability outcome of social conflict in these societies, but one whose probability may well have been increased by ecological circumstances such as the diffuse,

Caesar, *Galic War* 6.19.3, with Pelletier 1984: 14; cf. also Markale 1975: 36, for plural marriage with annual contracts.

²⁰⁶ For the Macedonians, see below, section 3.4. The Visigothic and Merovingian kings were hardly restrained in taking multiple wives; in the upper classes, multiple legal wives supplemented by concubines were the norm (Ross 1985). For the Arabs, see above, section 2.2.

²⁰⁷ The reverence of monogamous Christians for the polygamous patriarchs and kings of the Old Testament provides an interesting parallel.

²⁰⁸ Alexander *et al.* 1979: 420.

²⁰⁹ Alexander’s position as summarised by Betzig and Weber 1993: 46.

²¹⁰ MacDonald 1990: 198.

²¹¹ *Ibid.* 204-11.

²¹² It is true that since in general, polygyny is positively correlated with male stratification, decreasing resource inequality among men favors the spread of monogamy (Kanazawa and Still 1999). We would therefore expect egalitarian societies to be less polygynous than systems with highly skewed resource allocation. However, SIM is not a matter of degree but an absolute principle: as male mating value varies even in the absence of material resource imbalances, low complexity alone cannot entirely explain the introduction of SIM. The observation that in principle, SIM benefits the majority of men more than the majority of women (e.g., Wright 1994: 98), is consistent with the view that SIM fosters inter-male cooperation.

²¹³ MacDonald 1990: 211-23 only discusses the mechanisms in Roman society favoring SIM without attempting to explain why it arose in the first place (cf. also Betzig 1992c).

highly fragmented structure of the ancient Mediterranean city-states'.²¹⁴ The question of whether SIM may have been adaptive in terms of inclusive fitness must remain open.²¹⁵ At any rate, this is not the place to explore this problem in any detail; I hope to return to this issue in a future study of Greco-Roman monogamy. For our present purposes, MacDonald's most relevant point is that given abiding resource inequalities in Greek and Roman society, 'from an evolutionary perspective, this acceptance of economic and social inequality is facilitated by sexual egalitarianism. Indeed, from an evolutionary perspective, economic inequalities that are not translated into reproductive advantages are of relatively little importance'.²¹⁶ In other words, the strong principle of SIM *among citizens* may have fostered social cohesion in the absence of significant resource redistribution.²¹⁷ Herlihy also believes that SIM permitted 'a paradoxical combination of principles, sexual equality and social inequality'.²¹⁸ For that reason, it was essential for privileged segments of the population to be seen to be honoring this principle, even if it was only a façade.

In fact, from an evolutionary perspective, we would expect it to have been just that, a façade. Prescriptively monogamous societies are not necessarily effectively monogamous.²¹⁹ The concept of 'effective monogamy' allows a distinction between the socially imposed marital pattern and the actual breeding pattern, which may be different.²²⁰ Any union that is not based on 'a prolonged and essentially exclusive mating relationship between one male and one female' is not 'effectively monogamous'.²²¹ 'Effective monogamy' is now known to be uncommon in primate species.²²² It is generally assumed that extramarital sex (including concubinage) and remarriage would also skew reproductive success in prescriptively monogamous societies, albeit less so than in openly polygynous systems.²²³ In view of the difference between monogamy as a sociographic unit, indicating the togetherness of two heterosexual individuals, and monogamy as the individual's mating strategy, indicating an exclusivity in reproduction, 'partner-restricted behavior, if it is non-sexual, and especially parental roles, should not be used to identify mating systems (understood as procreation strategies)'.²²⁴ In either very simple or very modern societies with prescriptive monogamy, differential reproductive success is primarily a function of extramarital sex, often in the form of sperm competition between a long-term partner/provider and a casual mate.²²⁵ As a consequence of the latter, 'paternal discrepancy' (i.e., the frequency with which

²¹⁴ MacDonald 1995: 5-6.

²¹⁵ Ibid. 7 entertains the possibility that 'because of increased internal solidarity and cohesiveness, groups characterized by SIM and/or socially imposed altruism may exhibit greater reproductive success than groups in which individuals (and especially wealthy, powerful individuals) are free to pursue individually optimal reproductive strategies.' This proposition seems virtually untestable.

²¹⁶ MacDonald 1990: 233.

²¹⁷ Kanazawa and Still 1999: 37-40 challenge what they call the 'male compromise hypothesis' by pointing out that in a large modern cross-cultural sample, democracy (as opposed to authoritarianism) is not significantly correlated with monogamy (as opposed to polygamy); by contrast, the level of male resource inequality and the extent of women's rights and power are shown to be powerful predictors of the incidence of monogamy. But see above, n. **.

²¹⁸ Herlihy 1995: 581.

²¹⁹ E.g., Brown and Hotra 1988.

²²⁰ Daly and Wilson 1983: 152.

²²¹ Wittenberger and Tilson 1980: 198.

²²² Fuentes 1998. The extent to which human sociality has been fashioned by monogamous relationships remains doubtful: *ibid.*, 897. Cf., e.g., Hawkes *et al.* 2000. *Contra* Diamond 1992: 71, human testicle size does not point to habitual monogamy (as defined above): see Geary 1998: 89. Moreover, sexual dimorphism may be a better predictor of polygyny (cf. Geary 84-8 for primates).

²²³ Alexander *et al.* 1979: 420. But cf. Brown and Hotra 1988 for an effectively monogamous population under unusual environmental conditions (Pitcairn). In a sample of 862 societies, only 16 per cent were found to be exclusively monogamous in terms of marriage (Murdock 1967). However, this statistic tells us little about actual mating patterns (Fuentes 1998: 897).

²²⁴ Wickler and Seibt 1983: 45.

²²⁵ Baker and Bellis 1995.

children are not the genetic offspring of their putative fathers) is conventionally put at 10 per cent, and nonpaternity is now the leading cause of failure of genetic screenings. Published estimates of ‘paternal discrepancy’ range from 1.4 per cent for Caucasians in post-war Michigan and 2 per cent for the !Kung bushmen to 30 per cent in deprived urban areas of Britain.²²⁶ In societies with socially and legally condoned mechanisms of extramarital fertilisation by married men, by contrast, we may reasonably expect variance in male reproductive success to be significantly greater – and correlated with socio-economic status – than in societies that effectively penalise extramarital sex by a variety of means (from the recognition of universal human rights and the suppression of slavery to legal obligations providing for paternity tests and alimonies). Hence, societies that benefit from the material exploitation of imperial possessions and accept various mechanisms of sexual exploitation outside marriage are the ones that are most likely to be effectively polygynous while upholding the principle of SIM. As I will show in the following sections, Athens, Sparta and Rome belong in this category of intensively polygynous imperialist powers.²²⁷

3.2. *Monogamous marriage and polygynous slavery*

Greek and Roman laws envisage severe punishment for sexual relations with someone else’s wife. At the same time, concubinage with free or slave women (the former usually of non-citizen status) was commonly condoned. Sexual relations with one’s own slaves, however, constituted the most convenient means of enhancing ‘marginal reproductive success’. In prescriptively monogamous societies, the sexual exploitation of slaves takes on added importance. MacDonald accepts Hopkins’ view that Roman slavery ‘allowed the elite to increase the discrepancy between rich and poor without alienating the free citizen peasantry from their willingness to fight in wars for the further expansion of the empire’.²²⁸ What neither of them considers, however, is that slavery was instrumental in stratifying reproductive success without violating the socially desirable principle of SIM. It has long been argued that in archaic Greece, and to a lesser degree in Rome, the development of slavery and freedom went hand in hand, in that the import of foreign labour in the form of chattel slaves reinforced notions of political and legal (if not economic) equality.²²⁹ At the same time, the probable contribution of chattel slavery to formal (i.e., marital) sexual egalitarianism and thus to egalitarianism and social cohesion in general has been ignored. This is particularly surprising considering Finley’s apt reference to ‘free sexual access to slaves which is a fundamental condition of all slavery’.²³⁰ In reality, chattel slavery was the answer not only to the cultural preference of elites for exploiting labour, but also to their innate desire to convert the resultant surplus into reproductive advantage.²³¹

Pertinent evidence of sexual relations between Greek and Roman masters and their female slaves will be reviewed below (sections 3.3 and 3.5). Here, I hope to reinforce my general point about the pervasiveness of this phenomenon with the help of comparative evidence from a more recent slave society in which racial prejudice, religious injunctions and norms of social propriety made the sexual exploitation of slave women *less likely* than in any other major slave system on record: the Antebellum

²²⁶ Ibid. 199-200; cf. Mace 2000: 5.

²²⁷ Perhaps unsurprisingly, the current wave of cultural-constructivist scholarship on Greco-Roman sexuality pays no attention to this issue; for a recent overview, see Karras 2000. Parker 2001: 330-8 exemplifies the conventional Pavlovian reaction to ‘biological reductionism’ in the study of (ancient) sexuality.

²²⁸ MacDonald 1990: 234, with reference to Hopkins 1978: 14.

²²⁹ E.g., Finley 1959/81; Patterson 1991.

²³⁰ Finley 1969: 260.

²³¹ In effect, my approach to the emergence of Greco-Roman chattel slavery is as functionalist as the analyses of Finley and Hopkins. It differs from existing accounts in acknowledging the significance of exploitation beyond the economic sphere, i.e., with regard to human reproductive capacity.

South. Yet despite these apparent constraints, the scale of this practice in the southern slave states can hardly be exaggerated. Gutman and Sutch estimate that in the 1850s, more than 4 and perhaps as many as 8 per cent of black slaves had been fathered by whites. Miscegenation flourished despite racist contempt and the contemporary assertion that only lower-class whites engaged in sex with black slaves.²³² Steckel 1980 finds that miscegenation with slaves was positively correlated with the proportion of free men aged 15 to 49 in the county, with urbanism and city size; slave women without separate dwellings were more exposed to sexual advances than others. Thus, the incidence of sexual relations rose with increasing physical proximity of slaves and free men, especially their owners.

On his tour of Louisiana, Frederick Law Olmsted was told by a planter that 'there is not a likely-looking black girl in this State that is not the concubine of a white man. There is not an old plantation in which the grandchildren of the owner are not whipped in the field by the overseer'.²³³ From the slave's perspective, 'if God has bestowed beauty upon her, it will prove her greatest curse. That which commands admiration in the white woman only hastens the degradation of the female slave'.²³⁴ The results of Thomas Jefferson's relationship with Sally Hemmings are now well known; van Buren's vice president Richard Johnson openly supported two children by Julia Chinn, a black slave.²³⁵ The slaveowners' wives, while largely condemned to silence, were painfully aware of the situation.²³⁶ As Mary Boykin Chesnut wrote in her famous diary on March 14, 1861,

'Like the patriarchs of old, our men live all in one house with their wives and their concubines; and the mulattoes one sees in every family partly resemble the white children. Any lady is ready to tell you who is the father of all the mulatto children in everybody's household but her own. Those, she seems to think, drop from the clouds.'²³⁷

Looking back on her youth, Felton observed that 'the crime that made slavery a curse, lies in the fact that unbridled lust placed the children of bad white men in slave pens, on auction blocks, and no regard was shown to parentage or parental responsibility in such matters'. She also remembered planters who 'defied the marriage law of the state by keeping up two households on the same plantation, one white and the other colored, and both women were afraid to make public outcry'.²³⁸ Well before that, a sister of US president Madison is supposed to have said that 'we southern ladies are complimented with the name of wives, but we are only the mistresses of seraglios'.²³⁹

These sources confirm that in a slave society in which manumission had become extremely rare, the children of slaves by their owners were not normally freed or otherwise cared for. Even in Louisiana, a state with a stronger Romance tradition, owners only infrequently sought to provide for such offspring, and heirs usually opposed such attempts.²⁴⁰ Finkelman argues that the fact that a slave woman's child followed her status may have been an incentive for men to have sex with her: 'by predetermining the status of a possible offspring, white men might have been *less* concerned about the outcome of their sexual adventures'.²⁴¹ This assumption is fully consistent with the principle of 'marginal reproductive success' (section 1.5): sex with slave women increased inclusive fitness without attendant costs; on the

²³² Gutman and Sutch 1976: 152. Genovese 1976: 413-31. See already Stamp 1956: 350-61, esp. 355 for slave concubines.

²³³ Olmsted 1861: 240.

²³⁴ Brent 1973: 27.

²³⁵ Betzig and Weber 1993: 50.

²³⁶ See, e.g., Gwin 1985; Bleser 1991; Clinton 1991.

²³⁷ Chesnut 1951: 21-2.

²³⁸ Felton 1919: 93.

²³⁹ Betzig and Weber 1993: 49.

²⁴⁰ Schafer 1987. In Dutch South Africa, while even more strongly influenced by Roman law, children by slave women were rarely acknowledged or freed (Scully 1993: 70-1). Under different circumstances, societies dependent on the Roman legal tradition often favored the integration of such children: e.g., Gaudio 1992: 67.

²⁴¹ Finkelman 1997: 209.

contrary, slave-born children even augmented the father's estate. Hence, it is hardly surprising that more permissive slave societies witnessed sexual relations of this kind on an even grander scale. Genovese contrasts the comparative *restraint* of North American slaveholders, attributed to northern puritanism, with the behavior of their Portuguese counterparts in Brazil, who had a reputation for openly flaunting coloured mistresses while married, and where sons who had not sampled their fathers' slave girls found their masculinity called into question. Corresponding evidence from other slave systems could be added *ad libitum*.²⁴²

Greece and Rome were two of the very few genuine 'slave societies' in history.²⁴³ While slaveownership was disproportionately concentrated among the elites, it had also spread into considerable parts of the general population. Hence, slavery served the double purpose of allowing privileged groups – the primary beneficiaries of empire – to accumulate human resources for the exploitation of labour and sexual capacity, and of enabling subordinates to participate in this process in accordance with their personal means. Since in historical times, Greek and Roman slaves were usually outsiders – members of other *poleis* or more commonly non-Greeks in the case of Greece, non-citizens and increasingly non-Italians in the case of Rome –, large-scale slaveownership was to a large extent a function of imperial success.²⁴⁴ In Spartan society, the wholesale de-facto enslavement (or enserfment) of entire ethnic groups, classified as helots, served the same purpose (below, section 3.3.3). In all those cases, whenever imperial success was contingent on co-operation among the citizenry and associated with the acquisition of slaves, we would expect reproductive inequality to have been shifted from the marital sphere into the grey area of 'marginal reproductive success' predicated on the sexual exploitation of slave women.

3.3. The Greek world

3.3.1. Early traditions: women, war and colonisation

With regard to the association between rank and military aggression on the one hand and reproductive success on the other, the social universe of the Homeric epics conforms extremely closely to Darwinian predictions. This is scarcely surprising, given that grand tales of this kind commonly focus on evolutionarily significant patterns of human interaction.²⁴⁵ In the *Iliad*, the Trojans are portrayed as defending their city for the sake of their wives and children, while their women are targeted as booty by the Greek invaders. There is no reference to the actual or prospective sale of captured women; rather, they are earmarked for private use by their captors. Female rank is to be preserved even in bondage: while noblewomen are distributed among the Greek war leaders and turned into concubines (and are repeatedly assigned children by their new partners in the later mythological tradition), commoners keep on serving these ladies as before.²⁴⁶ Access to reproductive capacity is invariably a function of rank, i.e., cultural success: in the scene that triggers the central conflict of the *Iliad*, Agamemnon lets Achilles know that 'I shall take the fair-cheeked Briseis, your prize, I myself going to your shelter, that you may learn well how much greater I am than you, and another man may shrink from likening himself to me and contending

²⁴² Genovese 1976: 423. E.g., Bush 1990: 110-15, on sexual slave exploitation in the Caribbean. On slave concubines, see Patterson 1982: 434 n.58.

²⁴³ E.g., Hopkins 1978: 99-102.

²⁴⁴ While this is certainly true of Rome and Sparta (and at least to some extent for classical Athens), and although initially slaves were pictured as captives, the early expansion of chattel slavery in late archaic poleis, such as Chios, was not associated with imperial expansion (Finley 1959/81). In those cases, it might be more profitable to consider the introduction of slaves as a means of fostering cohesion among the citizenry by reducing labour exploitation of the free and promoting marital egalitarianism (see above).

²⁴⁵ Epics: Fox 1995. For evolutionary perspectives on literature in general, see esp. Carroll 1995, 1999; Cooke 1999; Gottschall *et al.* 2004. Gottschall 2001 deals with Homer in particular.

²⁴⁶ Wickert-Micknat 1983: 21-32, 40-5.

against me' (1.184-7). Later on trying to lure Achilles back into action – i.e., ensure the co-operation of an indispensable subordinate –, Agamemnon promises him 'seven women of Lesbos (...) who in their beauty surpassed the races of women' (9.128-9), and after the fall of Troy will 'let him choose for himself twenty of the Trojan women who are loveliest of all after Helen of Argos' (9.139-40). Meanwhile, Achilles already has other captive women at his disposal: 'and a woman lay beside him, one he had taken from Lesbos, Phorbas's daughter, Diomedes of the fair coloring; and in the corner, Patroklos went to bed; with him also was a girl, Iphis the fair-girdled, whom brilliant Achilles gave him, when he took sheer Skyros, Enyeus's citadel' (9.664-8).

Two features merit attention: these sex partners are invariably obtained through military success, and their allocation is governed by a redistributive system in which superiors, i.e. high-status men, make use of their seemingly automatic, *a priori* claim to such captives in order to reward subordinates, i.e., lower-status men whose co-operation is desired or required. Multiple layers of hierarchy are discernible (Agamemnon/Achilles, Achilles/Patroklos); women are assigned according to the status of their male recipients.²⁴⁷ This rank-based prerogative is challenged by Thersites, reminding Agamemnon that 'your huts are filled with bronze, and many women are in your huts, chosen spoils that we Achaeans give you first of all, whenever we take a citadel' (2.227-8). His reproach not only confirms the posited principle of *a priori* high-status privilege but also casts light on the tension between the leaders' desire to increase their inclusive fitness and the reluctance of subordinates to forego fitness benefits.

As a consequence, it is only logical that individual leaders are endowed with multiple mates. Next to their *alochos* (the commonest term for the legitimate wife), several of them keep one or more further women as wives, including the Trojan king Priamos, with three wives, and Telamon and Oileus. In addition, concubines (*pallakes*) produce illegitimate children.²⁴⁸ In the *Odyssey*, Odysseus makes up a story that he is the son of a rich man who had sons with his legitimate wife while Odysseus was borne by a bought *pallakis*, and that after the father's death the sons kept most of the estate, giving him just 'a house and little else' (14.199-214). Once more, we encounter the familiar motifs of the association of wealth and polygyny, and of the concurrent desires of improving inclusive fitness through estate preservation and branching out into 'marginal reproductive success'. Slave women are freely accessible to their owners: Laertes only refrained from sexual congress with his female slave 'for he shunned his wife's wrath'.²⁴⁹

Considering the considerable difficulties of explaining the emergence of SIM in the Greek *polis* (above, section 3.1), it would be helpful if we were able to determine whether or in which ways 'Homeric society' reflects historical conditions.²⁵⁰ The same is true for quasi-mythological traditions concerning early Greek colonisation. According to what appear to be two aitiological myths handed down by Herodotus, early Greek migrants operated in a 'Homeric' mode. In one case, the Ionians, when they took over Miletus, killed the native Carian men but took their women to wives; in another, the Lemnians raided Attica, seized Athenian women and kept them as concubines, producing rich progeny.²⁵¹ Stories like these raise genuine historical questions: did Greek colonisation entail the violent appropriation of non-Greek women and/or contribute to reproductive inequality in the target regions, and did it increase the reproductive success of the migrants? If, as we must assume, founding expeditions were skewed in favor of men, where did their future wives come from? Rougé 1970, one of the few to address this

²⁴⁷ Nowag 1983: 37-8.

²⁴⁸ Wickert-Micknat 1982: 83-4; Mauritsch 1992: 92-8; Ogden 1996: 23-4.

²⁴⁹ 1.433. For later examples of jealousy, see Thalmann 1998: 29, and below, section 3.3.2.

²⁵⁰ The marriage customs of the Minoan and Mycenaean era must have been as unknown to the Greeks of later periods as they are to us; cf. briefly Billigmeier 1985: 14-15 on Linear B material. The Near Eastern evidence discussed above raises the possibility of that some form of (harem) polygamy may also have existed in Greek Bronze Age palace centres.

²⁵¹ Herodotus 1.146; Pausanias 7.2.6 (Miletus); Herodotus 6.138 (Lemnos). Similar stories were placed in a less distant past: see Schaps 1982: 203 for references.

important issue, argues that intermarriage with locals must have been common all over the Mediterranean during the archaic period.²⁵² However, it is far from obvious that local women were readily available, especially since some – probably most or all – populations in the target areas would have practised some form of resource polygyny. In a highly fragmentary passage, Archilochos seems to claim that when the Parians wrested control of Thasos from the native Thracians, they took native women as their wives.²⁵³ The reproductive implications of the subjugation of native populations by Greek settlers are worth considering.²⁵⁴ And even in cases of peaceful interaction or fusion, the occupation of fertile land by Greek settlers and their other resources may have attracted local women at the expense of low-status local men, heightening existing reproductive inequality.²⁵⁵ Thus, even in the absence of imperial structures, once Greek settlements had been firmly established, male colonists were likely to have enjoyed an edge in competition for local sex partners. The slave trade could only have widened this inequality.

It may not be entirely coincidental that the archaising motif of ‘tribal-style’ military action for the express purpose of forcibly obtaining female mates repeatedly resurfaces in both Greek and Roman historiography. Herodotus treats his audience to the tale of how soldiers from Chios, retreating after a defeat at the hands of the Persians, entered the territory of Ephesos after dark when the local women were celebrating a religious holiday in the fields, and were attacked and killed by the Ephesians who ‘at once supposed them to be brigands who were after their women’.²⁵⁶ The most famous incident of this kind is the mythical ‘Rape of the Sabine Women’, when the all-male citizens of newly founded Rome staged a festival to lure young women from the surrounding communities into their city, then seized and turned them into their wives.²⁵⁷ Ancient authors even fabricated a mirror image of this momentous ‘event’: thus, after the Gallic sack of Rome several centuries later, their Latin neighbours are made to attack the weakened city, demanding the surrender of a substantial number of women for marriage in return for peace.²⁵⁸ In view of the unquestioned real-life custom of appropriating the female members of defeated populations, the male anxieties and desires reflected in all the accounts surveyed in this section may well be grounded in subliminal appreciation of the fitness implications of territorial conflict.

3.3.2. Athens

In historical times, Athenian citizens married monogamously. By the fifth century, monogamy had come to be considered a quintessentially Greek custom. Monogamy among an alien culture merited notice (as for instance with Herodotus’s questionable claim that the Egyptians practise monogamy, ‘as the Greeks

²⁵² Rougé 1970. Cf. also van Compernelle 1982.

²⁵³ Archilochos A IV 23 (Treu 1979: 61): *epeita gynaikas ei[chon]*. See Rougé 1970: 314; Graham 1978: 93; Treu 1979: 213. On intermarriage on Thasos, see Graham 92-3; he concludes that ‘while there is no evidence and no good argument in favor of peaceable conditions, there is at least some evidence of hostility’ (94). Cf. 97 for parallels in the region.

²⁵⁴ For an extreme case, see the enslavement of the Mariandynoi by the Greeks of Heraklea Pontika (Burstein 1976: 28-30). Sicily offers further evidence. Unfortunately, the section on relations between colonists and natives in Descoedres, ed. 1990: 131-204 does not touch on this issue.

²⁵⁵ For example, the fact that Ptolemy I acknowledged the Cyrenian citizenship of the children of mixed Cyrenian-Libyan unions (*SEG* 9.1 pr. 2-3) points to a long tradition of intermarriage; cf. Hdt. 4.153, with Rougé 1970: 315-6.

²⁵⁶ Herodotus 6.16.

²⁵⁷ Livy 1.9. As usual, the emphasis is on elite privilege: ‘the larger part were carried off indiscriminately, but some particularly beautiful girls who had been marked out for the leading patricians were carried to their houses by plebeians told off for the task’ (1.9). On a different occasion, the mother of the mythical Roman king Servius Tullius, Oeresia, was described a ‘beautiful’ war-captive brought to the royal palace (Ovid, *Fasti* 6.628).

²⁵⁸ Plutarch, *Romulus* 29, *Camillus* 33, *Moralia* 313a. For the Romans’ equally telling solution to this conundrum, see below, ***.

do'), whereas polygamy was regarded as unhellenic.²⁵⁹ Euripides ascribes bigamy to the Thracians, rejecting it as a 'barbarian' custom: 'we count it shame that over two wives one man hold wedlock's reins'.²⁶⁰ Overt polygamy was not only un-Greek, but also inequitable, the mark of tyranny: Dionysios I had multiple wives.²⁶¹ Tyranny is portrayed as sexual as well as political in nature; non-consensual intercourse in particular was seen as hybristic, a dishonoring act if performed among citizens.²⁶² The imperial Roman biographical tradition was to produce a plethora of variations on that irresistible theme (below, section 3.5.3).

However, Athenian men were only expected to marry, not to mate, monogamously. Husbands were not required to be faithful to their wives. Just as in Assyria or Rome, married men were incapable of committing adultery vis-à-vis their wives. In keeping with the axiom of estate preservation through the limitation of legitimate heirs, only proper wives were ordinarily capable of producing legitimate children. Marital monogamy made this principle easier to uphold than in polygamous societies.²⁶³ The only known exception to this rule dates from the late fifth century BC, when male citizens were temporarily permitted to father legitimate offspring with a second woman in addition to their own wife. This procedure, which may well have entailed bigamous marriage, was probably an emergency measure prompted by the catastrophic casualties of the Peloponnesian War.²⁶⁴ It deserves attention that the only men reputed to have availed themselves of this concession were celebrities moving in elite circles, from the super-wealthy Kallias to Euripides and Socrates. From a Darwinian perspective, it would not be surprising if men of means had been the main beneficiaries of this exceptional relaxation of SIM.

Extramarital sexual relations resulting in illegitimate offspring permitted propertied Athenian to enhance their 'marginal reproductive success'. This could be achieved in any of three overlapping legally and socially condoned ways: concubinage, prostitution, and domestic slavery.²⁶⁵ The best-known passage on this subject may well engage in special pleading (and eschews reference to sexual intercourse with those domestic slaves who are not subsumed under concubines), but nevertheless suggests the simultaneous presence of different layers of sexual relations in the lives of married men: '*Hetairai* we keep for pleasure, concubines (*pallakai*) for the daily care of our bodies, and wives (*gynaikes*) to procreate children legitimately and to have a trusty guardian of the things inside'.²⁶⁶ A citizen could have a concubine (*pallake*) – a loosely defined category perhaps best summed up as 'kept women' – instead or in addition to a wife.²⁶⁷ Men associated with free concubines 'with a view to free children'.²⁶⁸ Free

²⁵⁹ Herodotus 2.92; Erdmann 1934: 87.

²⁶⁰ Euripides, *Andromache* 215; cf. also 177ff.

²⁶¹ Diodorus Siculus 14.44; Plutarch, *Dionysius* 3; Aelianus, *Miscellaneous Histories* 13.10. On the marriages of Greek tyrants, see Gernet 1981: 289-302, who speculates that Peisistratos may also have been bigamous (290-1).

²⁶² Cohen 1993; Doblhofer 1994: 34-40.

²⁶³ Cf., e.g., Watson 1980: 240-1.

²⁶⁴ Ogden 1996: 72-5. For a parallel from Germany shortly after the end of the Thirty Years' War, see Westermarck 1921: 51; for nineteenth-century Paraguay, see Becker 1974. Cf. most recently Harford 2006: 'After more than a decade of war between separatist rebels and the Russian army, there are not many marriageable men to go around in Chechnya. So, acting Prime Minister Ramzan Kadyrov, probably not a feminist, proposed a radical step: "Each man who can provide for four wives should do it."'

²⁶⁵ Cohen 1991 assumes, on the basis of comparative evidence from the Mediterranean, that the seduction of other men's women was a competitive activity that conferred status upon the successful seducer but simultaneously clashed with the cooperative virtues of Athenian society and thus resulted in moral condemnation. The facticity of this model remains open to debate. Cf., e.g., Carey 1995.

²⁶⁶ Pseudo-Demosthenes 59.122. For discussion, see, e.g., Sealey 1984: 117-9 and now Davidson 1997: 73-7, who stresses that accounts in other sources lack the terminological consistency suggested by this passage (cf. also Kurke 1997: 108). Cox 1998: 170-89 provides a careful discussion of *hetairai* and concubinage in Athens.

²⁶⁷ Sealey 1984: 119; MacDowell 1978: 89-90.

²⁶⁸ Demosthenes 23.53. With reference to a Draconian (i.e., putatively seventh-century BCE) law granting immunity to a man who kills a man caught with a 'concubine kept for the production of free children' (e.g., Davidson 1997: 98).

women of this kind would be either citizens or resident aliens (metics). Concubinage normally implies co-residence.²⁶⁹ Some – a few, many? – concubines were slaves, and sometimes war captives.²⁷⁰

Evidence of stable polygynous relationships – involving a man, his wife, and one or more concubines – is scarce. As is to be expected in a prescriptively monogamous society, and even more so in a participatory democracy wary of upper-class rule-bending, it was considered socially desirable to keep up appearances. Married Athenian citizens could maintain sexual relations inside and outside the household as long as some basic rules of social propriety were observed with respect to the feelings and standing of the legitimate wife. Thus, wives and courtesans were expected to be kept physically apart, as with Mantitheus's two partners in separate households in Demosthenes 39 and 40. According to another speech, Lysias refrained from bringing two *hetairai* to his own house 'out of respect for his wife' and other coresident female kin but lodged them with an unmarried friend of his.²⁷¹ A very wealthy old man abandoned his family for one of his slaves, a former prostitute, who managed a tenement block for him.²⁷² Even in the absence of a legitimate wife, plural relationships called for physical separation: the successful orator Hyperides (then apparently widowed) reportedly kept three mistresses in separate homes in different parts of Attica.²⁷³ Failure to show a minimum of consideration invited censure: thus, Alcibiades's wife was alleged to have tried to divorce him for bringing free and slave *hetairai* into their house.²⁷⁴ In Sophocles's *Trachinian Women*, Deianeira allows her husband licence outside the home but finds cohabitation with other women in the marital household unbearable.²⁷⁵ It was the violation of etiquette, not the fact of polygyny as such, that constituted transgressive behavior, and it is primarily in regard to social protocol that Athenian polygyny differs from resource polygyny in other societies.²⁷⁶

For wealthy Athenians, this must have been a small price to pay, all the more so as these norms of propriety did not necessarily impair 'marginal reproductive success'. The passages cited in the previous paragraph confirm that in the same way as in all other cultures under review, and in keeping with the Darwinian correlation of cultural with reproductive success, men of property were most likely to engage in this kind of resource polygyny. Further evidence could be added: in one speech, for instance, another wealthy man was reputed to have freed one *hetaira* and given another one away while he was married.²⁷⁷ Davidson is surely right to conclude that 'it was considered a mark of prosperity or of extravagance to keep more than one woman'.²⁷⁸

Moreover, while open concubinage in the joint household of a married couple was deemed inappropriate, casual sex with domestic slaves will not have occasioned similar opprobrium.²⁷⁹ It is unremarkable that these relations hardly ever surface in Athenian oratory: relationships with slaves were of no consequence. Even so, Lysias once hints at the tensions in a household where the wife suspected her husband of having sex with a domestic slave woman: 'so that you may have a try here at the little maid (*paidiske*) – once before, too, when you were drunk, you pulled her about'.²⁸⁰ The jealousy of wives

²⁶⁹ For Just 1989: 52, any *hetaira* who took up residence with a man counted as a *pallake*.

²⁷⁰ Cox 1998: 174 n.31.

²⁷¹ Demosthenes 59.22.

²⁷² Isaeus 6.21.

²⁷³ Idomeneus *FGrHist* 338 F 14.

²⁷⁴ Pseudo-Andocides 4.14.

²⁷⁵ Sophocles, *Trachinian Women* 435ff, 456ff, 536-7. Erdmann 1934: 98-9.

²⁷⁶ When in fourth-century BC Athens it was made a punishable offence for a citizen (of either sex) to *synoikein* with an alien, this must have referred to formal marriages, not to concubinage (Just 1989: 62-4).

²⁷⁷ Demosthenes 36.45.

²⁷⁸ Davidson 1997: 102. For an analogous pairing of monogamy with concubinage, cf. Westermarck 1921: 46: a century ago, among the Hindus of India, the British authorities counted 1,008 wives per 1,000 husbands, while at the same time, 'the keeping of concubines by wealthy Hindus [was] a recognised usage'.

²⁷⁹ On the sexual exploitation of Greek slaves see most recently Klees 1998: 162-6.

²⁸⁰ Lysias 1.12.

suspecting sexual relations between husbands and slaves is a recurrent motif.²⁸¹ On the stage, Aristophanes could present this kind of affair as an ordinary occurrence.²⁸² Only comparative evidence (above, section 3.2) is capable of conveying an impression of the probable scale of this practice. Incidentally, one of the numerous divergent theories seeking to explain Pericles's citizenship law of 451/0 BC reckons with significant transfers of the offspring of masters and slave women into the citizen population. From that time, only the children of an Athenian father and an Athenian mother counted were admitted to citizenship.²⁸³ Walters speculates that previously, sons of masters by slaves had been presented as legitimate and enrolled as citizens.²⁸⁴ In this connection, it may be relevant that Aristotle knew of the enfranchisement of mixed citizen-slave offspring in other Greek *poleis*.²⁸⁵ If citizens had once indeed had the option of selectively legitimizing children fathered with slave women, this would merely have given them more leeway in defining the boundaries between 'official' and 'marginal' reproductive success.²⁸⁶ Slaveowners had no obligations to such progeny. Dio of Prusa regaled his audience with the story of one of Kallias's sons who was accompanied on a military campaign by a slave his age who looked so much like him that when the slave returned the son's death, he could claim to be the son himself and lay claim to his estate. The logical implication that this doppelgänger slave was in fact likewise Kallias's son did not have to be made explicit: in the same speech, Dio observed that many Athenians had sexual relations with their slave women, some secretly, others openly.²⁸⁷

To a large extent, commercial prostitution also relied on slavery.²⁸⁸ Davidson describes the archaeological remains of an Athenian brothel with at least 20 rooms, inhabited by what appear to have been foreign slaves from Thrace, Anatolia and Syria. The discovery of over 100 loom-weights in the same building shows that sexual exploitation and forced manual labour went hand in hand: the combination of prostitution and weaving must have increased overall productivity.²⁸⁹ *Ergasterion*, factory, was also a word for brothel. Outside brothels and the streets, prostitutes, *hetairai*, were also available at upper-class symposia. Although Plato and Xenophon, our main sources for the Greek symposium, 'take great pains to avoid intimations of fornication' (though rather clumsily in the case of the latter author) and never mention *hetairai* among the dinner guests, in other sources the presence of hired women was commonly associated with those events.²⁹⁰ In Dover's words,

'No danger attended the sexual use of women of servile or foreign status, whether they were prostitutes owned by a brothel-keeper, *hetairai* who were looking for long-term

²⁸¹ E.g., Homer, *Odyssey* 1.433; Plutarch, *Moralia* 144b-c, on Gorgias; Menander fr. 402 Edmonds.

²⁸² Aristophanes, *Peace* 1138-9.

²⁸³ *Athenian Constitution* 26.4. For recent discussions, see, e.g., Boegehold 1994; Ogden 1996: 59-69.

²⁸⁴ Walters 1983: 332.

²⁸⁵ Aristotles, *Politics* 3.1278a25-34, 6.1319b6-11. The status of the children of slave women fathered by their owners is not actually known, although it is usually assumed to have been that of their mothers (e.g., MacDowell 1978: 80). Erdmann 1934: 105 reports an older view that in pre-Draconian times, slave women could bear free children. Demosthenes 23.53 implies that concubines who were not themselves free would give birth to slave children.

²⁸⁶ Cf. Just 1989: 53 for the view that in pre-democratic Athens, the distinction between legitimate and illegitimate children depended on the father's desire to recognize them rather than on the marital status of the mother. Cox 1998: 172 points out that by the classical period, 'all *nothoi* recognized by their fathers or bastards of other types of slave or free noncitizen mothers were restricted from inheriting'. Hence, male gene proliferation would readily co-exist with concentration of resources upon legitimate offspring. In his *Laws* (930d), Plato provided for the expatriation of the offspring of masters and slaves (together with the slave parents), presumably in order to maintain the separation of free from slave.

²⁸⁷ Dio Chrysostomus 15.15, 15.5.

²⁸⁸ Herter 1957, 1960 gathers the evidence for Greco-Roman prostitution. For recent discussions of Athenian prostitution, see Keuls 1993: 153-204 and Davidson 1997: 78-91.

²⁸⁹ Davidson 1997: 85-90.

²⁹⁰ *Ibid.* 91-7.

dependence on agreeable and well-to-do men, concubines owned by the user himself or lent by a relative or friend, or dancers, singers, or musicians whose presence at men's drinking parties exposed them to importuning, mauling, kidnapping (an occasion for fighting between rival males), temporary hire, or straightforward seduction enjoyed by both partners.²⁹¹

Just observes that while 'the evidence for all manner of sexual licence outside the home with women of non-citizen status is overwhelming', 'if chastity was a virtue, it was a virtue reserved for the wives and daughters of Athenian citizens'.²⁹² Thus, extramarital sex was contingent upon access to non-citizen women. At the same time, it required financial resources: multiple concubinage and attendance of symposia in particular must have been privileges of elites. In other words, polygyny-bearing structures were firmly entrenched in Athenian society, and the proximate determinants of reproductive success (i.e., mating opportunities) were, as usual, correlated with cultural success (i.e., socio-economic status).

This raises the question of whether differential reproduction was facilitated by imperial expansion and exploitation. Kurke links the emergence of the *hetaira* (as opposed to the common prostitute) to the generation of new wealth through long-distance trade and monetization in the sixth century BC.²⁹³ Further economic expansion would likely have increased the scale of polygynous relationships. There can be no doubt that in the fifth century BC, Athens benefited, in material terms, from its naval empire.²⁹⁴ The concentration of imperial revenues served to attract foreigners, who took up residence in Attica as metics, and enabled the acquisition of slaves. Prostitution had an urban bias,²⁹⁵ and imperial success advanced Athens's development as a major city. War captives often ended up in brothels.²⁹⁶ Moreover, successful warfare provided additional mating opportunities even for sub-elite men: apart from rape, soldiers must often have been able to obtain slaves they could not otherwise have afforded.²⁹⁷ Even so, leaders may again have benefited more than others.²⁹⁸ The seizure of land from defeated enemies or rebellious allies and the foundation of substantial colonies of citizens in such territories²⁹⁹ provided both direct access to the female members of subordinate or at any rate comparatively less privileged populations and enhanced indirect access to mates by way of the assignation of new resources, such as land (allowing lower-class citizens to join the hoplite class). On all these issues, our sources are virtually silent. The main exception is Aeschines' claim that his opponent Timarchos, as *archon* of Andros (an island under Athenian control), 'in his treatment of the wives of free men showed such licentiousness as no other man ever did'.³⁰⁰ While the truth of this allegation perforce remains doubtful, it suggests that Aeschines – and his audience – appear to have regarded sexual exploitation as a credible instance of maltreatment of Athens' subjects. One late and expressly fictitious character, the Athenian citizen in Terence's comedy *Phormio* who is married in Athens but takes another legitimate wife in Lemnos, gives us an idea of the presumably more impressive opportunities afforded to the mobile and aggressive Athenian citizenry of the bygone imperial period.

²⁹¹ Dover 1974: 210.

²⁹² Just 1989: 138, 170.

²⁹³ Kurke 1997: 107.

²⁹⁴ Finley 1978/81; above, Chapter 4.

²⁹⁵ Herter 1960: 71-2.

²⁹⁶ Ibid. 79 n.148.

²⁹⁷ In Menander's 'Hated Man', the title character is distressed that his slave-mistress, a war-captive, does not return his affection.

²⁹⁸ In his description of the Aetolians' sack of Pellene (241/0 BCE), Plutarch, *Aratus* 31, has 'the leaders and captains going around grabbing the wives and daughters of the Pellenians, and taking off their own helmets and putting them on [the women's] heads so that no one else would take them', while the common soldiers were busy searching for money. The officer's privilege lends this story a Homeric flavour. As Schaps 1982: 203 points out, it does not matter whether this account is a fabrication: the implied focus on money and women seems perfectly realistic.

²⁹⁹ Graham 1983: 166-210.

³⁰⁰ Aeschines 1.107.

As we have seen in section 2, in premodern societies, imperial success commonly increases reproductive success among the main beneficiaries of imperial exploitation. In the case of despotic societies, these benefits are to a large extent monopolised by rulers and nobles, and will only to varying but invariably limited degrees percolate into society at large. As a result, imperial success tends to raise variance in male reproductive success. In democratic Athens, we might expect the resultant inequalities to have been less pronounced than in more traditional socio-political formations. SIM had the effect of channeling the resources of high-status men into relations with out-group women of free alien or unfree status. At the same time, ordinary citizens would have expected to partake in extramarital reproductive opportunities. While this relationship is impossible to substantiate on the basis of primary evidence, it seems reasonable to assume that on average, Athenian citizens enjoyed fitness benefits they would have lacked in the absence of successful imperial exploitation. The allocation of land in subject territories must have raised the marriage prospects of previously underprivileged members of the citizen community, while the transformation of tribute into compensation for services must have raised the purchasing power of the citizen population of Attica, and especially of those residing in Athens, facilitating concubinage for married and unmarried men alike and supporting immigration-based professional prostitution. Last but not least, the spoils of empire may have been instrumental in preserving abiding inequalities in wealth in the face of political egalitarianism: as long as wide sections of the citizenry benefited from the exploitative opportunities of the Athenian empire, the elites were guaranteed enjoyment of their riches old and new together with the attendant fitness advantages. Thus, in the final analysis, the principal beneficiaries of imperial success may have been high-status men who were able to maintain, or even raise, reproductive variance in an environment that was hostile to traditional modes of monopolisation of political power.

3.3.3. Sparta

For many generations, Sparta had been the only major hegemonic power in Greece. Just like other Greeks, the Spartans practised monogamous marriage.³⁰¹ Indeed, until king Anaxandrides was allowed to supplement his infertile wife with a second spouse, bigamy had supposedly been ‘unheard of in Sparta’.³⁰² However, domination of the helot populations of Laconia and Messenia gave Spartan citizens sexual access to comparatively huge numbers of powerless subordinates. *Nothoi*, bastards born ‘(out) of helot women’, were presumably the illegitimate sons of Spartan citizens.³⁰³ These children appear to have been identical with the *mothakes*, non-Spartiates reared together with legitimate citizen sons: Aelianus describes them as foster-brothers of the sons of wealthy families, while Phylarchus claims that ‘the boys of citizen status each (...) make some boys their foster-brothers – some one, other two, and some more’.³⁰⁴ Of course, not all of these foster-brothers need have been the biological half-brothers of the Spartiates’ sons; even so, as Ogden points out, ‘systematic mass-generation of *nothoi* should not be ruled out’.³⁰⁵ Foster-care along these lines was inevitably correlated with wealth, something that is made explicit by Aelianus and also implied by Phylarchus. Hodkinson, while disputing the conventional identification of *nothoi* with *mothakes*, argues nevertheless that since *nothoi* could only be reared in style by propertied fathers, ‘the presence or absence of *nothoi* will have been a visible mark of differentiation among Spartiate families’. This suggests that to some extent, the prestige of citizen households was based on sexual relations between the household head and his female servants.³⁰⁶

³⁰¹ Ogden 1996: 238-9.

³⁰² Herodotus 5.40.

³⁰³ Teles in Stobaeus, *Anthology* 3.3.40.8; Ogden 1996: 217-8.

³⁰⁴ Aelianus, *Miscellaneous Histories* 12.43; Phylarchus *FGrHist* 81 F 43. Ogden 1996: 218-24.

³⁰⁵ Ogden 1996: 221.

³⁰⁶ Hodkinson 1997: 55-62, esp. 54-5.

Under those circumstances, the sexual exploitation of subject women facilitated resource polygyny,³⁰⁷ deprived subject men of mating opportunities, and helped strengthen the system at the same time, given that these foster-sons would perform military service alongside legitimate citizen offspring. Access to helot women enabled individual Spartiates to translate cultural success (i.e., material resources) into reproductive success, and – by inducting select bastard sons into the in-group – helped Spartan society as a whole to maintain control over its helot population and its network of foreign allies.

3.4. *Hellenistic empires*

The polygamous habits of the kings of Macedon and several of the Diadoch empires highlight the fragility of SIM even in culturally ‘hellenised’ environments. There can no more be serious doubt that the Argead kings of Macedon were traditionally polygamous, while failing to establish clear hierarchies of wives and their sons.³⁰⁸ In the light of comparative evidence, Ogden’s suspicion that Macedonian rulers married many wives ‘simply because they could’ seems by far the most obvious explanation.³⁰⁹ As we have seen, it is monogamy, not polygamy, that requires explication.

Philipp II is known to have had eight wives.³¹⁰ In this regard, he could be distinguished from the Persian king Dareios III only in that unlike the latter, he ‘did not take his women to war with him’.³¹¹ His son Alexander eventually acquired four parallel wives: Barsine, the hellenised daughter of a Persian noble, in 332 BC; Roxane, a captive Bactrian noblewoman, in 327 BC; Stateira, the eldest daughter of Dareios III, and Parysatis, the youngest daughter of Artaxerxes III, in 324 BC. In addition, he reputedly kept Dareios’s III 360 royal concubines for his own personal use.³¹²

A number of the Macedonian rulers of the hellenistic successor kingdoms followed the example of Philipp and his son.³¹³ Lysimachus was married to four women, at least to two of them simultaneously. Ptolemy I had four known wives and was likewise known as a polygamist, as was Demetrius I Poliorcetes with his eight known wives. Demetrius II Aetolicus also practised polygamy; four of his wives are known, one of them a Thessalian war-captive.³¹⁴

Besides, more casual relations also resulted in offspring: Eumenes II may have fathered at least two sons with two different concubines.³¹⁵ Ancient source coverage of royal concubines is extremely

³⁰⁷ As so often, gene proliferation and the channeling of resources to legitimate offspring went hand in hand: Hodkinson 1989: 90-2 discusses polyandry with brothers and consanguineous marriage as means of estate preservation. (In this context, polyandry should not be seen as a sign of female empowerment: Millender 1999).

³⁰⁸ Ogden 1999 is now the fundamental study of Macedonian royal polygyny. For Argead polygamy, see esp. IX-X, and XVI with n.16-17 for further literature; for a historical account, see 3-40, and cf. also Carney 2000: 23-7. With reference to earlier debates on whether the Argeads really were polygamous or rather serially monogamous, Ogden XIV-XV notes that ‘the question of monogamy and polygamy among the Argeads has been further complicated by the debate as to whether the Macedonians were ‘Greek’ (a debate which has recently become savagely politicised), with polygamy considered alien to the ‘Greeks’.’

³⁰⁹ Ogden 1996: XVI.

³¹⁰ Ibid. 17-27.

³¹¹ Athenaeus 13.557b.

³¹² Justin 12.3.10.

³¹³ Plutarch, *Comparison of Demetrius and Antony* 4 observes that their example made it acceptable for Demetrius I Poliorcetes to have multiple wives, whereas it was inappropriate for the Roman Marcus Antonius to engage in bigamy. Here, polygamy is deemed un-Roman, just as it used to be seen as un-Greek. Carney 2000: 228-32 reckons with a decline of royal polygamy in the third century BC; however, stronger emphasis on ‘queenship’ may simply have resulted in supplementary consorts keeping a lower profile (cf. 231).

³¹⁴ Ogden 1996: 57-62 (Lysimachus), 68-73 (Ptolemy I), 173 (Demetrius I), 179-82 (Demetrius II).

³¹⁵ Ibid. 202-10.

uneven, and most remain unknown.³¹⁶ Even so, Ptolemy II is credited with 11 courtesans known by name, and Demetrius I with 9.³¹⁷ Problems of definition arise from the fact that ‘there were few absolute distinctions of status or profile between queens, wives, concubines and courtesans’. Whenever the origin of royal consorts is known, it is almost always a city in Greece, and not normally Macedon itself. In the case of hellenistic kings, imperial wealth and success appear to have attracted high-status concubines.³¹⁸ That native women are hardly ever mentioned in this connection may be due to the fact that only the most privileged partners of hellenistic kings came to be mentioned in the sources, and those were usually Greek. Moreover, local populations would probably satisfy demand at the lower rungs of the new ruling class.

Whether or to what extent Macedonian and Greek commoners from Egypt to Bactria sought to emulate the polygynous habits of their rulers remains unknown. Marriage contracts from the Egyptian chora forbid the husband to bring other women into his household or to keep a concubine, have children with another woman, or keep a separate household which his wife will not manage (presumably for a concubine; cf. above, section 3.3.2).³¹⁹ Since the state was unable to enforce legitimacy limitations, restrictions of this kind had to be stipulated in formal contracts.³²⁰ The fact that according to early Ptolemaic census documents studied by Clarysse and Thompson, immigrant families of Greek and Macedonian origin were more likely to own slaves than native Egyptian families underlines the superior socio-economic status of many of these newcomers.³²¹ In view of the general correlation between resources and mating advantages, it is hard to imagine that these inequalities – which must largely have been the result of privileges conferred upon these immigrants whose presence was crucial in maintaining imperial control – did not translate to differential reproductive success.

3.5. *The Roman empire*

3.5.1. *Marriage and concubinage*

In Roman society, from the earliest recorded times, monogamy was mandatory.³²² In fact, polygamy appears to have been impossible even in theory: marriage with someone other than an existing wife caused the cessation of any existing relationship because it implied that the requisite marital consensus had come to an end.³²³ Roman law and custom acknowledged quasi-marital relationships that did not legally count as marriage, i.e., concubinage.³²⁴ For us, the principal question is whether married Romans could also keep concubines at the same time. Modern scholars have repeatedly affirmed as well as rejected this notion: in purely quantitative terms, the literature is split right down the middle.³²⁵ There is

³¹⁶ Carney 1992; Ogden 1999: 213-72.

³¹⁷ Ogden 1996: 221-3. It is possible that hellenistic kings kept mobile harems in the form of designated womens’ quarters on ‘floating palaces’, i.e., outside ships (cf. Ogden 1999: 275).

³¹⁸ Ibid. 215 (quote), 243-7.

³¹⁹ *P. Eleph.* 1; *P. Giss.* 1.2.

³²⁰ Ogden 1996: 338-41.

³²¹ Clarysse and Thompson 2006.

³²² Speculations about the possibility of ‘group marriage’ in early Rome (Franciosi 1995: 159-81) are impossible to substantiate.

³²³ Friedl 1996: 47 and n.9. Cf., however, Cicero, *Orator* 1.183, on the question of whether a second marriage would automatically terminate a pre-existing union or merely add a *concubina* to the first wife.

³²⁴ The standard work of reference on Roman concubinage is now Friedl 1996. Among earlier work, see esp. Rawson 1974; Treggiari 1981. For a rapid survey of concubinage in world history, see Boyer 1986.

³²⁵ Friedl 1996: 214-5 n.5-6 produces a hefty bibliography of some 70 contributions, half of them arguing for and half of them against the quasi-polygamous character of Roman concubinage. Most studies in Romance languages favor the former, most anglophone works (and all studies prior to c.1880) the latter position. For discussion, see Friedl 214-28.

no compelling reason to think that it was impossible, or unheard of, to take a concubine without repudiating the current wife.³²⁶ Some legal provisions suggest that at the very least, parallel relationships were considered an option that had to be reckoned with. According to the grammarian Festus, ‘the ancients rightly labeled her a *paelex* who married a man who [already] had a wife’, apparently envisioning her as the Roman equivalent of the long-term Greek concubine (*pallake/pallax*).³²⁷ In the third century AD, Papinian referred to a marriage contract obligating one husband to pay his wife a penalty if he resumed relations with a former concubine³²⁸ – an arrangement that is reminiscent of the Ptolemaic texts mentioned above (section 3.4). Although in the sixth century AD, Justinian held that in keeping with ‘ancient law’, husbands were forbidden to keep wives and concubines simultaneously,³²⁹ we cannot be sure just how ‘ancient’ this prohibition actually was, and if it predated the third century AD. In any event, for all we can tell, parallel relationships with wives and concubines do not seem to have been common or socially acceptable behavior.³³⁰ Literary allegations of polygyny among married men or multiple concubinage are now usually rejected as hostile rhetoric.³³¹ Epigraphically attested quasi-marital unions between one man and different wives that could be interpreted as polygynous may well have been successive rather than parallel relationships, even if this is not made explicit in these texts.³³² In most cases, a formal association with a concubine was established instead of, and not in addition to, a legitimate union.³³³ For wealthy Romans, concubinage served as a means of avoiding the fragmentation of estates and of preserving social disparity: concubines were not expected to produce legitimate children and heirs.³³⁴ Thus, in Darwinian terms, Roman concubinage was designed to contribute to ‘marginal reproductive success’ by creating offspring that was excluded from primary paternal investment. While concubinage facilitated the continued exploitation of former slaves – as concubines – it did not normally create polygynous relationships outside the sphere of slavery.³³⁵

3.5.2. Sex and slavery

In the absence of polygamy or habitual polygynous relationships with wives and concubines, sexual access to chattel slaves constituted the principal means of increasing male reproductive variance. In Gardner’s pithy summary of the legal situation since Augustus, ‘Sex with a slave counted, for a married woman, as adultery under the terms of the Julian law. For a man, sex with slave girls did not count.’ Various types of evidence leave little doubt that this situation was exploited widely.³³⁶

³²⁶ Rousselle 1984: 81.

³²⁷ Festus 248L.

³²⁸ *Digest* 45.1.121.1.

³²⁹ *Justinian Code* 7.15.3.2.

³³⁰ Saller 1987: 85 n.43.

³³¹ Friedl 1996: 218-20.

³³² Thus Friedl 1996: 220-8, drawing on an exhaustive catalogue pertinent evidence (380-94) that supersedes previous work on this subject.

³³³ Saller 1987: 73.

³³⁴ Friedl 1996: 273; Saller 1987: 74-6.

³³⁵ Friedl 1996: 274.

³³⁶ Gardner 1986: 221. For the sexual exploitation of Roman slaves, see Garrido-Hory 1981; Kolendo 1981; Gardner 1986: 221-2; Bradley 1987: 116-8; Rawson 1989: 18. Treggiari 1979: 192-4 tends to downplay its extent, cf. also 1982: 20-2. On the sex life of Roman slaves, see also Morabito 1986. Defensive claims by accused rapists that they had mistaken free women for slaves shows that although the compelling of sex with slaves owned by others was penalized, it counted as a much lesser offence than the rape of free (citizen) women: Doblhofer 1994: 20-1. In general, in both Greece and Rome perpetrators of sexual violence could be described as men who dealt with free women *as if* they had been slaves and/or war captives (the raping of whom would have been acceptable) (ibid. 22).

It is undeniably true that many of the literary references are satirical or moralizing in nature. Some make fun of the practice: well-known examples include Horace – ‘When your organ is stiff, and a slave girl or young boy from your household is near at hand and you know you can make an immediate assault, would you sooner burst with tension? Not me. I like sex to be there and easy to get.’ –, Juvenal – ‘I’ll wager that you are one hundred per cent a man. It’s a bet. So will you confess, or must the torturer rack the truth from your slave girls?’ –, Martial – ‘You know you were begotten by a slave, and you blandly confess it, Sosibianus, when you address your father as “master”’, or, more extreme (1.84), ‘Quirinalis does not think he should take a wife, meanwhile he wishes to have sons; and he has discovered how to secure that object: he fucks slave girls, and fills his town-house and his rural estates with home-born slave-knights. A genuine *pater familias* is Quirinalis.’³³⁷ Others simply take it for granted, as in Petronius – ‘what a master orders is not shameful’ or in the Elder Seneca, according to whom unchastity was ‘a necessity’ for slaves.³³⁸ Plutarch stands out for his advice to the wives of slave-owners: ‘If a man in private life, who is incontinent and dissolute in regard to his pleasures, commits some peccadillo with a paramour or a slave girl, his wedded wife ought not to be indignant or angry, but she should reason that it is respect for her which leads him to share his debauchery, licentiousness, and wantonness with another woman.’³³⁹ Unique among the pre-Christian sources is a fragment of the mid-first century AD Stoic philosopher Musonius Rufus criticizing the lack of restraint of ‘the man who has relations with his own slave girl, a thing which some people consider quite without blame, since every master is held to have it in his power to use his slaves as he wishes’.³⁴⁰ Much later, the Christian Salvian chastised provincial landowners for their sexual relations with their slave women: ‘When the head of the household behaves like the husband of the slave girls, his wife is not far removed from the status of a slave. And was there any wealthy Aquitanian who did not behave like that? Was there any whose promiscuous slave girls did not have a right to look on him as their lover – or their husband?’³⁴¹

I quote these texts for three reasons. First, spin (and therefore critical literary exegesis) matters little; for whatever the spin, the message is always the same: owners have sex with female slaves. Second, this message is highly consistent with comparative evidence from better documented slaveowning societies.³⁴² And third, it is likewise highly consistent with less loaded statements in other Roman sources. When the slaveowner Larcus Macedo was thought dead, his apparent demise was noisily lamented by his slave *concupinae*.³⁴³ Slaves had no legal recourse against the adulterous disruption of their quasi-marital unions with other slaves, presumably perpetrated by their owners.³⁴⁴ The intention to marry one’s own former slave justified her manumission before age 30 (the minimum age-limit set by the *lex Aelia Sentia*); the fact that a slave was the owner’s biological child (*filius/filia naturalis*) activated the same exemption.³⁴⁵ And indeed, in some inscriptions the owner of a slave is also the father.³⁴⁶ *Filii naturales* of this kind are frequently referred to in Roman law: blood ties between owner and slave become a factor in legal discussions of manumission, damage assessment, and inheritance.³⁴⁷ The legal anomaly that a slave woman’s children were not included among her fruits (unlike in the case of

³³⁷ Horace, *Satires* 1.2.16-9; Martial 1.81, 84.

³³⁸ Petronius 75.11; Seneca, *Controversies* 4 pr. 10.

³³⁹ Plutarch, *Moralia* 140b.

³⁴⁰ Fragment 12. For discussion of this and the previous passage, see, e.g., Saller 1987: 78-9, 1996: 126-7.

³⁴¹ Salvian, *On the Kingdom of God* 7.4.

³⁴² In Portugal, sex of men with slave girls was regarded as a joke (Saunders 1982: 103). The audience of Roman satirists clearly shared this view. However, Roman elegy may arguably show some appreciation of the helplessness of female slaves in the face of sexual exploitation: e.g., James 1997. For parallels to the more critical statements quoted above, see above, section 3.2.

³⁴³ Pliny the Younger, *Letters* 3.14.3.

³⁴⁴ *Justinian Code* 9.9.23.

³⁴⁵ Gaius, *Institutes* 1.19.

³⁴⁶ Herrmann-Otto 1994: 42-6, 88-90.

³⁴⁷ Rawson 1989: 23-9.

livestock) made it easier for a putative owner/father to retain a child even if the mother was sold.³⁴⁸ According to Ulpian, one might happen to inherit an estate comprising one's own biological father, mother or brothers.³⁴⁹ Such heirs must have been the children of testators by their slave women. In his study of Roman wills, Champlin speculates that slaves instituted as heirs 'may have had a sexual liaison with the testator' or 'may have been an illegitimate child of the testator'.³⁵⁰ However, even though slaves and ex-slaves could be made heirs, this often involved adoption.³⁵¹ Slaveowners had no legal obligations to children they fathered with their own slaves. At the same time, they were free to choose to acknowledge, manumit, institute as heir, and adopt any of these children. In this way, Roman slaveowners retained the greatest possible degree of control over the allocation of their material resources: while they were unconstrained in disseminating their genes amongst their slaves, it was also left to them to decide whether or to what extent to match gene flow with the flow of paternal investment: in this regard, their options ranged from the sale of such offspring on one end of the scale to adoption on the other. In short, the Roman slave system optimised 'marginal reproductive success'. Syme notes the 'singular dearth of evidence about aristocratic bastards', which he attributes to a pervasive code of silence.³⁵² This silence will best be taken as powerful testimony to the masterful efficiency of the Roman elite in separating acknowledged from marginal progeny, and in regulating paternal investment accordingly.

In her study of Roman polygyny, Betzig suggests that 'slave women were kept to breed their masters' bastards'. She also considers it possible that the Romans frequently freed slaves because they were often related to them, and suspects biological ties behind owners' care for *vernae*, homeborn slaves.³⁵³ Taken at face value, these may seem tall claims, and ones that are not testable against quantifiable evidence. Even so, the proposed link between freedom and consanguinity undoubtedly improves on earlier accounts of Roman manumission that take absolutely no account of the latter; Hopkins's narrow functionalist analysis is an obvious example.³⁵⁴ As for Betzig's more far-reaching assumption that female slaves were owned for the purpose of procreation, it deserves notice that scholars have long been puzzled by the apparent paucity of activities performed by slave women, as opposed to their ostensibly more productive male counterparts.³⁵⁵ Since female slaves cannot have been much less numerous than male slaves,³⁵⁶ their sexual capacities may well have been of greater importance than is usually believed. Even so, the implication that slaves were purposely acquired as breeders, and in particular as breeders of their owners' illegitimate children, is impossible to substantiate. At any rate, the question of conscious motivation does not even have to enter the equation (cf. above, section 1.3). For that reason, I would propose to restructure Betzig's hypothesis, and rephrase it as follows: in Roman society, certain women bred their masters' bastards because they were slaves.

Owing to the mechanisms of the slave supply – producing balanced sex ratios for unfree births and low sex ratios for war captives and foundlings – many slaves were female; slaveownership was a function of wealth, i.e., cultural success; in a society that prohibited polygamy and apparently discouraged polygynous concubinage, sexual access to slaves offered the quantitatively most important opportunity to increase male reproductive success; therefore, wealthy Roman men must have found it feasible to acquire substantial numbers of female slaves, and intrinsically desirable to involve them in sexual relations. In elite households, where husband and wife were served by separate slave staffs, sexual encounters were both easy to engineer and to conceal. Once again, cultural success can reasonably be assumed to have

³⁴⁸ Watson 1987: 103-4.

³⁴⁹ *Digest* 30.71.3.

³⁵⁰ Champlin 1991: 137.

³⁵¹ *Digest* 28.2.11; Herrmann-Otto 1994: 85-6 n.179.

³⁵² Syme 1960/79: 511.

³⁵³ Betzig 1992b: 323 (quote), 323-42; 1986: 73; 1992b: 339, 334-7.

³⁵⁴ Hopkins 1978: 115-32. 'For the masters, manumission was economically rational' (131).

³⁵⁵ E.g., Treggiari 1979.

³⁵⁶ Scheidel 2005.

raised variance in male reproductive success, in that ‘marginal reproductive success’ was contingent on, and must have correlated with, the availability of material resources.

The sexual exploitation of female slaves in the context of domestic slavery was complemented by commercial prostitution, which was to a significant extent sustained by slavery.³⁵⁷ Flemming argues that the clientele of brothels belonged to less privileged strata of society, often those who could not afford to keep slaves of their own. Urbanisation facilitates prostitution: hence, the unusually high levels of urbanisation in Roman Italy – triggered by imperial success – must have favored the spread of prostitution and enabled growing segments of the general population to participate. Unfortunately, the actual scale of urban prostitution has proven difficult to measure: estimates of the number of brothels in Pompeii, the only Roman city that is sufficiently well preserved to permit detailed examination, have recently dropped from several dozen to 9.³⁵⁸ In principle, the growth of Roman slavery and Italian urbanisation were both functions of imperial exploitation; thus, in as much as slavery and urbanisation facilitated prostitution, Roman imperialism can be said to have boosted prostitution.

3.5.3. *Despotism and differential reproduction*

In the Roman literary imagination, one-man rule and despotic power are intimately associated with polygyny and the forcible accumulation of sex partners. A few salient examples will suffice to illustrate this point. Caesar had a reputation as a major womanizer; Augustus even ‘as an elderly man is said to have harboured a passion for deflowering girls, who were collected for him from every quarter, even by his wife’; Tiberius comes across as hopelessly debauched, abducting freeborn girls to corrupt them; Caligula reportedly likewise spoiled married matrons; Claudius is credited with insatiable sex drive and many affairs, and again, his wife – Messalina – procured mistresses for him; Nero put married women into brothels; Vespasian, in his role as a more restrained ‘good’ emperor, kept several mistresses after the death of his principal freedwoman concubine, whereas his son Domitian, designated one of the ‘bad’ emperors, constantly engaged in sexual activities, which he referred to as ‘bed-wrestling’.³⁵⁹ Commodus, also ‘bad’, ‘herded together women of unusual beauty, keeping them like purchased prostitutes in a sort of brothel for the violation of their chastity’; in this way, he acquired 300 concubines, ‘gathered for their beauty and chosen from both matrons and harlots’.³⁶⁰ Even the ‘good’ emperor Pertinax, having at first dismissed Commodus’s entourage, had many of them brought back ‘to administer to the pleasures of the old man’. Elagabalus, beyond the pale even by the standards of ‘bad’ rulers, ‘never had intercourse with the same woman twice except with his wife’, and installed a palace brothel. In a more exotic flourish, he is also made to hitch chariots to women of the greatest beauty, driving them ‘usually himself naked’.³⁶¹

Asking ‘how much was the economic and political inequality in the Roman empire matched by reproductive inequality, or polygyny’, Betzig makes much of these stories.³⁶² At first sight, her willingness to accept them as reliable evidence will seem naïve to the literary critic. Strictly speaking, her suggestion that the internal consistency of such anecdotes confirms their credibility remains a *non sequitur*: the reverse interpretation – that sexual conduct of this kind was a topos that could

³⁵⁷ Flemming 1999: 56-61. On Roman prostitution in general, see Herter 1957, 1960; McGinn 1998a; Stumpp 1998. For the nexus between enslavement in war and prostitution, see Dio Chrys. 7.133 and *Cod. Iust.* 8.50.7.

³⁵⁸ While Evans 1991: 137 still reckoned with 22 *lupanaria*, Laurence 1994: 73 reports only 9 purpose-built facilities, of which 7 are single *cellae*. Earlier estimates went as high as 35 or more. McGinn 2002 is the most recent discussion.

³⁵⁹ Suetonius, *Caesar* 50-2, *Augustus* 71 (cf. above, section 2.3.1, on the wife of Zimri-Lim of Mari), *Caligula* 36; Cassius Dio 40.2.5-6, 40.18.3; Suetonius, *Nero* 27, *Vespasian* 21, *Domitian* 22.

³⁶⁰ *Historia Augusta, Commodus* 5.8, 5.4.

³⁶¹ *Historia Augusta, Commodus* 5.8, 5.4, *Pertinax* 7.8-9, *Elagabalus* 24.2-3, 29.2.

³⁶² Betzig 1992b: 310 (quote), 313-20.

indiscriminately be ascribed to different individuals – seems at least as plausible. Then again, her point that the Roman biographical tradition tallies well with what is more reliably known about other pre-modern kings and emperors may carry greater force. The one thing we can be sure of is that Roman upper-class authors consistently associated the despotic use – for them, abuse – of monarchical power with promiscuity in general and with transgressive sexual behavior in particular. Thus, while reasonably ‘good’ rulers (such as Caesar, Augustus or Vespasian) are merely credited with strong sexual appetites and polygynous affairs, their ‘bad’ counterparts are portrayed as violating social norms by compelling sex from non-consenting free or even married women. From a Darwinian perspective, this explicit link between political inequality in its most extreme form and reproductive potential is in itself of considerable interest, given that it mirrors faithfully a fundamental principle of differential male reproductive success.³⁶³ The close match between what Romans thought, or found expedient to claim, their rulers did and what we know rulers in more overtly polygynous cultures actually did is similarly striking (see above, sections 2.2-3).

Even so, it remains difficult to resolve the tension between these underlying realities and the creative power of literary representation.³⁶⁴ For a literary critic, the actual conduct of Roman emperors may be of secondary importance or even irrelevant, and it is perfectly feasible to dissect the biographical tradition as a patchwork of complementary stereotypes that could be re-arranged in a limited number of constellations in keeping with the biases of the observer. Intertextual relationships also come into play: when the Roman aristocrat Fabius Valens is said to have advanced ‘with a long and luxurious train of harlots and eunuchs’ when he campaigned for Vitellius,³⁶⁵ we are immediately reminded of such quintessentially ‘oriental’ characters as Dareios III or Surenas, the victor of Carrhae (see above, section 2.3.3). By contrast, the student of reproductive variance must address a more intractable – and less fashionable – question: does the literary tradition reflect existing mechanisms of creating mating opportunities for powerful Romans? Are we to believe that the Romans would have created lurid images of the reproductive consequences of despotic power that are both perfectly plausible in Darwinian terms and compatible with comparative evidence if they had lacked any practical experience with these consequences? Without proper contextualisation, this common sense ‘no smoke without fire’ approach will seem simple-minded; when judged against the background of evolutionary theory and comparative data, it may become more respectable. However that may be, Roman elite authors inhabited a world of habitual sexual coercion; they were men for whom the sexual availability of disempowered women – slaves – was a given. In their search for a definition of the ‘tyrant’, it seems to have been attractive to model the relationship between disempowered citizen/subject and ruler/master (*dominus*) on their own relationship with their slaves. Reducing respectable – i.e., free and/or married women – to the status of sexually available slaves, the tyrant-emperor overturns the social order by re-staging in the sphere of the free (and upper-class) citizenry patterns of interaction that are unquestioningly accepted between owners and slaves.

Given their immense wealth and the correspondingly large number of women at their disposal – from female slaves and freedwomen to women who would have been attracted by their status – Roman emperors cannot have found it difficult to mate with as many women as they wished.³⁶⁶ Whether certain emperors chose to display their power by interfering with the reproductive rights of their subordinates – a

³⁶³ The association of male high status with female beauty frequently found in Greek and Roman accounts of forced sexual intercourse (Doblhofer 1994: 43-4) underlines this point. If physical attractiveness is an honest signal of reproductive potential (see Thornhill and Grammer 1999: 106-9 for a survey of pertinent scholarship), the status of the exploiter can be expected to be positively correlated with the physical appearance of the exploited. For pertinent references, see above, ***. Etcoff 1999 summarises evolutionary insights into the nature and function of beauty.

³⁶⁴ For an example of the problems involved, see McGinn 1998b.

³⁶⁵ Tacitus, *Histories* 3.40-1.

³⁶⁶ As in the case of the Roman aristocracy in general, it does not really matter that evidence of imperial bastards is extremely rare (Scheidel 1999: 279); cf. above, section 3.5.2.

central theme of the biographical tradition (and a motif also found in other cultures³⁶⁷) – remains open to debate. In my view, this tradition is instructive for two different reasons. First, it shows that with regard to the correlation between cultural success and the proximate determinants of reproductive variance, the literary imagination operates within a conceptual framework that puts heightened emphasis on critical evolved behavioral mechanisms. In this regard, Roman biography (just like Greek stories about tyrants) resembles Homeric myth (see above, section 3.3.1). And second, by likening the sexual conduct of emperors to that of slaveowners, this particular strand of the literary tradition helps corroborate our model of chattel slavery as the primary means of translating cultural into reproductive success in societies which upheld SIM (see above, sections 3.2-3 and 3.5.2).

3.5.4. *Imperialism and mate choice: the Roman army*

Next to the ruling elites and the metropolitan population, soldiers were the only other substantial group of primary beneficiaries of Roman imperial success. As essential subordinates, we would expect their privileged position to have enhanced their chances of reproductive success. Rape, prostitution, and access to newly enslaved women may count as obvious means to this end. Successful campaigning would inevitably have provided ample opportunity for sexual coercion.³⁶⁸ For our present purposes, the crucial question is whether thanks to successful imperialist ventures, Roman soldiers enjoyed higher reproductive success than they would have without joining up and/or than the male population of the subject regions in which these soldiers were active. While the first half of this question is impervious to empirical examination, the second merits further scrutiny. For the year 171 BC, Livy reports that Roman soldiers on duty in Spain had produced 4,000 children with local women who had to be settled in a Latin colony.³⁶⁹ In later centuries, when Roman soldiers served for extended periods of time, received regular pay, and were mostly stationed in the frontier zones of various provinces, inequalities in material resources and legal status were likely to benefit these soldiers in the competition for mates.

On a conventional estimate, the military absorbed between two-thirds and three-quarters of the imperial budget during the Principate.³⁷⁰ Thus, in what must have been the single largest systematic transfer of resources in western history prior to the modern period, much of the revenue extracted from a taxpayer base of maybe 60-70 million was redistributed to some 350,000 to 400,000 professional soldiers. Annual average per capita GDP probably did not exceed HS 200, and many people were poorer than this; minimum per capita subsistence in the provinces may have been as low as HS 100 annually. By comparison, the base wage of a legionary stood at HS 900 in the first century AD, rising to HS 1,200 for much of the second century AD and more rapidly in the early third century AD. Officers were paid in fractional or full multiples of this base stipend; moreover, upon discharge veterans could expect to receive a bonus equivalent to 10 times their annual compensation in cash or land. In general, there can be little doubt that Roman soldiers were significantly better off than the commoner population of their areas of

³⁶⁷ According to Saletore 1974: 83-4, an Indian king ‘would forcibly halt all nuptial processions passing through his capital without assigning any reason and, without any sense of shame or guilt, pounce on the bride, take her away to his palace to deflower her and after he had done the fould deed would send her to her husband’s house’. Again, while the facticity of this account is uncertain, the imagined link between despotism and sexual predation is the same as in Rome.

³⁶⁸ Thus, a Roman officer credited with raping a Galatian queen could be described as ‘making a soldier’s use of his good fortune’ (Plutarch, *Moralia* 258d-f). Thus also Livy 38.24, about a centurio ‘characterized by both the lust and greed of the soldier’ who rapes a beautiful war captive; Polybius 21.38 notes that he ‘used his good fortune as soldiers do’. Phang 2001: 254-5 and now esp. Phang *** discuss the historical evidence. For a Darwinian study of rape, see Thornhill and Palmer 2000.

³⁶⁹ Livy 43.3.1-4.

³⁷⁰ Duncan-Jones 1996: 33-46, esp. 45.

deployment.³⁷¹ Widespread slaveownership is indicative of the relative affluence of Roman soldiers.³⁷² The Roman military also generated significant demand for prostitutes.³⁷³

The prediction that this privileged access to material resources – as well as their citizenship status which could eventually be passed on to their children – was likely to translate into reproductive success is consistent with primary evidence. Literary evidence adopts the usual moralizing slant, associating contacts between soldiers and local women with luxury and corruption, inevitably with dire consequences: the train of women, children and slaves that supposedly slowed down Varus's doomed legions and the mingling of the proverbially spoilt Syrian army with the local population are just two examples.³⁷⁴ Even so, these sources merely put a particular spin on what appears to have been common practice. Although from Augustus to Septimius Severus, soldiers could not legally be married, inscriptions document de-facto unions, albeit to a much smaller degree than for civilians: fellow soldiers and freedwomen were more likely to dedicate epitaphs for active soldiers than freeborn (quasi-)spouses.³⁷⁵ Soldiers were able to designate their partners and children heirs in the same way as lawfully married men.³⁷⁶ Even polygynous relationships may not have been unknown.³⁷⁷ Three papyri from the late second century AD record the parallel presence of de-facto wives and *focariae*, apparently additional concubines, of Roman soldiers.³⁷⁸ Military diplomas for auxiliary soldiers took pains to prevent polygamy; some scholars have suggested that they may have reacted to actual attempts.³⁷⁹ Polygyny is at least a possibility in the case of the will of a Roman naval veteran who gave freedom to two female slaves who also, together with the daughter of one of them, became his heirs; in the absence of a wife, it is tempting to identify these women as his concubines and the child as his own.³⁸⁰

More than half of all wives of auxiliary soldiers who are known from discharge diplomas had been acquired in the province of service.³⁸¹ The unions of legionary soldiers, who later on usually settled in the provinces where they had been on active duty, would have followed a similar pattern. Congress with Roman soldiers – be it as concubines or lawful wives – was a means of social mobility for native women, who benefited from their husbands' superior material resources and produced children who could themselves attain citizen status.³⁸² Such unions exemplify the Darwinian principle that female mate

³⁷¹ Wierschowski 1984.

³⁷² Speidel 1989.

³⁷³ Stumpp 1998: 186-91.

³⁷⁴ Cassius Dio 56.20.1-2; Tacitus, *Histories* 2.80.3. But see also Tacitus, *Histories* 4.65.

³⁷⁵ Friedl 1996: 229-69 and esp. Phang 2001. Unions were never *banned*; rather, the state merely withheld legal acknowledgment.

³⁷⁶ Since the reign of Hadrian, even the children of soldiers who had died intestate were able to claim limited inheritance rights if they were able to document their descent: Phang 2001: 38-40.

³⁷⁷ Friedl 1996: 256-7 discusses possibly polygynous relationships in inscriptions, concluding that they were probably successive rather than simultaneous. Phang 2001: 412-3 concludes that the evidence is ambiguous. Cf. above, section 3.5.1.

³⁷⁸ Gilliam 1968.

³⁷⁹ Allason-Jones 1989: 63; Friedl 1996: 264.

³⁸⁰ Keenan 1994: 104.

³⁸¹ Friedl 1996: 264-5.

³⁸² I remain unimpressed by the absence of unions between Roman soldiers and native women recorded on epitaphs in North Africa (Cherry 1998: 101-40). As Cherry makes clear, these texts do not show 'how often Roman married indigene (which is historically unrecoverable), but the incidence of intermarriage across cultural identities' (ibid. 100). The potential weakness of the epigraphic approach is highlighted by his observation that only one out of 185 known unions with soldiers involves a wife with a non-Romanised name (120 table 4.1), an implausibly low frequency of intermarriage (as Cherry himself concedes: cf. 122). It might make more sense to assume that soldiers married local women who had already switched to Roman names or did so after marriage. This is not to deny the possibility that some of the soldiers' wives were the daughters of other soldiers (e.g., Shaw 1983: 148). In any event, the African garrisons may arguably have been more isolated from the native populations than in other provinces. Cf. also Pollard 2000: 151-9 for much more meager evidence from Roman soldiers' unions in Syria. In general, about

choice, governed by the desire to increase inclusive fitness, favors mates with above-average resources and the ability to improve the status of joint offspring, thereby contributing to inclusive fitness rather than merely raising lifetime reproductive success. In some cases, the resultant variance in male reproductive success – privileging Roman soldiers over local competitors – may have had a significant impact on the mating opportunities of the native male population.³⁸³ There are two ways in which a hypergamous mating system may deprive a significant number of low-status men of reproductive opportunities: either the polygynous concentration of women in the hands of an elite reaches such a scale that it creates an absolute numerical lack of mates for low-status men, or the introduction of additional high-status men into a given population is sufficiently massive to produce the same effect among locals. Even though slavery – sustained by long-range transfers of human chattels – will have attenuated the impact of the demands of soldiers on the local marriage market, in heavily militarised regions the presence of garrisons which were of substantial size relative to the civilian population may nevertheless have created serious imbalances. In Britain, for example, some 40,000 soldiers in their twenties and thirties would have faced between 200,000 and 300,000 women aged 15 to 35. Even if some of these soldiers had been of local origin, perhaps one woman in ten had the option to choose a foreign soldier over a native mate or spouse. The potential for competitive pressure would have reached a comparable scale in other frontier zones, above all the valleys of Rhine and Danube.³⁸⁴ These sexual repercussions of Roman imperialism have yet to be acknowledged in modern studies of provincial ‘Romanization’.

3.5.5. Conclusion

Roman imperialism entailed the transfer of people and resources on a scale unprecedented in Mediterranean history. Millions of women were uprooted, enslaved and moved, above all to Rome and central Italy, to satisfy the demand of the slave markets. Hundreds of thousands of settlers and veterans were assigned agricultural land that had been taken away from its previous owners. During the imperial period, millions of recipients of public revenue were distributed across the empire as professional soldiers. These movements greatly enriched the ruling elite, known for concentrating in their hands ever larger amounts of cash, real estate and slaves. The attendant inequalities in cultural success provided this elite with an enormous potential for reproductive success. Cultural institutions, primarily chattel slavery and secondarily concubinage, enabled the elite to convert this potential into tangible fitness benefits. Other segments of Roman society participated on a correspondingly smaller scale: while colonists, soldiers and veterans had the chance to exploit their privileged access to resources at the local level for reproductive purposes, city-bound migrants gained access to extramarital sexual relations provided by prostitutes. The sexual exploitation of slaves – as concubines, domestic servants or prostitutes – was pivotal to the transmutation of cultural into reproductive success. In turn, widespread availability of these

90% of all wives of soldiers and veterans in the epigraphic record bear ‘Roman’ names (*duo nomina* with a Latin *nomen gentile* and a Latin or Greek *cognomen*), leaving little room for indigenous single names or ‘Roman’ names with an indigenous *cognomen*, commonly indicating recent enfranchisement (Phang 2001: 191). Taken at face value, this would seem to suggest that soldiers overwhelmingly formed unions with women who were either ‘Roman’ (in the narrow sense of citizens who were of Italian origin or descended from other citizen soldiers or enfranchised auxiliary veterans, or women who were ‘Iunian Latins’, that is, informally manumitted ex-slaves who had belonged to Roman citizens), or (both legally and culturally) ‘Romanized’ in the sense that they descended from (long?) enfranchised locals. See furthermore Scheidel forthcoming.

³⁸³ For what may have been a related issue, cf. *Digest* 34.9.14 (with Stumpff 1998: 191 and n.117), on sanctions against (previously honorable) women who committed *stuprum* with soldiers.

³⁸⁴ However, at least in the early stages of occupation, unions with slaves and freedwomen appear to have mitigated this pressure to a considerable extent: cf. Phang 2001: 193–4 (42–50 per cent of legionaries’ epitaphs at the Danubian frontier in the first century AD were set up by freedwomen). Unions with indigenous women may have been required a certain amount of social and cultural integration: see above, n. ***.

slaves – staggered depending on status – was guaranteed by successful imperialism: not only were slaves obtained through warfare, but the transfer of material resources enabled the recipients, through their purchasing power, to maintain, expand or even create market mechanisms that continued to provide new slaves, and likewise enabled them to keep female slaves even when it may have been economically irrational to do so.

4. Conclusion: theory and evidence

The central predictions generated by an evolutionary approach to ancient imperialism have been outlined in section 1.5 and need not be repeated here. By and large, the empirical evidence gathered and discussed in sections 2 and 3 tends to support these predictions. In all imperial systems under review, regardless of their marriage customs and constitutional properties, the appropriation of resources facilitated reproductive success. ‘Facilitated’ is the critical term: for Darwinian theory to hold, it is behavior that is *by nature* associated with reproductive success – i.e., heterosexual intercourse – that matters, not reproductive outcome as such. This definition has allowed us include mechanisms such as prostitution in our discussion of fitness-enhancing mechanisms, regardless of whether congress with prostitutes (who may routinely have used contraceptives and abortifacients) actually resulted in conceptions or live births. Moreover, the crucial variable is inclusive fitness rather than lifetime reproductive success. In as much as the future reproductive success of offspring is contingent on socio-economic status, estate preservation is as important as offspring quantity. In all societies surveyed above, legal institutions permitted male beneficiaries of imperial success to strike a balance between these two critical variables. In polygamous systems, the designation of one or more wives as ‘principal’ spouses made it easier to focus paternal investment on a fraction of gross legitimate offspring. Concubinage served the same purpose. Kautsky notes that in what he terms ‘aristocratic empires’, the involvement of aristocrats with non-aristocratic women was the result of inter-class marriage prohibitions that limited men’s choices and encouraged them to seek sex without formal commitment.³⁸⁵ Similar restrictions in Athens or Rome also had the effect of steering upper-class men towards informal relationships that helped them preserve their material resource base. Moreover, since the amount of time spent in stable heterosexual relationships is an important determinant of male reproductive success,³⁸⁶ concubinage of not yet married, divorced or widowed men (or of husbands physically separated from their wives, such as the Assyrian merchants mentioned in section 2.3.1) tended to increase their genetic contribution to the next generation. The sexual exploitation of female slaves offered mating opportunities outside the sphere of marriage or stable concubinage that were inevitably strongly correlated with economic status. In this context, the number of potential mates – i.e., wealth – constituted the only real constraint on reproductive success. Slavery had the added advantage of allowing the primary beneficiaries of imperialism to shift the cost of increasing reproductive success – i.e., decreasing mating opportunities for others – to subject or enemy out-groups. This mechanism, which helped foster social cohesion within the in-group even beyond the circle of primary beneficiaries, was more strongly developed in non-despotic societies (such as Greek *poleis* or Republican Rome) than in traditional monarchies. Even so, this difference appears to have been largely a matter of degree.

As I have already pointed out in section 1.5, questions of conscious motivation are of limited relevance here. In the case of domestic slavery, for example, male owners may have acquired female property for any number of reasons. In his discussion of the sexual exploitation of slaves in nineteenth-century Africa, Lovejoy argues that ‘for some aristocrats, sexual domination was probably a substitute or

³⁸⁵ Kautsky 1997: 209.

³⁸⁶ Low 2000a: 66-7 notes that human societies practising serial monogamy experience greater variance in male than in female reproductive success and are ‘functionally polygynous’.

an expression of political power'.³⁸⁷ The former may well have held for wealthy Athenians or Romans of the imperial period, who, constricted in their ambitions by democratic ideology or monarchical rule, derived vicarious pleasure from the penetration of powerless subordinates. However, regardless of such proximate factors, only ultimate consequences are of genuine significance for our understanding of human behavior. In this regard, the convergence between (1) imperial expansion, (2) the exploitation of imperial success in the form of forced transfers of resources and humans, (3) cultural norms and legal institutions facilitating both the conversion of cultural into reproductive success and the balancing of the complementary aims of maximizing quantitatively a man's genetic contribution to future generations (by increasing lifetime reproductive success) and of optimizing offspring quality (through the preservation of heritable status) for the sake of enhancing inclusive fitness – ordinarily achieved by raising 'marginal reproductive success' –, and (4) actual behavior (in as much as it can be reconstructed from inadequate ancient sources) merits particular attention. The interplay of these four variables determined the actual consequences of imperial success for reproductive success in general and variance in male reproductive success in particular. It is easy to imagine counterfactual conditions that would have favored different outcomes. For instance, SIM might have been strengthened in substance by an ideology that was hostile to extramarital relations of any kind, as Christianity was to be in later centuries; male infidelity could have been penalised by law; the marriage or adoption of slaves could have been prohibited; slaves could have been granted legal recourse against sexual exploitation in the same way as law and custom sometimes recognised a limited right of excessively brutalised slaves to appeal to the authorities. Any of these measures would have made it more difficult to convert cultural into reproductive success. As it is, and despite the general Darwinian prediction that 'the function of laws is to regulate and render finite the reproductive strivings of individuals and subgroups within societies, in the interest of preserving unity in the larger group',³⁸⁸ it would seem difficult to devise social and legal norms and institutions that were *more* conducive to the maximisation of inclusive fitness of the primary beneficiaries of imperial success than the norms and institutions that actually prevailed across a wide range of ancient empires from Mesopotamia to Rome.

Were ancient empires established in order to facilitate sexual exploitation? At the most superficial level of conscious deliberation, motivation and justification, the answer must be no. There is no evidence that the acquisition of new sex partners figured prominently – or at all – in the dominant ideologies of ancient empires. Regarding the most fundamental underlying behavioral mechanisms, the answer must be yes. Since imperialism is ultimately an expression of evolved innate propensities from cooperation to male dominance and inter-group aggression, and since dominance and successful aggression confer status benefits that are positively correlated with reproductive advantages, ancient – or any – empires would not have been established in the absence of behavioral traits that have evolved to promote inclusive fitness. Both approaches leave much to be desired. While the former, 'culturalist', perspective fails to relate ideological representation and observed behavior to deeper, subconscious motivational structures, the latter, 'geneticist', view is static, almost tautological in its reductionist simplicity, and neglects the proximate determinants of human behavior. The challenge lies in amalgamating these approaches into a coherent whole. So far, traditional historical studies have persistently ignored the sexual dimension of imperial exploitation or – not explicitly but by implication – marginalised it as an coincidental side-effect of imperialism. As I have tried to show in this paper, evolutionary theory strongly suggests that increased reproductive opportunities or variance in male reproductive success, far from being merely accidental consequences, were ultimately the most significant rewards of empire. Cultural studies of the representation of sexual relations in imperial contexts might therefore benefit from an appreciation of the underlying behavioral predispositions, thereby reconnecting protean language games with the hard surfaces of genetic heritage. At the same time, Darwinian interpreters of historical phenomena would do well to turn their attention to the interplay between ultimate motivation and proximate causation in order

³⁸⁷ Lovejoy 1990: 179.

³⁸⁸ Alexander 1979: 240.

to identify the mechanisms which allow evolved behavioral propensities to influence and to be expressed in social and cultural institutions.

In terms of the causal nexus between cultural and reproductive success, the experience of ancient empires appears to have been broadly typical of that of premodern societies in general. For most of human history, competitive and exploitative strategies that were ultimately grounded in evolved fitness-enhancing behavioral propensities would on average tend to increase actual fitness. The dissociation of cultural from aggregate reproductive success (to the extent that traditionally fitness-enhancing traits and accomplishments have begun to fail to translate to actual reproductive success: above, section 1.3) is a comparatively recent phenomenon, at first limited to western societies and only gradually disseminated across the world. This development is well outside the remit of the academic field of ancient history. Rather, students of the ancient world need to inquire into the causes of regional and temporal variation in the socio-cultural institutions mediating cultural and reproductive success in an attempt to relate observed differences in the norms and conventions governing sexual competition to specific ecological, economic or ideological contexts and circumstances.

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