
From the Beginning of History: Paleolithic Democracy, the Emergence of Hierarchy, and the Reemergence of Political Egalitarianism

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Abstract

Human beings have had political structures long before the first civilizations came into being, indeed long before sedentary life came into existence. Contrary to common beliefs about political structures in ancient human history, I argue that the crucial majority of human history and evolution has been dominated by democratic political practices and structures. This point is examined by considering the evolution of socio-political structures in an evolutionary and multi-disciplinary approach. There are several important conclusions to this research for the study of democracy and democratization. First, human nature is perfectly compatible with political egalitarian outcomes like democracy. Second, the common assertion that most human history has been dominated by hierarchical political structures has no real support and in fact the evidence suggests that democratic practices and political egalitarian structures were dominant in the Paleolithic era. Third, by considering Paleolithic political structures, and what political structures have evolved *from*, the 20th century democratic-boom is understood as a re-emergence of political egalitarianism adapted to post-Neolithic conditions. Forth, issues of causality in socio-political change are discussed.

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One of the ‘stylized facts’ about democratization is that “most of the world for most of its history has not been democratic” (Shapiro 2003: 78). Some have even suggested that forms of political egalitarianism have been totally absent from most of our history due to the deep conflict between political equality and basic natural dispositions to hierarchical structures, a biological legacy from our closest living ancestors the chimpanzees (Somit and Peterson 1997). Indeed, many political scientists believe that our democratic heritage starts with the Athenian democracy, about 2500 years ago, and that democracy is a relatively recent and fragile cultural invention which was absent from, more than it was prevalent in, human history and evolution (e.g. Dahl 1998: 25).

The aim of this paper is to offer a hypothesis about the evolution of socio-political structures. By doing so, this paper addresses the antiquity of our democratic heritage and provides an appropriate framework to evaluate the emergence of democracy and its exponential growth in the 20th century. In a nutshell, the argument advanced here is that our political heritage has been dominated by democratic practices and political egalitarian political structures. This idea is completely compatible with biological explanations and there is no need to resort to cultural explanations to account for political egalitarianism. Accordingly, the emergence, heightening and expansion of democracy can be viewed as consistent with our ancient egalitarian heritage, and as a large-scale structural and cultural adaptation to post-Neolithic ecological and social conditions.

1. Political Egalitarianism among Hunter-Gatherers:

The Anthropological Perspective

The starting point for the discussion is what we convincingly know about the core characteristics of *nomadic* hunter-gatherer societies, henceforth termed ‘nomadic foragers’ for short. Nomadic foragers, other than non-nomadic or semi-nomadic foragers, provide an invaluable source of information and are the best model to reconstruct political structures of the past because small-scale nomadic foragers’ ways of life represent an adaptation to certain ecological conditions, an adaptation that reflects human beings’ way of living during most of human evolution. This is not to say that current nomadic foragers are living relics of the past. Current foragers have most likely been in contact with, and influenced to various degrees by, sedentary and modern ways of life. Nomadic foraging, however, is not an arbitrary cultural construct; it is a way of living most suitable to cope with, and dictated by,

unpredictable and unstable ecological conditions. Foragers live in small-scale groups and periodically migrate in search of fluctuating food resources and water supplies, a way of life that prevailed during the crucial majority of human evolution (Leacock and Lee 1982: 5; see also Murdock 1968: 13). We can safely conclude that nomadic foraging was the most prevalent, if not universal, system of production of the Paleolithic era in light of what is known about the climatic conditions of the last glacial age (see more below).

A core characteristic of documented nomadic foragers, which was identified already in the late 1960's¹, is their political egalitarian structure. Namely, nomadic foragers have no strict hierarchical political structures, decisions are reached through deliberation and consensus, leaders (if they exist) have little, if any, real authority over other group members, rotation of roles and functions can occur regularly, and people can come and go as they please, no one person can command or subject group members to act according to one's political wishes and aspirations (Barclay 1982; Boehm 1993, 1999, 2003; Cashdan 1980; Gardner 1991; Knauff 1991; Leacock 1978; Leacock and Lee 1982; Lee 1979, 1982; Power 1991; Service 1979; Silberbauer 1982; Turnbull 1968; Woodburn 1982).

Christopher Boehm, who made an extensive survey of nomadic hunter-gatherer societies, asserts that these were “societies of equals, with minimal political centralization and no social classes. Everyone participated in group decisions, and outside the family there were no dominators” (1999: 4)² and “this egalitarian approach appears to be universal for foragers who live in small bands that remain *nomadic*, suggesting considerable antiquity for political egalitarianism” (ibid: 69). Elsewhere, Boehm (2003: 209) states a ‘rule of thumb’ regarding nomadic foragers’ political structure:

Ethnographers have documented the behavior of several hundred hunting bands worldwide, for extant foragers have been available for study on all continents—save for Europe and the Middle East. The great majority are nomadic, just as their prehistoric precursors surely were. With respect to politics, there is a rule of thumb that applies to every last group of these nomads: they are politically egalitarian.

¹ The late 1960's is the time when the study of pre-state hunters and gatherers was emerging as a distinct and structured field of scholarship. The conference and later book 'Man the Hunter' is an important landmark in the study of hunter-gatherers, see (Lee, DeVore and Nash-Mitchell 1968).

² The fact that no political hierarchy exists among foragers relates to social units bigger than the family. Inside the family unit, there are conflicting reports about women's status, although gender interpretations probably contribute to this unclarity (Hager 1997; Leacock 1978). Women have different levels of influence over political decision making and conflict resolution in foraging bands (Boehm 1999: 7-9; Kelley 1995; Turnbull 1968) and women can also be found in leadership roles (Freedman 1980: 336-337; Leacock 1978; Lee 1979; Power 1991: chapter 6).

Political egalitarianism among foragers is accomplished by sophisticated socio-political practices known as *leveling-down mechanisms*. Leveling-down mechanisms are socio-cultural practices which are aimed at controlling over-assertive individuals from boasting about and exploiting their success and traits (e.g. in hunting, see Wiessner 1996a) and at preventing leaders from exploiting their position. If a leader or a would-be-chief tries to dominate other group members or to misuse a leadership position, group members may tell him that he makes them laugh (ridicule tactic), they may walk away, disobey or simply ignore him. Other tactics are to rebuke, rebel against, remove, ostracize or expel an over-assertive individual from the group, and, in extreme cases, execution is also an option. Different foraging groups exercise different leveling-down techniques (Boehm 1993, 1999; Kelly 1995: 295-297; Lee 1979: 244-249, 343-354; Power 1991: 178-186; Service 1979: chapter 4; Turnbull 1968: 24; Wiessner 1996a; Woodburn 1982). Sedentary societies employ an array of leveling-down practices as well (e.g. Howe 1978; Mahdi 1986; Mitchell 1978, 1988). Leveling-down mechanisms are the natural checks and balances instruments of nomadic forager societies. Leveling-down mechanisms help to keep the political system as close to flattened as possible despite the variability in personalities, physical traits and capabilities, and notwithstanding the underlying competition between individuals (see more below).

However, leveling-down mechanisms are cultural practices and in themselves they do not necessarily explain *why* political egalitarianism among nomadic foragers is a human universal. As Richard Alexander has said about cultural evolution, the important issues are “who or what decides which novelties will be perpetuated, and how is this decided? On what basis are cultural changes spread or lost?” (Alexander 1979: 73). In this context, why were leveling-down mechanisms selected as a prevalent cultural practice and not hierarchical practices? The persistence of leveling-down mechanisms, and the resistance of this cultural adaptation to hierarchical innovations, may be explained by a biological level of analysis.

2. Biological Basis of Political Egalitarianism

Generally, any theory or thesis about political structures during the Paleolithic era would be clearer if its assumptions about the relationship between biological (nature) and ecological (environment) factors are made explicit. By not making the relationship explicit, or by ignoring the biological factor, human nature is treated as a blank-slate that can be shaped to any arbitrary direction due to

cultural, economic, or other environmental (external) effects (see Tooby and Cosmides 1992; Pinker 2003). In the analysis that follows, the biological (ultimate) factor is made explicit, the relation between political egalitarianism and the biological level of analysis is proposed, and the possible evolution of political egalitarianism is explained.

Political egalitarianism among nomadic foragers is a product of a long evolutionary process. *Homo sapiens* has evolved from previous hominids, and these hominids have evolved from previous hominoids, the closest living ancestors of whom are the chimpanzee and bonobos. There is no direct evidence about the social structures of our ancestors during the five million years that separate us from living apes. It is known, however, that our primate ancestors evolved through several evolutionary trajectories and became more sophisticated in the course of evolution: skeletons were adapted to terrestrial environments, bipedal locomotion (upright walking) evolved, and brain-size increased considerably relative to body size, i.e. encephalization (Krogman 1997; McHenry and Coffing 2000). It is also known from archeological evidence that about 2.6 million years ago our ancestors began using, and experimenting with, stone tools, and later created bifaces, namely small stone hand-axes whose function is still not well understood (Klein 2000). More importantly, there is evidence of a reduction in sexual dimorphism in hominids, which serve as indirect evidence to extrapolate about the possible leveling-down of social organization in hominids.

When one compares the social structures of our living ancestors to the socio-political structure of nomadic foragers the dissimilarities are striking (Knauft 1991; Service 1979: 29-33). Gorillas, for example, are extremely despotic in the sense that one male monopolizes all resources and females in the group. When gorilla males reach maturity they usually leave the group in search of a new harem or occupy a peripheral role in the group, whereas female gorillas are much smaller in size relative to the alpha male and are completely subordinate to him. Chimpanzees exhibit both similarity with, and departure from, gorillas in that they may also have a dominant alpha male or several dominant males, but also an intricate inter-group politics that involves coalition formation between males and females. Two males may join forces and dethrone an alpha male who is stronger than each of them separately and then the two will share power and privileges (de Waal 1982). That is, captive chimpanzees can exhibit a less hierarchical social structure than gorillas do

and this tendency is probably more pronounced in free-ranging chimpanzees (Power 1991).

Bonobos, a primate quite similar to the chimpanzee in appearance, and as closely related to humans as the latter, have a much more egalitarian social structure compared to chimpanzees. Bonobos have a female-based social organization. Females are strongly bonded with each other and with males, but males do not form coalitions to dominate others like male chimpanzees do (Knauff 1991: 386; de Waal 2001; Susman 1987). In this sense, bonobos manifest a much more egalitarian social structure than chimpanzees and gorillas do. Bonobos' social organization is equally plausible as a model for the starting point of hominid social organization. However, whether the bonobo or chimpanzee model is better suitable as a starting point to our socio-political evolution is not crucial to the argument. And, it is important to remember that these two primate species have continued evolving in the last five million years and hence their social organization may have changed.

One cannot say for certain what types of socio-political structures our bipedal nomadic ancestors have had during human evolution. However, it is highly plausible that political egalitarianism among nomadic foragers is an outcome of a gradual evolution and leveling-down of our ancestors' socio-political structures or a refinement of the bonobos model. This idea of a gradual reduction of hierarchies in group structures (see also Erdal and Whiten 1994) is consistent with the occurrence of several evolutionary trajectories during the last five million years.³

These important physiological transformations were accompanied by additional psychological faculties (e.g. communication, cooperation, tool manipulation etc.) and further natural instincts and mental sophistication. Hence, the evidence suggests that abilities for foresight and communication have increased, which may imply more developed capacities to control others' dominance tendencies and to activate sophisticated leveling-down mechanisms. The fossil remains of hominids, and other pertinent archeological findings, tend to validate this idea: braincase size and development of certain brain regions, evidence of increasing complexity of stone hand-axes (bifaces) in the last 2.6 millions years, and the beginning of fire manipulation between 350,000 to 500,000 years ago. Moreover, reduction of sexual dimorphism in teeth characteristics (disappearance of canines)

³ Compare: "it is possible that egalitarianism advanced in stages, with subordinates gradually, over many millennia, gaining more control until the alpha role was effectively suppressed... This process could have begun with *Homo erectus*, and conceivably even earlier..." (Boehm 1999: 196).

and in body-size ratios between males and females also imply a transition to more monogamous and egalitarian political structures.

Nevertheless, given that these complexities did occur, the question is then what may be the causal relationship between these increasing complexities of our evolutionary ancestors and the political egalitarianism of nomadic foragers. The emergence of socio-political egalitarian structures can be explained in an individual-selection biological level of analysis which pertains to ultimate factors of fitness. According to Erdal and Whiten (1994), the tendency for dominance behavior and hierarchical structure counterbalances itself when applied to all group members. Every individual in the group will have a biological advantage over other individuals should the individual manage to monopolize socio-political power. Indeed, there are considerable advantages to those who monopolize high rank and status in hierarchical structures in terms of fitness through reproduction and higher progeny survival rates, as is evident from research on chimpanzees (de Waal 1982; Pusey, Williams and Goodall 1997; and compare Grammer 1996, Turke and Betzig 1985). Namely, each group member will benefit from upholding high rank and status due to the privileges that come with it.

At the same time, each individual member also has a biological interest, so to speak, not to be dominated for exactly the same reasons that give the advantages to the dominant individual: being dominated reduces one's fitness directly and indirectly. Being dominated entails a considerable disadvantage to the subordinate individual and may result in a complete lack of reproductive ability. In other words, individuals strive to achieve high status and rank in their groups which will maximize their fitness and at the same time individuals tend to resist being dominated because this reduces their fitness.

That this basic logic of individual-selection underlies the inherent conflict of interest of subordinate members with their dominants is manifested in the continual tacit and explicit competition (sometimes to death) in many species such as primates (de Waal 1982), birds and social insects (Zahavi and Zahavi 1997). There are, of course, limitations to an individual's capabilities to uphold high or top rank and also to an individual's capabilities to resist subordination. These factors are determined both by an individual's specific genetic traits and by particular ecological and social constraints (see also Vehrencamp 1983). The fact that individual traits vary due to natural genetic variation, and that not every individual is equally capable of being the alpha male or female due to genetic and ecological factors, does not change the

basic matrix of interests for each individual member: occupy the highest rank and status possible and not be dominated by any member. These benefits engender fierce and at times deadly competition (even between close kin) over the alpha and beta roles in many species. For the same reason, top ranks in many species are highly changeable and alternate between competing individuals.

This basic individual-selection logic tends to be forgotten by those who conflate submission with willing consent (rather than a lack of choice in given conditions) and hence group-selection explanations – which assert that an individual's biological interests are dictated or subordinated by the groups' overall genetic interest vis-à-vis rival groups – are often invoked in order to explain why submission may be adaptive (e.g. Somit and Peterson 1997: chapters 5-6). In biological terms, however, individuals who *willingly* accept the role of subordinate will quickly be selected out from the chain of evolution because their genetic traits will be lost in the face of the dominant's reproductive success over them. This is not to say that submissive behavior is not adaptive. Submissive behavior, however, should be understood in the mainstream individual-selection models of evolution as maximizing the agent's fitness given the ecological and social constraints.

The dispositions to gain high status and rank, and at the same time to avoid being dominated, are also evident in the ongoing dynamic of maintaining political egalitarianism. Political egalitarianism among nomadic foragers is not an effortless or static state in which all members accept the egalitarian ethos and refrain from deviating from it. As Boehm (1993, 1999) skillfully depicts, political egalitarianism among hunters and gatherers accompanies repeated attempts by individuals who test the limits of the egalitarian ethos and try to utilize their special potencies in order to gain advantages over others. At the same time, an array of tacit and explicit leveling-down mechanisms are employed in order to put boastful and assertive individuals in line. Status seeking and leveling practices start already at an early age (Hold-Cavell 1996; Lee 1979: 246). Moreover, the conflicts between over-assertive individuals or leaders and their groups can be so tacit that they may escape the attention of an outsider, as Boehm (1993: 233-234) indicates.

Indeed, the prevalence and multiplicity of leveling-down mechanisms is in itself a strong testimony for these two countervailing tendencies: a constant struggle of individuals for high status and rank on the one hand, and the motivation to prevent ambitious individuals from becoming dangerous and harmful to other group members on the other hand (see also Wiesner 1996b: 12).

The concurring existence of these two opposing tendencies in *Homo sapiens* as well as in other species strengthens the idea that political egalitarianism is not a sudden departure from ancient dominance behavior patterns. Political egalitarianism emerged because dominance behavior became more restricted and leveled-down in the course of evolution, and because strict hierarchical structures became mal-adaptive in comparison to political egalitarian structures. As Erdal and Whiten (1994: 177) succinctly put it “dominance behaviour was not entirely lost in evolution but was balanced by counterdominant tendencies which only evolved because they provided fitness advantages in the ecological and social environments of the time.”

Socio-political hierarchy is mal-adaptive because over-assertive individuals may put themselves at risk of being injured by both males and females who do not share dominants' biological interests of monopolizing the group. A group of nomadic individuals is hard to control and monopolize: individuals can exit and move to another group, and they can form manifold coalitions that practically prevent any one individual from controlling other group members. Under these conditions, competitive tendencies for rank and status generate a situation in which conflicting interests thwart each other and leave the socio-political structure as close to flattened as possible. Upon changing the ecological conditions, however, the same causal factors may become unchecked and leveling-down mechanisms may become ineffective, and consequently hierarchical structures may ensue. Such were probably the consequences of the ecological transformations of the last glacial period and the beginning of the Neolithic era.

The psychological ‘phobia’ from others’ domination (Boehm 1993; Wiessner 2002: 262), and the intricate cultural leveling-down mechanisms, probably originated because of ultimate biological factors, and not as substitutes or counter-factors to biological factors. Psychological predispositions to resist and refrain from being dominated and to seek high rank and status are proximate (psychological) mechanisms in the service of ultimate (biological) factors. Hence, the biological level of analysis and the psychological and cultural aspects of political egalitarianism are complementary: biological factors underlay psychological predispositions and leveling-down mechanisms (culture), which together work to balance and inhibit a hierarchical outcome and to maintain an egalitarian outcome.

3. Supportive Evidence for Political Egalitarianism during the Middle and Upper Paleolithic Era

This section briefly explores the supportive evidence to the argument that nomadic foraging was the predominant way of life during most of human evolution or at least during the Upper Paleolithic⁴ (60,000–12,000 B.P.); and that the political structures were indeed politically egalitarian. An elaborate exploration of the following issues is discussed in the Political Egalitarian Project (PEP Members, in preparation).

3.1 Ecology, Nomadism and Political Egalitarianism

Ecological conditions during the Paleolithic probably necessitated a nomadic way of life. Certain ecological conditions dictate an immediate-return economy and minimal personal possessions and wealth because all belongings must be carried on one's back beyond one's offspring. This type of subsistence and the lack of possessions and material wealth are strongly associated with political egalitarianism (Testart 1988; Woodburn 1982).

The prevailing climatic conditions during the middle and upper Paleolithic between 100,000 and 12,000 years ago appear to have been highly unstable over even decadal time-scales and for the most part were arid and much colder than during the Neolithic (e.g. COHMAP Members 1988; NGRIP Members 2004). The global climate appears to have had the tendency to rapidly fluctuate over timescales ranging from a decade to millennia during the Paleolithic and these fluctuations also appear in regional records. Such profound changes must have had a strong impact on the existence and predictability of fauna and flora, and of water supplies.

Furthermore, as Richerson, Boyd, and Bettinger (2001) argue, these harsh and rapidly changing climatic conditions make agriculture impossible. The stable conditions necessary for agricultural innovations to take place were absent. As such, it is highly likely that nomadic foraging was inevitable during most of the Paleolithic.

3.2 Archeology and Political Egalitarianism

There is very little archeological indication of sedentary life during the Palaeolithic (Nadel 2002; Nadel and Zaidner 2002; Weiss et al. 2004) nor does there seem to be any clear or definitive indication of hierarchy or social stratification in considering the Palaeolithic evidence.

⁴ (Boehm 1999: 69; Glynn 1968: 253; Knauff 1991: 418; Leacock and Lee 1982: 5; Lee and DeVore 1968: 3; Murdock 1968: 13; Service 1979: 13).

The type of evidence that is available from the Paleolithic era is congruent with the types of remains that documented (political egalitarian) nomadic foragers tend to leave behind, and it is also congruent with archaeological evidence from post-Neolithic study of nomadic hunter-gatherers.

3.3 Fossil Records, Evolution of Hominids and Political Egalitarianism

Another telling type of evidence to infer about socio-political structures during the Paleolithic is fossil records of hominid braincases, skeletons (body-size measures) and teeth. The evolution of these morphological aspects in hominids lends support to the thesis about a gradual reduction of our ancestors' socio-political structures (Erdal and Whiten 1994)

The fossil records show a reduction in body-size ratios and the reduction of canines, both of which imply a transition towards more levelled-down social structures according to the mainstream understanding of these factors. Indeed, a strong correlation exists between “the levels of sexual dimorphism and the type of social organization” (Lewin and Foley 2004: 182). By this logic, and in light of the fossil records that are available, political egalitarian structures could have originated already 1.9 million years ago with *Homo erectus*, a species characterized by a low degree of sexual dimorphism similar to that of *Homo sapiens*.

4. From Political Egalitarianism to Hierarchical Political Structures

The discussion so far has focused on explaining the logic and causes of political egalitarianism among nomadic foragers. The next important phase of analysis is the transition from political egalitarianism to political hierarchy in post-Neolithic times.

Since the end of the last glacial period (namely, the end of the Pleistocene geological epoch) around 11,500 years ago, extensive ecological, technological and social process were set in motion. In ecological terms, the end of the Pleistocene and the onset of the following Holocene geological epoch is marked by the amelioration of the climate to relatively warm, wet and stable conditions (e.g. COHMAP Members 1998; NGRIP Members 2004). The end of the last age is also marked by the end of the Paleolithic era and the onset of the Neolithic, characterized by technological innovations such as the domestication of animals and plants and the beginning of agriculture. The Neolithic era was followed by several other historical periods and continuing technological innovations. The socio-political consequences of the transition to sedentary life were rapid growth in populations and eventually the emergence of the first civilizations and empires about 6,000 years ago.

These far reaching changes, and the two predispositions that were elaborated above, set the background to hypothesize about the emergence of social hierarchy after the beginning of the Neolithic era. For obvious reasons, the discussion of the many social, political and technological transformations of the last 12,000 years is beyond the scope of one paper. However, a general explanation is offered to the causes underlying socio-political hierarchy formation.

Political egalitarian structures are sustained as long as leveling-down mechanisms prevent individuals from transforming the political structure to their own advantage. Socio-political hierarchy may follow, however, when social conditions change in ways that render leveling-down mechanisms ineffective. There were many participating factors in engendering these new social conditions at the beginning of the Neolithic era (for review see Wiessner 2002). The main factors are subsistence changes that propel the accumulation of wealth, and population growth. These two factors are strongly associated with the transition to sedentary life and they provide important opportunities to ambitious individuals, and later to a distinct segment of the population, to alter the egalitarian political structure to their own benefit.

Subsistence economy of sedentary life enables wealth accumulation, a practice rarely, if at all, characteristic of nomadic foragers. The accumulation of wealth tends to be a facilitative factor and a kind of window-opportunity for individuals to deviate from the egalitarian structure. Sedentary economy of food storage allows the accumulation of wealth both in the sense that it is physically possible to gather possessions in one place (impossible in nomadic life) and to manipulate delayed-return subsistence economy and food sharing (Testart 1988; Woodburn 1982).

With wealth accumulation come differentiated social structures. Some individuals are better than others in hunting, gathering, herding, cultivating land etc., and those differences can translate into socio-political hierarchy. A clear case study for such a pattern is Richard Lee's long study of the transitional effects to sedentary life on the fiercely egalitarian and nomadic bushman, the !Kung San: "with the transition to village life the old mechanisms have proved quite inadequate. The process of moving to a new mode of production involved the !Kung not only in changes in the economic base but also has necessitated the emergence of new kinds of political relations, new forms of leadership, and new methods of resolving disputes" (Lee 1979: 369).

Population growth is a second central factor that is strongly associated with the formation of socio-political hierarchy. In nomadic groups, group size is small due to the environmental limitations, such as food and water supplies. Moreover, internal affairs are easier to maintain and conflict resolution is more flexible in smaller groups that can fission when severe tensions rise. With the move to sedentary life, conflicts become more frequent, more effort is required from group members (especially from food suppliers), and increased degrees of cooperation and coordination are necessary (Lee 1979: 354-369). Hence, increased group size may facilitate the concentration of political power in the hands of a leader who can resolve these inevitable problems of large sedentary groups that cannot fission that easily (Boehm 1999: 97-100).

Furthermore, population growth may have the effect of creating direct dependency between those who have and those who do not have enough resources. When the number of offspring is no longer confined by the constraints of nomadic life (e.g. carrying children on one's back), the main limitation of population growth becomes food and water supplies. Given that resources may be unstable and not always abundant enough to support all group members, and combined with the natural variation in personal skills, food supply by those who have more of it to those who do not have enough can transform from a matter of right (as in nomadic foragers) to a matter of dependency, submission and hierarchy (Service 1979: 18).

When group size reaches large numbers, and when resources become scarce or not available to all, dependence may result despite leveling-down mechanisms. Inegalitarian outcomes can occur because some individuals take advantage of this dependency, based on their tendency to push for high rank and status. Alternatively, inegalitarian outcomes may occur despite a strong egalitarian ethos, namely, by the mere fact that some individuals become physically dependent on others for the lack of ability or luck. This is, of course, not to say that those who become dependent on others have different preferences of social organization; only that this is their best survival option given their constraints and alternatives.

The fact that many participating factors (some contradictory) have been associated with the transition from political egalitarianism to socio-political hierarchy (see Wiessner 2002) testifies that environmental, social, demographic and other conditions are not necessary *causal* factors that can provide a general explanation to this transition. Both abundance of food and the lack thereof have been associated with socio-political hierarchy. Similar explanatory problems appear

regarding the important precipitating factors of a change in subsistence economy and population size. These factors may engender important options for deviating from political egalitarianism, but they are not necessary or even sufficient conditions for it. In some cases, these above mentioned socio-cultural and ecological changes do not bring about socio-political hierarchy, and in other cases of socio-political hierarchy they are missing altogether.

In fact, it is important to note that the transition from nomadic foraging to sedentary life need not *necessarily* alter political egalitarianism at all. There are many sedentary societies that fiercely maintain an egalitarian political structure and ethos in the face of a variety of environmental and cultural conditions. An array of horticulture and semi-nomadic tribal societies manage to sustain a non-hierarchical political structure (Barclay 1982; Boehm 1999: chapter 5; Howe 1978). For instance, Mitchell (1978, 1988) depicts the ways which the Wape, a horticultural people, have employed in order to uphold their egalitarian ethos, despite outside pressures and strong Western influences. The Wape have, with ingenuity, utilized gambling in order to decrease wealth accumulation and increase wealth circulation within their community. Accordingly, Wape political organization is kept non-hierarchical and no person can command another. That is, political-egalitarianism is a strong and pervasive phenomenon and many societies manage to maintain a non-hierarchical political structure despite sedentary life and with all the complications and complexities that come with it.

Socio-cultural and ecological conditions cannot therefore be seen as causal forces for socio-political hierarchy; they are precipitating factors that together with underlying evolutionary predispositions yield socio-political structures. These bio-psychological factors should not be ignored in the explanation of socio-political transformations just because they are constant. The constant interplay of high rank and status seeking and aversion of submission is central to causality in socio-political change. Socio-cultural and ecological factors, on the other hand, are important in that they explain the immense variance in socio-political structures, but not their shared underlying causality.

More specifically, the immense variability in socio-cultural factors does not preclude identifying two general trends of socio-political development since the Neolithic era. The one trend is high rank and status striving through domination, which manifests itself in increasing socio-political hierarchy in global terms, especially since the conflict escalation between tribes, city-states and empires. Small

political units, egalitarian or otherwise, were forced into hierarchical structures, or were submerged into large hierarchical units because of conflict escalation and the expansion of one political unit at the expense of the other.⁵ Even if a group had managed to keep an internal egalitarian political structure, it nevertheless became contained within a larger hierarchical political structure such as an empire or mega-state.

The second trend is that of a constant resistance to socio-political hierarchy by those who suffered from it. The resistance to hierarchical, despotic, arbitrary and disrespectful regimes is a universal phenomenon (see also Boehm 1993: 234). Ever since the inception of non-egalitarian regimes human beings everywhere on the globe, at different places and at different times, have rebelled, protested, and made various attempts to restrict the power of their rulers or to dethrone them and alter power monopoly in other meaningful ways. Empires, despotic states, and stratified societies have all suffered from instability and constant tensions because resistance to subjugation is a universal phenomenon. In the 20th century, the last empires and mega-states collapsed and disintegrated into smaller political units.

The two trends just described are consistent with the two predispositions mentioned above. On the one hand, individuals who occupy high rank and status in social hierarchies generally do not give up power even when it is clear that their reign is illegitimate and falling apart. In fact, as history clearly reminds us, those who exercised power usually did not restrain themselves from deliberately exploiting the weak and the subjected in order to stay in power. On the other hand, subjugated individuals have the incentive to curb the power of those who rule them, and, where possible, to level them down, keep them in check, and replace them at will. This equally applies to groups under extreme domination such as slaves, peasants, serfs, untouchables, and prisoners, although their tactics to resist domination are obviously more implicit and restricted due to power monopoly by rulers (Scott 1990).

⁵ Boehm depicts the post-Neolithic transition from political egalitarianism to political hierarchy in a similar way: egalitarian societies of tribesmen “continued the political approach of hunter-gatherers under radically different ecological circumstances” (1999: 90). Tribesmen persisted with their denial of authoritative leadership and prevented it from developing. As a consequence they were “prone to raiding, feuding, and territorial warfare” and they were pushed into forming intertribal coalitions (Ibid: 91). The transition from a confederation of tribes to chiefdoms and kingdoms was accelerated by the competition between tribes and confederation of tribes, and this eventually gave rise to strong and powerful central authorities that can be seen as the first states. Indeed, some of these chiefdoms and kingdoms eventually became the kernels of the first civilizations (Ibid: 97)

5. The Reemergence of Political Egalitarianism

The ecological, social and technological transformations that began about 11,500 years before the present mark the onset of a historical course of much variability and manifold changes. In the 20th century, we have seen the reemergence of political egalitarianism throughout the world with the spread of modern democracy which has become the dominant form of political system in the world.

Political egalitarianism among nomadic foragers is not synonymous with democracy. Democracy is a term that usually refers to a large political unit with formal institutions; whereas nomadic foragers have informal institutions, fluid social composition, and informal alternating leaders for different roles. In the 21st century the term democracy pertains to the modern territorial ‘sovereign state’, a system that began to crystallize after the Peace of Westphalia (1648) (Biersteker and Weber 1996; Brown 2002). Nonetheless, nomadic foragers exhibit democratic characteristics such as deliberation, reaching consensus on group decision making, control, accountability and replacement of leaders, and leadership only by people’s consent (Lee 1982; Silberbauer 1982). The striking similarities between democracy and the political practices of egalitarian forager bands are hard to ignore. Democratic mass elections can be seen as modern forms of a leveling-down mechanism by which an unsatisfied rank and file can hold its leaders accountable and replace them if necessary.⁶ Elections also reflect a social mechanism of reaching a consensus similar to those in foraging bands. And, elections are an acknowledgment of the importance of popular legitimacy and citizens’ consent.

Moreover, democracy is not a term with a fixed meaning; the understanding of what democracy should entail has changed during the centuries and is still contested nowadays (Whitehead 2002). Since the mid-20th century, a procedural definition of democracy has become the main tool for distinguishing between non-democracies and democracies in the 20th century (Huntington 1991: 5-13); although this definition does not apply to any democracy prior to the 20th century. In the flux of changing definitions and understandings of democracy it becomes clear that the concept is context dependent, having a core meaning pertaining to the rule of the people (*demos*) but in an ongoing contestation of what the role of the people entails (Whitehead 2002).

⁶ “Most abstractly, but also most profoundly from the standpoint of democratic theory, all these separate strands of accountability are bound together by the far more intangible notion that all those who govern are ultimately answerable to the governed as a whole” (Whitehead 2002: 94). This definition equally applies to leaders in hunter-gatherer bands and in many tribal societies as well.

In this sense, the political egalitarianism of small nomadic bands represents a seminal form of democracy or at the very least as a political structure with strong democratic characteristics. In other words, our ancestors most probably have had a type of political structure which can be termed as *Paleolithic Democracy*, a democracy adapt to a small group of nomadic foragers. Correspondingly, modern democracies are political egalitarian structures adapt to the post-Neolithic era of mass societies. Modern democracies are politically egalitarian in comparison to other political structures, which are clearly not characterized by the basic and minimal requirement of the rule *of the demos*.

Thus, the rapid growth of democracy in the last century can be understood as a reemergence of political egalitarianism in the form of modern democracy, a political egalitarian adaptation in the socio-cultural conditions and context of the 20th century. Why and how did democracy emerge, strengthen and spread so rapidly worldwide? Can the forces that brought about democracy be ascribed to the same causal forces that were discussed above? In the remaining subsections of this paper, I explore three general avenues of thinking about these issues. The first subsection locates the 20th century democratic boom in evolutionary time-scales. The second subsection explores historical examples of political egalitarianism in the past several thousand years. In the third subsection, I suggest that bio-psychological predispositions do play a central causal role in democratization. I refer to general phenomena and fields of scholarships that support this hypothesis.

5.1 The Emergence of Democracy in Evolutionary Time Scales

From the beginning of the Neolithic era to the rapid expansion of democracies in the 20th century less than 10,000 years have passed. In fact, the beginning of political hierarchy escalation begins rather late in the Neolithic, approximately 6,000 years before the present, a very short time in evolutionary scales. Within those last 6,000 years the picture is of complex and unstable dynamics between social forces that perpetuate political hierarchy and social forces that resist it. Actually, the escalation of political hierarchy and its subsiding are encapsulated within a very short historical interval, relative to the long period in which human beings maintained political egalitarian structures.

In evolutionary scales, democracy appeared rather quickly in human history as an adaptation to conditions of massive population growth and socio-cultural flux. A helpful perceptual scale and illustration to this point would be to compare the relative portion of historical periods to their equivalent in a one-day scale.

For more than 21.5 hours of the day (more than 90% of human history counting from 100,000 B.C.E), human beings (*Homo sapiens*) lived in small egalitarian societies of foragers. The emergence of agriculture and the beginning of the Neolithic era occurred in the last 2.5 hours of the day. The escalation toward political hierarchy started only in the last 1.4 hour of the day. The Athenian democracy briefly emerged and disappeared 36 minutes before midnight. The modern territorial sovereign state system that began to crystallize after the Peace of Westphalia (1648) was created in the last 5 minutes. Democracy, as a type of regime that qualifies by 20th century definitions, emerged barely 2 minutes ago! By 20th century standards of the term, democracy may be a very recent development in human history.

Nevertheless, looking at this from another angle, the 20th century democratic boom occurred only about two hours after the Neolithic revolution and its troubled aftermath, and barely 4 minutes after the modern state system was formed. Thus, in an evolutionary timescale, political egalitarianism in the form of democracy re-emerged quite fast, and after only a very short interruption. This fast achievement attests to our incredible adaptationist capacities to learn and control new environments that were not part of our evolutionary history, but perhaps not less importantly also points to the deep and inherent resistance to political hierarchy and subjugation.

5.2 Democracy was Always Around

A second, and complementary, line of thinking about the emergence of democracy is that the forces that engender political egalitarianism were actually always at work and they gradually transformed political structures into 20th century democratic forms and standards.

As indicated above, the Athenian democracy was alive and kicking already 2500 years ago, and so were other democratic Greek city-states. Athenian democracy, although lacking in many respects in today's standards, appeared approximately 2,500 years after sedentary structures actually became prevalent in most human societies (Clark 1968; Cosmides and Tooby 1997) and not long after the first civilizations appeared (Boehm 2003). The Republic of Rome is another example (for the examples below see Dahl 1998: chapter 2). Rank and file (plebeians) struggled for their place in decision making and eventually achieved it. Democracy in the Republic of Rome lasted even longer than the Athenian democracy. However, after Rome grew into an empire, democracy turned into a despotic regime.

Moreover, for more than two centuries, between 1100-1300 C.E., small democratic city-states appeared in Italy. The middle class demanded and gained a say in government. These small democracies were later subdued in larger authoritarian political units.

More historical examples exist. Around 800 C.E., small communities of peasants, in what is today a canton in Switzerland, “found themselves in a uniquely egalitarian situation. Bound together by their common status ... and by their common rights of usage over [mountain pastures], they developed a sense of equality wholly at odds with the hierarchical, status-conscious thrust of medieval feudalism. This distinctive spirit was to dominate the later emergence of democracy in the Raetian Republic” (quoted in Dahl 1998: 19-20).

England is also an interesting example of a slow gradual transition to democracy. Dahl (ibid, 21 – emphases added) describes the growth of English democracy as a “product less of intention and design than of *blind evolution*, Parliament grew out of assemblies summoned sporadically, and under the *pressure of need*, during the reign of Edward I from 1272 to 1307.” Other than England, small communities of farmers, peasants, middle class merchants and raiders, such as the Vikings, produced local democratic assemblies (which later demanded participation rights) in many other parts of Europe, such as in Norway, Denmark, Sweden, Florence, Venice and probably many other places. Moreover, the democratic practices of Switzerland’s cantons and the American local assemblies and communities were active prior to the 18th century. The French Revolution’s (1789) motto of “Liberté Égalité [egalitarianism or equality] Fraternité” symbolizes more than yet another short democratic transition. The French Revolution is seen as a turning point and a catalyst for the transition from absolute regimes to democracy in Europe.

Although these examples are not democracies in today’s standards, the common denominator between them is that they are associated with (or started as) small scale local societies that produced or enhanced democratic characteristics. Also, in all these examples, leveling-down mechanisms were involved: demands for elections and representation or revolutions by the rank and file. The successful activation of these leveling-down mechanisms restricted leaders’ authority and modified social structures in a similar manner to the way they were employed in the Paleolithic era. These historical examples are not easily captured by, and indeed they make little sense in light of, 20th century theories (and standards) of democratization.

These examples are, however, completely compatible with the notion that democracy was consistent in history.

Defined by 20th century concepts and standards, democracy is indeed a 20th century phenomenon. However, democracy as an evolved product of leveling-down mechanisms, which is adapted to large scale societies, is a phenomenon with ancient and persistent foundations. Democracy has been becoming more sophisticated both ideologically and institutionally, and the heightening of democracy has been gradually transpiring throughout the centuries in several parts of the world (Whitehead 2002). Gradual transitions to democracy are still occurring in Africa (Bratton 1992, 1999; Gyimah-Boadi 1999; Williams 2003; Young 1999), East Europe and South East Asia (McFaul 2002) and the intermediate category or ‘partial democracies’ is now becoming clearer as an important phase in the democratization process (Epstein et al. 2005).

Lastly, and perhaps more importantly, the above mentioned examples should be supplemented with dozens of examples of small continuous hunter-gatherer bands with democratic characteristics in Africa, East Asia, North, Central and South America, the Mediterranean, Oceania, New Guinea and Australia (Boehm 1993, 1999).⁷ In fact, the emergence of hierarchical political structures is quite recent in human history, with centralized political power emerging only within the last 6,000 years and in certain places emerging quite recently. As Boehm puts this point “hierarchical societies with centralization of political power arose only within the past 6,000 years or so, with the advent first of weak chiefdoms, then authoritative chiefdoms or primitive kingdoms, then early civilizations and empires, and finally modern nations. At the beginning of the eighteenth century, there were still major regions of the world where this transition from egalitarian tribes (or bands) to the hierarchical types that followed had not yet begun” (2003: 212).

Hence, democracy was always around to some degree. Forms of democracy have been evolving for centuries, and other forms of political egalitarianism among pre-state societies were continuous in many parts of the world as well. It is easy to

⁷ Interestingly, for many centuries smaller societies seem to have had more success with democracy than empires and big societies (Whitehead 2002: 253). Many seminal democracies, however, lost their independence to strong empires and states, probably as a result of wealth accumulation that enabled rulers to build big armies and strengthen their coercive regimes (Brown 2002: 23-24). On the other hand, the fall of empires served in many cases (but certainly not in all cases) as a catalyst towards more democratic societies. The breakdown of big empires or nondemocratic entities into smaller units is no guarantee for democratization, but it does seem to be associated with it, most probably because members of smaller groups can more easily communicate and cooperate (Deutsch 1961) and set in motion leveling-down mechanisms which can shape democratic characteristics.

forget about or even ignore this fact when faced with the drama and splendor of great historical civilizations and mega-states, and of meteoric conquerors that rose and fell in an eyeblink. The democratic boom of the 20th century, thus, is an important development in an ongoing process. Democracy did not emerge anew in the 20th century; it rather came into a new phase of development, in continuation with its persistent trends of resisting the rule of the few and increasing the rule of the people. Finally, at the beginning of the 21st century, it is already safe to say that whole world can, and probably would, become democratic for the simple fact that three-fifths of the world's states, and over sixty percent of the world's population, already live under democratic systems, regardless of very different cultural, economic, geographic and other contingent factors (Diamond 2003).

5.3. Bio-Psychological Predispositions at Work

The third avenue of thinking about democracy and democratization brings us back to the issue of causality. Previously in the paper, the factors of aversion to subjugation and seeking of high rank and status were associated with the transition from political egalitarianism to political hierarchy. In this subsection, I point to general themes and scholarships in political science and sociology that support the hypothesis that the causes of democratization can be ascribed to these factors as well.

The fact that the history of democracy is immersed with violence, revolutions and contentious politics can hardly be disputed (Aminzade 2001; Goldstone 2003; Gurr 1970; Moore 1967; Tarrow 1994). The emergence, heightening and spread of democracy was, more often than not, associated with struggles emerging from within society against oppressive regimes and social hierarchies. The struggle for the vote by men, women and minorities in the last centuries testifies that democracy did not come easily and usually not without a fight. Those who enjoyed the privileges of political hierarchy were reluctant to share power or give it away if they were not forced to do so. In fact, it can be said that democracy reached its 20th century form by gradual and continuous struggles by those who were oppressed and denied of political power. This struggle has come to be known in political science as the "struggle for recognition" (Fukuyama 1992; Honneth 1995; Taylor 1992).

The struggle of recognition reflects the two aforementioned predispositions. The struggle for recognition is the struggle against deprivation and subjugation and it is also a struggle for high rank and status. In the social psychology literature the phenomenon of a struggle for recognition is known as the defense and pursuit of

positive self-esteem (Crocker and Bylsma 1995; Crocker and Nuer 2004; Leary 1999, 2004; Pyszczynski et al. 2004).

Furthermore, an extensive body of scholarship about psychological motivations and social change has been explored in sociology. The argument of ‘relative deprivation theory’ (Gurr 1970) bears similarity to the logic presented in this work regarding issues of causality: while socio-cultural conditions may vary substantially from place to place and from time to time, the underlying causal factor that explains why revolutions and social change happens is rooted in the same psychological disposition to resist (relative) deprivation. That is, Gurr identifies causality in certain universal psychological models of the mind, while mapping an array of contingencies that may trigger this psychological mode and motivate people into violent behavior and to rebel against their regimes and rulers.

The importance of bio-psychological predispositions is also manifested by the fact that almost all regimes in the last decades describe themselves as democratic or at least make every effort to present themselves as speaking in the ‘name of the people’, as elected by the people, or at least as not disrespecting the worth and dignity of their populace. Citizens, on the other hand, can be quite sensitive to the ways they are treated by their regimes. Certain policies may be seen as lacking recognition or as misrecognizing people’s worth. Indeed, Charles Taylor’s (1992) essay, *The Politics of Recognition*, is an important contribution which stresses the fact that politics are shaped by people’s perceptions of recognition and non-recognition.⁸ Francis Fukuyama (1992) has stressed the ideological dimension of the struggle for recognition arguing that liberal democracy signifies a convergence point of political ideologies. The triumph of liberal democracy is not incidental, argues Fukuyama; only universal recognition in people’s civil and political rights can bring about a political system that is lacking an internal contradiction in its moral foundations.

Hence, there is ample evidence to claim that the causes of democratization can be ascribed to the bio-psychological factors that were elaborated above. By this perspective, political structures were selected due to their compatibility with the

⁸ “The thesis is that our identity is partly shaped by recognition or its absence, often by the *mis*recognition of others, and so a person or a group can suffer real damage, real distortion, if the people or society around them mirror back to them a confining or demeaning or contemptible picture of themselves. Nonrecognition or misrecognition can inflict harm, can be a form of oppression, imprisoning someone in a false, distorted, and reduced mode of being” (Taylor 1992: 25). See also Isaiah Berlin who has put it in vivid words: “What I may seek to *avoid* is simply being ignored, or patronised, or despised, or being taken too much for granted — in short [...] having my uniqueness insufficiently *recognised*...” (2002: 201-202 – emphasis added).

predispositions of subjugation aversion and seeking high rank and status. By way of trial and error, regimes that were not compatible with these bio-psychological factors were prone to fail and be replaced, while those which were more compatible tended to endure (see also Fukuyama 1992). Many socio-cultural factors are obviously involved in this complex process as participating factors, but not as causes.

6. Conclusions

In this paper, I proposed a macro-level explanation of the development of socio-political structures in human evolution, up to the democratic boom of the 20th century. This undertaking has served several purposes.

First, after exploring the antiquity of our democratic heritage and its underlying biological causes, it can be concluded that democracy and political egalitarianism in general do not conflict with bio-psychological predispositions. Human nature is more compatible with political egalitarian outcomes than with political hierarchy.

Second, the exploration of ancient political egalitarianism and its persistence throughout human evolution reveals a striking contrast to the stylized-fact about a seemingly lack of democratic characteristics during most of human history. The assumption that democracy and political equality were lacking during most human evolution is unwarranted, unsupported and misleading. There is considerable evidence to suggest that Paleolithic democracy was prevalent, tenacious, and has never been easily replaced by political hierarchy even not in post-Neolithic era.

Third, the overview of the evolution of socio-political structures provides an appropriate framework to evaluate the emergence of democracy and its impressive growth from the 20th century onwards. To understand the emergence of democracy and the phenomenon of democratization in general it is important, I believe, to state what our current political structures have *evolved from*. By broadening the analysis perspective into the Paleolithic and considering democracy as a political egalitarian adaptation to post-Neolithic times, democracy seems to have *re-emerged* relatively quickly in human history after a very short interrupted interval.

Forth, I have explored the underlying causes of socio-political change. It appears that political egalitarianism and socio-political hierarchy can both be ascribed to the same causal factors. This attests to the importance and robustness of these factors as explanatory factors to most different socio-political phenomena and to democratization in particular.

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