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Tributary World-Ecologies, Part I¹ The Origins and the North Sea World

Çağrı İdiman

Yeditepe University cagri.idiman@yeditepe.edu.tr

Abstract

This essay, in two parts, argues for the centrality of the world-ecology perspective for theorizing the relations, dynamics, and crises of the High Medieval Worlds. Commercialization Theorists view the High Middle Ages as a period of early capitalism, while classical Marxist theorists conceive it as a continuation of feudalism. In contrast to both conceptions, I argue that this era can instead be evaluated on its own terms from the world-ecology perspective. In Part I, I develop two interrelated historical-geographical and theoretical arguments. By employing a comparative world-historical methodology, I first argue that two distinct world-ecologies emerged in the North Sea and the Mediterranean during the High Middle Ages. Second, I define world-ecologies not only in terms of commercial relations, but also of production relations, that is, the mode of appropriation of nature and labor. Next, I focus on the common characteristics of tributary world-ecologies. These two world-ecologies were distinguished by agrarian tributary relations, two-tiered commercial networks, and a multiple state-system. I argue that they expanded due to the unique bundling of climatological upturn, novel production relations, and technological and organizational innovations. I conclude Part I by analyzing the North Sea world-ecology, which has typically served as a model for both Commercialization and Classical Marxist perspectives. While there is no question that both perspectives have their merits, it seems more fruitful to explain the relations and dynamics of the North Sea world by the mutual-conditioning of nature, tributary production, and two-tiered commerce. Second, it is more useful to theorize the North Sea world in relation to the larger tributary worlds, characteristic of the High Middle Ages.

Keywords: World-Ecology, Feudalism, Capitalism, Middle Ages, Historical Sociology

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Defining the Middle Ages is a contentious issue. In fact, how we define the Middle Ages—why, how, when, where it began and ended—is intimately related to how we define capitalism. Commercialization Theorists equate capitalism with market expansion and thus conceptualize the High Middle Ages as early capitalism. However, this runs into the problem of "immanence of capitalism," that is, the historically-specific socio-ecological relations of capitalism are assumed to exist throughout the entire human history. In turn, classical Marxist theorists focus on the production relations, and conceptualize the High Middle Ages as a continuation of feudalism, which is assumed to have originated after the fall of the Roman Empire. However, such an approach disregards the transformations in terms of organization of production and market integration between the Early and High Middle Ages. Furthermore, neither Commercialization Theorists nor classical Marxist theorists take ecological transformations between these eras into account. In contrast, although world-systems perspective's theorization of the High Middle Ages, as exemplified by Wallerstein, does consider ecological transformation, especially in relation to the feudal crisis, it has methodological and theoretical inconsistencies. Wallerstein (1974) argued that there were two world-economies in Europe during the High Middle Ages; later he rescinded his thesis and argued that there were neither world empires nor world economies at that time ([1980] 2011: xv). In this essay, I develop Wallerstein's earlier thesis, and follow Janet Abu-Lughod's lead (1989) that the High Medieval European Subsystem centered on the industrialcommercial Flemish towns in the North and the commercial Italian towns in the South. However, I first elaborate on Wallerstein's typology of world-systems and reconceptualize world-systems as world-ecologies. Second, I define world-ecologies, not only in terms of commercial relations, but also of production relations, that is, the mode of appropriation of nature and labor. By employing a comparative world-historical methodology, I argue that two world-ecologies occupied the North Sea and the Mediterranean during the High Middle Ages. These two world-ecologies were characterized by agrarian tributary relations, two-tiered commercial networks, and a multiple statesystem. They expanded due to the unique bundling of climatological upturn, novel production relations, and technological and organizational innovations. In turn, when these socio-ecological relations reached their limits, both world-ecologies collapsed, finding its clearest expression in the Black Death.

In this effort, I begin this essay, Part I², with a brief examination of the literature. I compare and contrast Commercialization, classical Marxist, and world-systems perspectives in terms of their historical periodizations, units of analysis, and prime-movers. The debates between these perspectives resulted in a series of spatial, temporal, and theoretical dilemmas regarding feudalism and capitalism: a) Europe versus England, b) High Middle Ages versus Early Modern Period, and c) Market versus Production dilemmas. In turn, I argue that the world-ecology perspective first allows us to develop a consistent and coherent methodological framework to overcome these dilemmas. Transition from pre-capitalism to capitalism is conceptualized in terms of a transition

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between "world-ecologies," that is, the basic spatio-temporal unit of socio-ecological analysis. Second, this perspective allows us to overcome the theoretical dilemmas by integrating the question of "nature as matrix." Neither are production, commerce, and power simply conceived as social, economic, or political questions nor is nature viewed as an additional external factor. Instead, tributary (and capitalist) relations of production, exchange, and power are all at the same time socio-ecological relations. Hence, tributary production, two-tiered market relations and statebuilding cannot be theorized independent of the soil and climate. Based on these methodological and theoretical premises, I focus on the common characteristics of the North Sea and the Mediterranean world-ecologies. I examine how the changing class relations, the Medieval Warm Period, and technological innovations were interwoven to each other. In turn, I scrutinize how these conditioned, on one hand, the increasing rent and tax, and on the other hand, the formation of two-tiered commercial networks based on long-distance and short-distance necessities (and also luxuries) trade. Finally, I examine the North Sea world-ecology, as a specific case. I assert that what has been theorized as the High Medieval/Feudal Europe is more precisely the North Sea world-ecology. It was premised upon the feudal "caging of the peasantry" and cellularization of economic and political power. Combined with new technologies and the warming of the climate, the absolute surplus product accumulated in the hands of aristocrats and monarchs. This, in turn, triggered the growth commerce and manufacture. Consequently, Francia and Flanders emerged as the organizing centers of the North Sea World due to the concentration of manufacture and commerce, while other zones specialized in agriculture. I conclude that it seems more fruitful to explain the relations and dynamics of the North Sea world by the mutual-conditioning of nature, tributary production, and two-tiered commerce. Second, it is more useful to theorize the North Sea world in relation to the larger tributary worlds, characteristic of High Middle Ages.

Review of the Literature: Overcoming the Dilemmas

Commercialization Models

Commercialization theorists identified capitalism with market expansion and viewed the High Middle Ages as a period of early capitalism. Based on the Smithian assumption that human beings have a natural propensity to "truck, barter and exchange" (Smith [1776] 1999: Book 1, Chapter II), they argued that markets also have a natural tendency to expand in the absence of political and cultural constraints. According to the proposed theoretical causal mechanism, market expansion leads to increasing division of labor; and the latter, in return, results in higher labor productivity. Historically, the expansion of both ancient and modern markets relied on the operation of this causal mechanism (Wood [1999] 2002a). Hence, there was no qualitative but a quantitative difference between ancient and modern capitalisms. However, the natural progress of history from the ancient to modern capitalism was interrupted by an "unnatural interlude," that is, feudalism (Wood 1995; Wood [1999] 2002a). The first disagreement among the Commercialization theorists pertained to this disruption. According to Smith (1999), it began with the so-called "Barbarian Invasions." In contrast, Pirenne (1956) argued that the breaking point was the "Arab Invasions" of

the seventh century, which closed the Mediterranean to commerce. The collapse of the Merovingian Dynasty resulted in the shrinking of the merchant class, trade, and cities. Consequently, the nascent Carolingian Dynasty was confined to an agrarian existence in the north. With the emergence of feudalism, politics, landowners, and countryside dominated over the economy, market, and city, respectively. McCormick (2001) later argued, however, that people and goods continued to circulate around the Mediterranean in the eighth and ninth centuries. In fact, emergence of the Caliphate conditioned the constitution of a new, yet subordinate, European economy oriented towards export of raw materials, especially European slaves, to the more developed Muslim world in exchange for specialized goods (spices, drugs, cordovan leather, papyrus) and cash (gold *dinars* and silver *dirhems*). Despite these revisions, however, McCormick still posited commerce as the prime-mover of the new European economy.

The second disagreement among commercialization theorists related to the revival of trade, and hence birth of modern capitalism. Most agreed that, starting with the year 1000, feudalism began to disintegrate, and capitalism was reborn with the growth of towns and expansion of trade (Smith 1999). Both Pirenne (1969) and Lombard (1947) underlined the role of Italy and its connections to the Mediterranean. However, for Pirenne (1969), the crucial link was between Italy and Byzantium. Cities and merchants who preserved their autonomy, Roman traditions, and Byzantine connections, became the initiators of the natural trend towards capitalism. In contrast, Lombard (1947) emphasized the links between Italy and the Islamic world. Lately, Abulafia (2011) formulated the relations in the Mediterranean both cooperative and competitive terms. During the Third Mediterranean 600-1350, the cities of Amalfi, Pisa, Genoa, Venice, and Barcelona could defend themselves against Muslim attackers much more successfully, establish their maritime supremacy by protecting their merchant ships from Muslim pirates by patrolling galleys and hence flourish based on necessities and luxuries trade. In short, for Commercialization theorists, trade and cities had chronological and causal priority in the dissolution of feudalism and transition to capitalism. (Procacci 1978) However, as Wood (1995) emphasized, the main problem of commercialization models was that they assumed the immanent existence of the explanandum, that is, capitalism. In other words, Commercialization theorists were begging the question. First, the medieval markets were not capitalist markets. In the Early Middle Ages, most trade in the Mediterranean and the North Seas was luxuries trade. In the High Middle Ages, when necessities trade developed, not the entire social product but only the surplus product was exchanged. Second, social production was based on unfree and dependent peasant labor rather than wage-labor. Third, capital had not taken over production in the form of industrial capital but existed only in the forms of commercial and financial capital.

Classical Marxist Models

Classical Marxists, in contrast, viewed the High Middle Ages as a continuation of the Early Middle Ages. Based on the dialectical materialist method, their focus was on class struggles, rather than on trade. They examined transition between different modes of production through internal contradictions generated by class struggles. Most agreed that the slaves in the Late Roman Empire

were gradually transformed into coloni—unfree dependent peasants—and then into serfs (Anderson 1974; Wood 2008). The relationship between serfs as the *de facto* owners of the means of production and labor, and landlords as the de jure owners of means of production and appropriators of serfs' labor was the defining characteristic of feudalism. Classical Marxists certainly recognized the significance of market expansion in the High Middle Ages. In fact, transition from labor-rent to rent-in-kind and finally to money-rent were crucial moments in the historical development of feudalism (Marx [1894] 1991; Takahashi 1978). Moreover, emergence of merchant's and usurer's capital were necessary conditions for the rise of capitalism (Marx [1894] 1991). However, they rejected that market expansion caused transition to capitalism (Marx [1894] 1991; Marx [1939] 1993). Dobb (1963; 1978) pointed out that the disintegration of feudal society began in areas peripheral to trade and urban life than core areas. For example, serfdom had dissolved in Northern and Western England much earlier than in the Southeast. Furthermore, the second serfdom in Eastern Europe was associated with commercialization. Hilton (1978a; 1990) showed that money, trade, and towns were not external to feudalism, but rather grew out of it. Brenner (1985a; 1985b) emphasized that expansion of trade resulted in divergent trajectories in different regions of Europe in terms of income distribution, long-term economic growth, and the development of forces of production. Hence, commercialization could not have accounted for transition to capitalism.

The internal disagreements among classical Marxists pertained to the theorization of transition from feudalism to capitalism, rather than to the characterization of the Middle Ages. Kosminsky (1956), Dobb (1963; 1978), Hilton (1973; 1978a; 1978b; 1990), and Byres (2006; 2009) argued that the serfs freed themselves from feudal domination through class struggle in the aftermath of the Black Death. This class struggle, in return, "modified the dependence of petty mode of production upon feudal overlordship...It [was] then from the petty mode of production (in the degree to which it secure[d] independence of action, and social differentiation in turn develop[ed] within it) that capitalism [was] born." (Dobb 1978: 59; also see Duchesne 2003) Although these theorists diverged from the commercialization models, they still conceived class struggle as means to remove the obstacles to capitalism, as it grew organically from pettycommodity production. In other words, they assumed capitalism to be an immanent phenomenon and hence also begged the question (Wood [1999] 2002a; Akram-Lodhi and Kay 2010). Unlike both commercialization and petty-commodity production models, Brenner (1985a; 1985b; 1977) and later Wood (1994; 2002a; 2005) argued that transition to capitalism was not due to the liberation of an immanent impulse towards capitalism, but rather an unintended consequence of the political balance between the peasants and landlords. Only in England, neither the landlords could enserf their peasants (as in the East of Elbe) nor the peasants could consolidate their smallholdings (as in Western Germany and France). Consequently, a large portion of land in England was owned by the landlords and farmed by tenants, whose tenure depended on short-term leases, rather than fixed by custom or law. This compelled them not only to produce for the market competitively but also to specialize, innovate, invest, and accumulate; hence leading to capitalism and sustained economic growth. There were, however, significant problems with classical Marxist

accounts—Petty-Commodity Production theorists and political Marxists alike. First, historical development of feudalism was neither a pre-determined nor a linear process. There were significant differences between "early" and "high" medieval eras in terms of peasant freedom, rights, and obligations. In fact, European peasants were much freer and more independent during the Early Middle Ages than the High Middle Ages, except for Francia. Demesne agriculture emerged only after the "caging of the peasantry;" that is, the Carolingian Era (Wickham 2005; 2010). Second, demesne agriculture was very much integrated into markets from its inception (Wickham 2005; 2010). Third, although they viewed feudalism as a pan-European phenomenon, hence excluded southern and eastern Mediterranean from the European dynamic, they—except for Sweezy (1978a; 1978b)—theorized transition to capitalism only as an English phenomenon.

World-Systems Perspective

The world-systems perspective's approach to the Middle Ages was based on completely different premises. Wallerstein (1974; 2000a; 2000b) distinguished between two types of world-systems: world-empires and world-economies. Both types of world-systems were united by a single division of labor and encompassed multiple cultural systems. However, they differed according to the singularity or plurality of their governing structures. The world empires were characterized by centralized political systems. Their basic logic was tribute-extraction/redistribution. Long-distance trade could exist within them, but it was still a minor part of the total economy. Furthermore, such trade was "administered trade," not "market trade." In contrast, world-economies were vast uneven chains of integrated production dissected by multiple political structures. Their basic logic was capitalist; that is, accumulated surpluses were distributed unequally to those who could achieve temporary monopolies in the markets. According to Wallerstein (1974; 2000a), between circa 8000 BCE and 1500 CE, the dominant type of world-systems was world-empires, which absorbed and destroyed world-economies in their expansionary phase and opened space for new worldeconomies in their contraction phase. Around the fourteenth century, however, something unprecedented happened in Europe. The intersection of cyclical, secular, and climatological trends resulted in the "crisis of feudalism." First, "the optimal point of [economic] expansion was reached given the technology, and there followed contraction" (Wallerstein, 1974: 37). Second, feudalism had exhausted the soil and blocked the development of forces of production over the millennium culminating in a secular crisis. Finally, the end of the Medieval Warm Period significantly worsened the climatological conditions, which further "lowered soil productivity and increased epidemic simultaneously" (Wallerstein, 1974: 37; 2000a). Despite the resultant disintegration of the feudal order—expressed by the collapse of the feudal ruling class, states, and papacy—there was neither an internal conqueror nor an external invader, which would have unified Europe into a world-empire (Wallerstein 1992). Hence, under pressure, Europe's ruling classes pursued policies and adopted strategies that favored a capitalist rather than tributary solution to the feudal crisis. This new capitalist system would neither be based on tribute like world empires nor rent like feudalism. Instead, surplus appropriation would be based on market mechanisms prioritizing productivity and efficiency in agriculture and industry (Wallerstein 1974).

Although, Wallerstein (1974), unlike Commercialization and classical Marxist theorists, recognized that the fourteenth century crisis was a result of a "socio-physical conjuncture," his approach suffered from certain methodological and theoretical inconsistencies. Arrighi (1998) raised two crucial questions about Wallerstein's account. First, he asked whether all worldeconomies were capitalist or not. Wallerstein's answer seems to be affirmative. (1974; 2000a; 2000b) However, this, first, created the problem of neo-Smithianism, the identification of capitalism with market (Brenner 1977); and second, the problem of begging the question, that is, the immanent existence of capitalism (Wood [1999] 2002a). Second, Arrighi (1998) also questioned why Wallerstein used feudalism to explain transition to capitalism although it was not part of his typology of social systems. Wallerstein (1974) had initially argued that there were two world-economies inside Europe during the High Middle Ages, he had also underlined that most of Europe, characterized by self-sufficient economic nodules, was not involved in these networks. However, he later completely rescinded this thesis and emphasized that there was neither a worldeconomy nor a world-empire in Europe before the emergence of the modern capitalist worldeconomy (Wallerstein [1980] 2011). In turn, Arrighi argued that "world capitalism did not originate in the economic activities and social relations that were predominant in the larger territorial states but rather in the interstices that connected those larger territorial organization to one another and their totality to other world-systems" (Arrighi 1998: 126). In other words, to explain how the European world-economy became capitalist, one is ought to focus on the interstitial growth of capitalism in city-states within and between world-systems. This interstitial growth, based on an alliance between state and finance, occurred only in Europe, and was later subjected territorial states to its logic and thereby propelled endless accumulation of capital (Arrighi 1998; 1994). However, Arrighi's approach also begged the question since he explained the emergence of capitalism through already-existing capitalist city-states. Second, he defined feudalism narrowly as the countryside, that is, rural social relations in medieval Europe; and argued that feudal relations were relevant only for understanding national histories but irrelevant for understanding the origin of world-capitalism (Arrighi 1998). Hence, he did not find it necessary to theorize pre-capitalist territorial units or world-systems. Consequently, he both dismissed the feudal character of medieval cities and the contribution of countrysides to the emergence of worldcapitalism.

World-Ecology Perspective: An Alternative Framework

In this essay, I develop a world-ecological perspective on the High Middle Ages (Moore 2003a, 2003b; 2003c; 2015; 2017; 2018). The world-ecological framework "takes…bundles of human/extra-human activity as its starting point" (Moore 2015: 37). Central to this reconstruction is the concept of *oikeios*, which aims to situate the "creative and generative relation of species and environment as the ontological pivot—*and methodological premise*—of historical change" (Moore 2015:35, italics original). Moore defines the *oikeios* as:

A multi-layered dialectic, comprising flora and fauna, but also our planet's manifold geological and biospheric configurations, cycles, and movements. Through the *oikeios* form and re-form the relations and conditions that create and destroy humanity's mosaic of cooperation and conflict: what is typically called "social" organization. Nature-as-*oikeios* is, then, not offered, as an additional *factor*, to be placed alongside culture or society or economy. Nature, instead, becomes the matrix within which human activity unfolds, and the field upon which historical agency operates. (Moore 2015: 36, italics original)

World-ecologies neither interact with nature as a resource nor act upon nature "but they develop through the oikeios... [they] are, rather, bundles of relations between human and extra-human natures. These bundles are formed, stabilized and periodically disrupted in and through the oikeios" (Moore 2015: 46; italics original). Climate, for instance, is interwoven into the fabric of world-ecological production, commerce, and power. When the climate changes, production, market, and power structures change as well. However, this does not happen "because climate interacts with civilizational structures," but rather climate, "atmospheric processes that co-produce power and production" structures, "is one bundle of determinations—not determinisms—that push, pull, and transform the rich totalities of historical change" (Moore 2015: 38; italics original).

Following Wallerstein, we can distinguish between two types of world-ecologies: world empires and world economies. In contrast to Wallerstein, however, I argue that both world economies and world empires can be distinguished on the basis of their dominant relation of production, that is, the mode of appropriation of nature and labor. Moreover, I emphasize that not only world empires, but all world economies before modern capitalism, were also tributary. Although long-distance and local necessities trade existed within these tributary world ecologies, most of the social-product did not take the form of commodities, that is, there was not generalized commodity production and circulation. These tributary world ecologies were instead characterized by partial commodity production. Production was predominantly subsistence-production (production-for-use as in Sweezy [1976a]), and a small portion of the products acquired the commodity form—only the surplus product above the individual subsistence of the direct producers was exchanged (Marx 1991). Production was principally based on a historically-specific bundling of environmental relations, technology, and exploitative relations in agriculture (Crone [1989] 2003). The direct producers had non-market access to their means of subsistence and production, mainly land. Class exploitation was premised upon the union of the "political" and the "economic," that is, the appropriation of the surplus labor of the direct producers by the landowning ruling classes though extra-economic—political, judicial, military—means (Brenner 1985a; 1985b; Wood 1981). In turn, the ruling classes derived their revenues in various forms of tribute: rents, levies, and taxes. When they were under pressure to increase their revenues, they relied on the extra-economic means to increase "absolute surplus labor" (Brenner 1977). Although increasing "relative surplus labor" through application of tools and machinery was not absent altogether, these innovations tended to be "once-and-for-all." There was no systemic incentive to innovate and increase productivity (Anderson 1974). Whenever market-opportunities arose, the owners of the surplus product (landlords, slave-owners, or free-peasants) could sell it on the

market. However, when markets opportunities shrunk, they reverted back to subsistence production. In other words, market imperatives for innovation, efficiency, and accumulation did not exist (Wood 1994; 2002b, 2009). The diverse tributary relations of production, thus, operated according to their distinctive logics as in Chayanov (1966) and were *externally articulated* with other relations of production through political redistribution (taxation) and administered markets (Polanyi 1957; 1968). Although capital existed in the forms of merchant's and usurer's capital, it had not taken control over production. Consequently, these tributary world-ecologies exhibited similar macro socio-ecological patterns of development and territorial expansion, that is, the expansion phases (A-phases) and the contraction phases (B-phases).

Based on these methodological and theoretical premises, I posit that the Middle Ages did not constitute a structurally coherent entity. What has been habitually called the Early Middle Ages, was, in fact, the period of dissolution of the ancient Mediterranean world-ecology (circa 700 BCE to circa 700 CE)—roughly corresponding to what Abulafia (2011) calls the "Second Mediterranean." Hence, it was neither an unnatural interlude (as in Commercialization models) nor the beginning of feudalism (as in classical Marxist models). In turn, the High Middle Ages witnessed the rise and collapse of two distinct world-ecologies: one in the north centered on the Baltic and the North Sea; and the other around the Mediterranean, what Abulafia (2011) calls the "Third Mediterranean." In other words, I elaborate on Wallerstein's former thesis, following Janet-Abu Lughod's (1989; 1996) lead. The North Sea and the Mediterranean world-ecologies expanded and contracted from circa 900 to 1350—hence representing a middling period between the ancient Mediterranean world-ecology and the capitalist world-ecology. Tributary relations, two-tiered commercial networks, and a multiple state-system characterized these two world-ecologies—these were tributary world-economies. They expanded due to the unique bundling of novel agrarian relations, technological innovations, and climatological upturn, that is, the Medieval Warm Period (Patel and Moore 2018). More specifically, the North Sea world-ecology was premised, not upon the Carolingian world imperial project, but rather on the geographical fragmentation of power, that is, the feudal process (Moore 2015; Patel and Moore 2018). The feudal relations were bundled together with the climate conditions of Medieval Warm Period. When these conditions changed, the result was not a biophysical crisis in the narrow sense of soil and climate, but also the crisis of the bundles of seigneurial, commercial, and territorial power. In other words, seigneurs, merchants, and states could not reproduce themselves. Consequently, the North Sea World faced an epochal crisis, which resulted in a new mode of producing nature, wealth, and power—the capitalist worldecology (Moore 2000; 2003a; 2003b; 2007; 2015; Patel and Moore 2018).

Tributary World-Ecologies: Local Relations, Global Connections, Common Trends

Relations and Forces of Production: Nature, Class Relations and Technology

The Mediterranean and North Sea Worlds witnessed significant transformations in the second half of the ninth century. First, both Carolingian and Abbasid World empires disintegrated. However, these transformations were not limited to the disintegration of state apparatus (bureaucracies,

taxation, armies) but had drastic impacts on production and commerce. The Carolingian Empire constituted the largest contiguous political entity in Western Europe after the fall of the Roman Empire. In less than a century, however, it would break into, initially three, and later, more kingdoms, principalities, duchies, and counties. Its greatest accomplishment was the "caging of the peasantry" (Wickham 2010). This resulted in the "feudal revolution," that is, both secular and ecclesiastical landlords were able to extract more tribute from free and unfree peasants in various forms. The Abbasid Empire, too, disintegrated as a political entity around the same time. By the beginning of the tenth century, a system of localized secular authority emerged, which only formally recognized Caliphs' religious authority. The dissolution of political power was much less marked there than in Western Europe since all these small principalities would later be incorporated into larger political units. However, in similar fashion to Europe, the basis of landtenure was radically transformed. The iqta' system spread across post-Abbasid lands. (Cahen 1953; Cahen 1968) Although iqta' differed from European feudalism in many respects (see Part II), it first represented a break from the previous systems of land-tenure, and, second led to the localization and demonetarization of systems of taxation. Moreover, despite the initial recovery of the Byzantine power due to the weakening of the Abbasid and Bulgarian Empires, the Seldjucid conquest of Anatolia shattered its rule and led to the introduction of pronoia system. Like iqta', pronoia also led to the localization and demonetarization of the taxation system. In summary, across the Mediterranean and North Sea worlds, centralized states weakened, whereas local magnates gained strength.

Due to the articulation of new relations of production, utilization of new technologies and favorable climate, that is, the Medieval Warm Period, two distinct world-economies began to emerge in Western Eurasia from the mid-tenth century onwards. The northern world-economy centered around the North Sea and the Baltic, whereas the southern world-economy centered around the Mediterranean. First, like all non-capitalist world-economies, the formation and expansion of these world economies were conditioned by the imposition of aristocratic hegemony over the peasantries. Under novel land-tenure arrangements, great land-owning classes could exploit their peasantries on greater scale and extract more surplus labor. Hence, complex, vivid, and colorful environment of economic dynamism was also a sign of increased exploitation (Wickham 2010). Second, combination of new technologies and favorable climate conditioned both the geographical expansion and economic growth of the world-economies. In the north, arable lands were expanded through forest clearance and reclamation of wetlands. In the south, especially on the European coast of the Mediterranean, formerly abandoned arable lands were reutilized. In turn, economic growth was achieved through a combination of new relations production and forces of production, that is, new technologies. These new technologies included the introduction of ironplough, horses as draught animals, watermills and windmills, irrigation, and the three-field system (White 1963). These technologies were introduced both in the north and south with varying degrees of success (for instance, three-field system was mainly a Northern European achievement, whereas irrigation spread to Southern Europe from Al-Andalus). Increasing exploitation of peasantries, utilization of new technologies and favorable climate resulted in higher agricultural

surpluses. These agricultural surpluses, in return, stimulated the growth of urban populations, crafts and commerce. Consequently, Flanders became an industrial region in the north, while Italian cities such as Amalfi, Pisa, Genoa, and Venice grew into big commercial entrepôts. The growth of agricultural productivity conditioned the growth of demand for urban manufactures. In return, the growth of non-agricultural consumers increased the demand on agricultural production and land reclamation. Furthermore, alongside necessities trade between towns and countrysides, long-distance luxuries trade also developed based on the conspicuous consumption and political accumulation needs of the large landowners.

Two-Tiered Market Relations: Necessities versus Luxuries Trade and Short-Distance versus Long-Distance Trade

In terms of commercial networks, the Northern Sea and the Mediterranean Worlds operated on two distinct economic (necessities vs. luxuries) and geographical (short vs. long-distance) levels. The first was the short-distance necessities exchange between the towns and the countrysides. What sustained city-countryside commercial networks and micro-regional agricultural and artisanal specializations was internal demand. That internal demand depended on the wealth of the aristocracies—that is, extraction of the surplus labor from the peasantries. The towns were dependent on their immediate hinterlands for their means of subsistence, especially food. The peasants, in return, needed coins to pay their rents, dues, and taxes; or buy manufactured goods from towns. If the towns were sufficiently large and dense, as in the case of central-northern Italian cities, Sicily and Flanders, Egypt, and Constantinople, the commercial networks became territorially dispersed. The short-distance necessities trade between rural primary products and urban low-quality cloth and ironworks was much more significant than the long-distance necessities and luxuries trade. Nevertheless, long-distance necessities trade also grew. In contrast to the Roman Mediterranean, grain was never a prominent commodity. This was probably because it was produced everywhere, and, even during the Empire, grain trade relied on fiscal rather than commercial networks. Aside from grain, however, the transportation of oil amphorae and cheese indicate that necessities were traded over long-distances. Al-Andalus began exporting high quality silks, timber, and later cheese to Egypt. Tunisian olive once again reached Italy and Egypt in 1000, as it did in 400. Tunisian pottery, yet this time glazed pottery rather than the African Red Slip of the late Empire, found its way to Italy in 1000, as it did in 400, possibly following the oil amphorae. Attalia (Antalya) became a major entrepôt between Syria, Palestine, and Egypt. (Wickham 2010) The economic complexity and competitiveness reached such a degree that that, not only Egyptian linen, but also Egyptian flax was sent to Tunisia and Sicily to be turned into cloth. Although commercial networks did not dominate everywhere and to the same degree, the Mediterranean and Northern world-economies, based on necessities trade, had begun to emerge by the tenth century.

The peasant majority was both directly and indirectly linked to the world markets. First, they were indirectly linked to the world-markets through the necessity to generate consistent food and fuel surpluses for the elites and workers, and raw materials for the craftsmen (Wickham 2016). In return, the towns and cities were linked to one another through long-distance necessities and

luxuries trade. Second, the peasants were directly linked to world-markets through commercialized agriculture. In fact, one of the most important impacts of commercialized agriculture was specialization. However, this did not lead to the complete development of monocrop plantations (as in the case of early capitalism). Nevertheless, in certain regions, for instance in Italy after the eleventh century, hillsides were dedicated to viniculture whereas the plains were allocated to cereals. Similarly, specialization in viniculture also developed in the Paris basin and Champagne, where a sufficient elite demand existed. However, since these vineyards on the northern margin were less productive, large-scale specialization-for-export developed further south in Bordeaux and Burgundy. In England, pastoral and agricultural regions became similarly specialized. Some agricultural regions became specialized in certain crops and began to develop export orientation. Although grains could be cultivated everywhere, fertile regions with access to rivers and seas could export to grain-deficient regions. This was also the case with Sicily and central-northern Italian cities, and with Polish grain and Northern Europe. Wool production also became specialized and export-oriented in England in the twelfth century, and in central Spain and in Italy in the thirteenth and fourteenth centuries. Similarly, Black Forests of Germany, and coastal forests of Norway specialized and exported timber. Northern Norway also exported dried fish (stockfish) via Bergen to England and further south. In a period of increasing population and urban demand, these necessities trade relations were established over long distances. Even after populations drastically dropped after the Black Death, these specialized production and exchange relations survived. In fact, after the population decrease, in many places, there was a move from agriculture to pasture, which would provide the basis for cheap woolen production in the following centuries (Wickham 2016).

The second level exchange was long-distance luxuries trade that connected towns and cities of the Northern Seas and Mediterranean and beyond. The demand for long-distance luxuries trade was generated by the kings, aristocrats, senior clergy, urban patricians, and their clienteles. In the North, London, Bruges, and inland Rhine ports such as Cologne developed as important entrepôts. In the Mediterranean, Constantinople, Alexandria (and inland Cairo), Palermo, Almeria, Genoa, Pisa, and Venice also became important commercial centers. The northern commercial networks expanded especially eastwards into the Baltic and connect to ports in Germany and Poland, which would in the fourteenth century become the Hanse. These networks would finally link to Russia, move along the great rivers between Novgorod and Kiev, and ultimately reach to Constantinople again. In the west, the rapid industrialization and urbanization of Flanders and Italy conditioned the development of land routes, even across the Alps. Moreover, the Northern Seas and the Mediterranean luxuries trade complex operated as parts of a larger Eurasian complex extending from China all the way across the Indian Ocean to Egypt (Abu-Lughod 1989). There, silks from Byzantium and Syria, linen and sugar from Egypt, pepper and other spices from the Indian Ocean, woolen cloth from Flanders and Italy, arms from Milan, and furs from Russia were sold. The real economic powerhouse of Mediterranean commerce was Egypt, with its center at Cairo. Cairo was twice the size of Paris and Milan, and with the decline of Constantinople after the Fourth Crusade,

was the largest city in the Mediterranean. Egyptian production of sugar and linen, with cloth factory towns of Tinnis and Damietta, was on an industrial scale (Wickham 2016).

By the tenth century, Mediterranean had reached the complexity of the North Sea trade in the eighth and ninth centuries, and even surpassed it. Egypt's agricultural wealth and productive complexity was the engine of this process. Even when the Italians took over the role of middlemen from the Jewish and Arab merchants from 1100 onwards, Egypt's central role to interregional trade as well as Indian Ocean trade did not change. What made necessities trade possible was that other regions, at least some of their sectors, became as complex as Egypt so that relations of economic interdependence became reliable and even beneficial (Wickham 2016). The commercial and banking techniques that the Italian mercatores employed had not only Roman, but also Jewish and Islamic precedents (Goeitein 1967; Çizakça 1994). Venice and Genoa relied on Egypt for their commercial success, whereas the Italian and Flemish cities could not match Egyptian linen production until the sixteenth century. In the eleventh century, Italian ports of Genoa and Pisa would become the commercial organizing centers of the Western Mediterranean by force, whereas the Crusaders and especially Venice would do the same in the East (Wickham 2010). By the twelfth century, the Italian and Flemish merchants began meeting halfway between in Champagne fairs—a series of six great annual fairs set up by local counts (Braudel 1992). As the exchange system became complicated, so did the credit system. The Tuscan towns of Lucca and Florence specialized in banking. These bankers not only invested in commercial operations, but they began financing war-making operations of kings. Sometimes they made extravagant profits, and, sometimes, when the kings defaulted, whole banks collapsed (Wickham 2016).

As we shall see in Part II, the tide began to turn at the beginning of the fourteenth century. Medieval Warm Period came to an end. Organizational and technological innovations of the tenth century had reached their limits. Agriculture was in crisis. As the populations grew, famines struck, and the Black Death followed. As much as being devastating, plague was transformative. First, it increased the bargaining power of the surviving peasants vis-à-vis landlords. Consequently, they were both able to legally liberate themselves, and economically keep more of their products to themselves. Especially in the future capitalist centers—Northern Italy, United Provinces, and England, these peasants were able generate sufficient demand for artisanal products, which was formerly stimulated by the landlords. Furthermore, they were also able to work for wages either as proletarians or semi-proletarians. Hence, second, the plague did not lead to the collapse of commercial networks. On the contrary, commercial networks both in the north and south developed more at a cellular level based on mass demand (Wickham 2016). In fact, the eastern and western halves of the Mediterranean began to de-couple again. In return, western Mediterranean and the Northern Seas began to unite based on capitalist productive and commercial networks. Hence, the period from mid-fourteenth to the mid-fifteenth century signified transition to capitalism and emergence of a unified Europe. Third, the aftermath of the Black Death also witnessed significant transformations in the state-formation. The landlords were weakened not only vis-à-vis peasants, but also states. As the Hundred Years War, aristocrats could not cope with rising costs and new technologies of war-making. Consequently, professional troops supplanted

aristocratic heavy cavalry and ended aristocratic military domination. The rise of professional armies also necessitated centralized fiscalization and bureaucratization.

The North Sea World-Ecology

Origins of Feudalism and its Historical-Geographical Variations

After the fall of the Roman World empire, first, the centralized fiscal networks dissolved in the Romano-Germanic Kingdoms. Although the commercial networks outlasted the breakdown of the fiscal networks, the economic regions became progressively more localized and simplified. Second, aristocracies were weaker and poorer than they were than under the empire, except Francia. This led to the diminishing purchasing power of aristocracies, decreasing demand for artisanal products, and gradual dissolution of interregional commercial networks (Wickham 2005). Although neither short-distance (monetary) trade nor barter among peasants and artisans completely disappeared, their volume was not comparable to the days of the empire (Bloch 1961). Third, the peasants gained power and autonomy from the sixth to the eighth centuries. Fourth, the civil and secular ideology of the Roman landed aristocracies was replaced by a more militarized identity. Fifth, as the regions gradually broke away the Mediterranean world economy, their economic development became conditioned by internal relations and dynamics. Consequently, interregional differentiation increased between the fifth and ninth centuries. Finally, interregional differentiation resulted in remarkable fluidity and flexibility in relations between landlords, peasants, and states (Wickham 2005).

The post-Roman peasantries had several roots and differed in rank and status. Slavery disappeared over the centuries, though neither swiftly nor completely. However, the form of exploitation of slaves changed over time (Bloch 1947a; 1947b). In the late Republic and early Empire, the landlords directly maintained their slaves and supervised production in their latifundiae (great slave plantations) through their agents. In the last centuries of the empire, it became more common for slaves to maintain themselves and hand in a part of their time and product to the landlords (Bloch 1947a). Former slaves became coloni and later serfs. They were settled down to their masters' lands and permitted to establish families (Anderson 1974; de Ste. Croix 1981). By the Carolingian Age, slavery no longer held the place it once held in the economy (Bloch 1947a). Aside from the serfs, there were different types of direct-producers—free smallholders, semi-dependent peasants, and dependent peasants; each with their differing rights and obligations. The differences between the original status of the peasantry led to important differences among their offspring in rights and obligations (Bloch 1966). The distinctive character of the medieval peasantry was the possession of means of subsistence and having access to communal property with ancient rights. This created a historically specific form of subordination and continuously generated a conflict over their legal status (Hilton 1990). The differentiation of the peasantry was, therefore, a constitutive characteristic of medieval European feudalism (Byres 2006; Kosminsky 1956; Hilton 1973; 1978b; Duchesne 2003). However, peasant differentiation

also remained quite limited (Hilton 1973; also in Byres 2009). Hence, feudal peasantries could be treated as a single class (Kosminsky 1956; also in Byres 2009).

The real struggle in the feudal society was neither between the different ranks of the peasantries (Byres 2009) nor among the different factions of the ruling class (secular or ecclesiastical), but between the landlords and peasants. On one hand, peasants had direct/nonmarket access to their means of subsistence—land, tools, and labor-power. On the other hand, landlords extracted surpluses in the form of rent (and later, dues) from the peasants by means of extra-economic coercion. Hence, as Hilton (1978b) argued, the struggle for rent was the prime mover in feudal society. By the time of the Carolingians, whether free or not, almost all the Western European peasantries were subordinated by the feudal landlord class. This is what Wickham referred to as the caging of the peasantry (Wickham 2010). In France and Germany, demesne agriculture and labor-rent continued into the twelfth century and in England, it did so into the fourteenth century. It was both an instrument of labor control and means of intensification agrarian revenue (Wickham 2010). In the Carolingian lands, peasants both paid rents and did labor service in the bipartite estates (manors). These estates were generally characterized by a dual laborforce: a large number of unfree tenants with no legal rights, who owed high rents and did most of the labor, and a small number of free peasants with less rent and labor obligations (Somçağ 1994; Wickham 2016). After the Norman conquests, England also witnessed the superimposition of feudal relations, perhaps in its severest form. Landlords, just like the Eastern European counterparts later in the sixteenth century, got directly involved in production, and expanded and reorganized their demesnes to sell products on the Northern Sea world market (Hilton 1949; Byres 2009). They employed bailiffs to supervise and organize the labor-force to increase their revenues (Hilton 1949). This led to a universal increase in the labor services demanded from the peasants (Hilton 1949; also in Byres 2009). The feudal relations also expanded to regions east of Elbe after the colonization of these lands. The colonizing peasants were exploited much less, and were, in general, freer in these regions compared to their French and English counterparts.

It is important to underline, however, that the estate model based on labor-rent and rent-in-kind was neither universal nor resilient across Europe. As Bloch pointed out: "feudal Europe was not... feudalized in the same degree or according to the same rhythm, and above all... feudalized completely" everywhere (Bloch 1961: 445). In Western Europe, there were still free landowning peasants. They tended to concentrate in either coastal regions of the Netherlands and Germany or the mountainous regions of the Alps (Wickham 2016). The northern-most regions of Scandinavia (including Finland) were never feudalized and stood as frontier zones with free peasants. The southwestern-most region of Iberia never experienced feudalism, either. Moreover, feudalism began to dissolve in Italy in the tenth and, even, in France, in the twelfth century. Only in England did it survive into the fourteenth century. Aside from the social and spatial differentiation of peasantry, there were also other forms of dependent labor articulated with serfdom, such as wagelabor and slavery. In France, most of the surviving demesnes after the twelfth century were cultivated by wage-labor. Although labor-rent, which marked unfree status, did not fully disappear before the Black Death, it was gradually replaced by more flexible patterns of exploitation

(Wickham 2016). However, neither wage-labor nor slavery occupied the dominant position that they did within the ancient Mediterranean or modern capitalist worlds, respectively. Hence, they operated according to completely different logic within framework of feudal relations. The landowning ruling classes derived their wealth and power from the lord-serf relationship and most of social product was the product of dependent peasant labor.

After the collapse of the Carolingian Empire, states lost almost all their control and, in return, the landlords extended their politico-judicial control over the peasantries in the form of seigneurie banale. This control included not only the dependent tenants but even free landowners (Wickham 2010). These lords were either militarized medium-owners or rich families from the village community. Their local knowledge made domination easier. They often formed capillary hierarchical links with their former neighbors in the form of patron-client relationships. Villages became more structured than ever, as they became larger and nucleated. After 800, they often had a church, and after 1000, they even had a castle. Castles formalized the caging of the peasantry. Peasants had less freedom and negotiating power (Wickham 2010). In other words, the development of the church-castle complex at the village level resulted in the cellularization of power; what Fossier (2006) calls "encellument." Seigneurie banale also included economic aspects. The landlords imposed the right to collect dues for justice, pasturing and wood rights, the use of the mill, and rights to require labor for transport, castle building, and castle guard. These dues, called taille (cut) in France, were substantial on top of the rent. Furthermore, they were imposed on both dependent tenants and free-holding peasants within the castle's territory. These patterns were prevalent in France, West Germany, England, as well as northern Spain and Italy. The peasants became so subjugated that they practically became unfree regardless of their origin. The expansion of seigneurial regime made manorial labor service unnecessary, as dues were easier to increase than rents (Somçağ 1994; Wickham 2016).

Articulation of Feudalism, the Medieval Warm Period, and the New Technologies

The subjugation of peasantries and the ushering of the Medieval Warm Period set the conditions for Western Europe to expand constantly in population, production, and commerce. First, European population tripled from the fall of the Roman Empire to the fourteenth century. However, the periods between 450–750 and 950–1300 demonstrated different demographic characteristics. The real demographic growth seems to have begun in the Carolingian period and accelerated after 950 (Wickham 2010). After 950, the strengthening of aristocratic hegemony and the coercion to produce absolute surplus labor should have contributed to the population increase. Furthermore, the beginning of the Medieval Warm Period contributed to a natural increase in agricultural productivity and the possibility maintaining a higher population. Second, western Europe began to expand internally. Peasants in northern Europe began to employ intensive methods in agriculture under the pressure from their landlords. One of these methods was the three-field system. In this new system, instead of two years in three, only one year was left to fallow. This method was already known in 800s, but it became generally used when population pressures increased (Wickham 2010). Furthermore, new crops were introduced in the north, which made

even fallow years unnecessary in certain areas such as parts of Norfolk and Flanders (Wickham 2016). In addition to these intensive methods, peasants also used extensive methods of land clearance and reclamation. Already in the Early Middles Ages, forests were exploited for timber, rough grazing, and hunting. Only after the increase of population pressures, did the peasants begin to clear forests, marshes, and heaths and to convert them into meadows and arable lands (Bloch 1966; Wickham 2010). Peasants also began utilizing the wheel and windmill on an ever-greater scale. Previously disconnected regions were united through improved communication and transportation. New villages sprung up all over Europe, and countless towns and cities either revived or were founded anew. Towns not only increased in number but also in size (Bloch 1966; Braudel 1992).

Third, since the collapse of the Roman Empire, mining and monetary transactions increased for the first time after the year 1000, except for two low points around 1100 and later around 1400. The great mines of Goslar in Saxony began their operations after 960s, Meissen in Saxony after 1160s, Freisach in Austria after 1190s, Jihliva in Bohemia after 1220s, and Kutná Hora in Bohemia after 1290s. Mining continued in Iglesias in Sardinia, the only non-Central European mine, for approximately a century (Wickham 2016). Increasing availability of silver and monetization of the economy created the possibility for transformation from rent-in-kind to money-rent (Hilton 1978a). This transformation initially took place sporadically and then on an extensive scale. It presupposed "significant development of trade, urban industry, commodity production in general and therefore monetary circulation" (Marx [1894] 1991: 932-933). From the eleventh to the twelfth and thirteenth centuries, rents and dues were increasingly paid in money. When taxation restarted in the thirteenth century, taxes were generally collected in money, as well (Wickham 2016). Peasants used coins to pay their rents and taxes and, buy manufactured goods. Landlords used them to buy goods and finance their war-making. In periods of market expansion (such as mideleventh to mid-thirteenth century), peasants could sell their surplus product. However, in periods of market contraction, they could revert to subsistence production and abstain from market interaction. Under feudalism, the peasants enjoyed customary rights to land. In other words, they had non-market access to their means of subsistence. They were "compelled to produce to survive, rather than sell to survive" (Moore 2003b: 106). Hence, due to their customary rights and form of intercourse with the markets, the peasantry could not be displaced either by landlords or by market forces (Wood 2009).

Medieval Cities: Commerce and Manufacture

Manufacture and commerce could only concentrate in towns and cities if they could attract skilled craftsmen and artisans from the countryside and other urban centers (Braudel 1992). In the Greco-Roman world, the inhabitants of the surrounding countryside were free to enter and exit towns and cities as they pleased, whereas the European medieval cities were closed enclaves circumvented by walls. Due to the feudal exploitation in the countryside, towns and cities became centers of attraction for the rural populations for both political and economic reasons. It was hard to leave the countryside and get inside the cities, but if a serf could live in a city for a year and a day, they

could earn their freedom: Stadtluft macht(e) frei (Braudel 1992). In the Middle Ages, the towns and cities were not capable of self-reproduction due to high mortality rates, and hence relied on influx of rural poor for population growth. However, these new urban populations needed to be fed, as well. For the first time in centuries, the countryside was able to provision the cities with sufficient surplus. Between the eleventh and fourteenth centuries, the rural and urban population increased rapidly. According to Slicher van Bath, Europe, by 1150, moved beyond "direct agricultural consumption," that is, self-sufficient agricultural production to "indirect agricultural consumption" conditioned by the commercialization of surplus agricultural production (Slicher van Bath 1966; also, in Braudel 1992). Consequently, towns and cities of High Medieval Europe began to expand on an unprecedented scale (Hilton 1978b). By the late eleventh century, approximately 10 percent of the European populations lived in towns with significant regional variation; ranging from two percent in Scandinavia to 15 percent in Italy. These figures probably doubled by the year 1300. Nevertheless, except for Italy and Flanders, towns did not dominate the society either demographically or politico-economically. In 1300, the largest city in the north was Paris, with possibly 200,000 inhabitants. London maybe had 80,000 people but acted as the center of a coherent state (Wickham 2016).

Urban manufacture and commerce were, hence, a natural outgrowth of feudal society (Dobb 1963; 1976; Hilton 1978a). Cities and towns were, then, integral to feudalism rather than being "non-feudal islands in the feudal seas" (Postan 1972: 239). Both industry and commerce were regulated and constrained by companies, guilds, and urban-corporate political communities; rather analogous to lordly and peasant political communities that maintained feudal relations in the countryside (Brenner 2001). Development agricultural production stimulated industrialization and commercialization of urban centers, especially in Flanders (as well as Italy). New divisions of labor emerged due to social and technological innovations, notably in sea transport, financial mechanisms, and business organization (Moore 2003b). Consequently, the manufacturing output increased, and the market economy expanded. As long as rising agricultural productivity and territorial expansion increased rural revenues, the demand for urban manufactures also increased. In return, the growth of non-agricultural population increased the demand on agricultural produce, putting more pressure on land for territorial expansion (Moore 2003b). Furthermore, long-distance luxuries trade was fueled by the demands of the landlords for either conspicuous consumption or political accumulation. These medieval towns and cities strengthened their positions in the trade networks through establishing workshops and amassing coins behind their walls (Braudel 1992). There were local markets, where the products of the city and the (immediate) hinterland were exchanged, town-markets in the countryside where the products of peasants were exchanged, and long-distance markets, where the products of distant "worlds" were exchanged. Finally, there were also seasonal and annual fairs (Pirenne 1969). Different factions of the merchant class were involved in these markets: the rural merchants were engaged in local trading of bulk goods and were usually the former agents of landlords and/or large-farmers, while the urban merchants were engaged in long-distance luxuries trade and "capitalized on poor communications and hence high

disparities of prices from one area to another, especially when certain areas suffered natural calamities" (Wallerstein 1974:19).

Zonal Differentiation and Integration

The North Sea world-ecology emerged based on these productive and commercial relationships. As Braudel observed "the Northern economy was built from scratch" (Braudel 1992: 98). The Carolingians' selection of Aix-la-Chapelle (Aachen) as their capital had already ignited the economic development of northern Europe. Though it would never match the Roman or the Abbasid levels, commerce developed in the Northern Seas under the Carolingian leadership. Despite coming under severe threat during the age of the Norsemen (820–891), the economy revived with the restoration of links across the Rhine and the North Sea. The Low Countries were reanimated (Braudel 1992). In response to the initial attacks, weavers and merchants moved to inhabit walled towns and cities. Textile industry and trade flourished from "the banks of the Seine and Marne to the Zuyder Zee" (Braudel 1992: 99). In the tenth century, North Sea commerce took off and the presence of Scandinavian communities in various ports across the sea extended the scope of commerce (Wickham 2010). As the Viking Age ended, the North Sea world economy expanded externally to include to territories that were neither occupied by the Romans nor feudalized by the Carolingians: Eastern Europe, Scandinavia, Britain North of Hadrian's Wall, and Ireland. "Gradually the seas surrounding the old continent—the stretch of water encompassing the Baltic, the North Sea, the English Channel, and the Irish Sea—were colonized" (Braudel 1992: 92). In the tenth century, the North Sea commerce, including the Irish Sea, Baltic, and Russian Rivers, was still luxuries trade. In southern Germany, several urban centers on the Danube were developing based on salt, horse, and slave trade. However, Danube, in the tenth century, was not yet a match for the Rhine, Meuse, and Seine (Wickham 2010). Only in the eleventh and twelfth centuries when the other North European regions matched the complexity of Francia, a true world economy emerged. English wool, Flemish cloth, French and Rhenish wine, Norwegian timber, and north Norwegian dried fish began to be exchanged on sufficient scale and scope (Wickham 2010).

Francia continued to be the most economically complex and active region of northern Europe. The Paris basin and Champagne specialized in viniculture for local consumption, while Bordeaux and Burgundy produced vines on large-scale for export. Mainz joined Cologne and Paris as a major artisanal and commercial center. In the tenth century, smaller urban centers also developed such as Saint-Denis just outside of Paris or the network of Flemish towns such as Bruges, Ghent, and Saint-Omer. Dorestad declined in this period, while being replaced by other centers in Rhine-mouth, especially Tile. Iron production increased noticeably, while ceramic production continued to expand as the Badorf and Pingsdorf kilns near Cologne were joined by products from Ardenne in the Meuse Valley and Beauvais north of Paris. The Badorf/Pingsdorf ceramics reached as far as the Scandinavian trading centers of Ribe and Hedeby but they were probably luxuries there (Wickham 2010). The distribution of products could now be traced not only through ceramic archeology but also through numismatic archeology. The wines of Burgundy and Paris region were exchanged for the wools of Rhine delta—the future Flanders, while the great river basins were

linked by roads and small market towns where monetary exchanges took place (Wickham 2010). However, in Francia, most commerce was still local: 80 percent of the coins were discovered within a 100 km radius of their mints. Flemish cloth production only began to expand only after 1000, and the Champagne Fairs began to be organized in the following century (Wickham 2010). Through these fairs, the North Sea and the Mediterranean Worlds made their contacts via land. Only in 1277, direct sea routes between Bruges and Genoa would be established and later in 1314 between Bruges and Venice. Italian merchants settled in the city. Either through land or sea, the precious spices that Italians brought afar were exchanged for the industrial products of Flanders (Braudel 1992).

Bruges emerged as the organizing center of the North Sea World because of its industrial capacity (mainly, textiles) and commercial ties. However, the industrial production of Flanders was not confined to Bruges. Its development also stimulated Ghent and Ypres' economies along the same lines, turning the entire region into a production zone unparalleled in Europe (Braudel 1992). By the eleventh century, Flanders developed its woolen-cloth industry and was importing cloth from England. In the thirteenth century, half of Ghent's population was textile workers. Such a concentration was only matched by Ypres, Milan, and later Florence. The Flemish cloth was exported to Florence for dyeing and finishing. However, this cloth was too high quality for mass consumption (Wickham 2016). In England, pastoral regions specialized in wool production, whereas agricultural regions specialized for grain production. Large-scale production, regional commerce, and urban development, especially in York, began to take off in the tenth century (Wickham 2010). England and Scotland provided the wool needed for Bruges' looms and, in return, the latter exported finished textile products (Braudel 1992). Bruges' trading network also included the loosely aligned cities of the Hanseatic League, controlling the trading waters of not only the Baltic but also of the North Sea, the English Channel, and the Irish Sea. Until 1280s, ships avoided navigating through the Sound, and even when that route became common, they continued to use the isthmus route between Hamburg and Lübeck. This stimulated the development of both cities as intersections of trade networks (Braudel 1992). The raw material products of the Baltic zone—wood, fur, wax, rye, and grains—were exchanged for the industrial products of Western Europe. However, due to their more developed position, it was the cities of Flanders that set the ground rules for exchange (Braudel 1992). However, the real rise of the Hanseatic Cities will come in the fourteenth and fifteenth centuries, that is, after the Black Death.

Medieval State-Making: Revival of Taxation and Bureaucracy

The high medieval polities in the North Sea World differed significantly from their early medieval predecessors. After the collapse of the Carolingian Empire the political units contracted in Europe. This process was reversed in the twelfth and thirteenth centuries across the continent, not only in France and England, but also in Poland, Hungary, and Sweden (also Castile and Italy further south). Early medieval polities were already involved in war-making and administration of justice. However, the high medieval polities re-instituted taxation and bureaucracies. Kings still owned lands, that is, relied on their rent incomes, but taxation steadily increased, especially due to the

rising costs of war-making. The level of taxation was not comparable to that of Roman, Byzantine or Islamic World empires, but tax and rent revenues allowed them to employ salaried officials and increase the effectiveness of their administration and justice (Wickham 2016). The rise of bureaucracies progressed concurrently with the increasing use of writing, growing conception of accountability, increasing complexity of law, and rising ideas of problem-solving (Wickham 2016). Finally, in addition to taxation and bureaucracy, the process of legitimation was different. The early medieval politics were based on assembly politics. However, assembly politics based on collective activity had dissolved across Europe, with the notable exception of England, and cellular units of seigneurial domination had replaced them in the eleventh century. State-building in the twelfth and thirteenth centuries started from these cellular units and proceeded from bottom to top. The kings either conquered or coerced these units into loyalty. However, inside the cellular units, seigneurial domination remained intact (Wickham 2016). The royal authority was legitimated by personal loyalty of lords to the kings. This loyalty was ritualized through ceremonies of homage and swearing of oaths. Not only did the lords swear oaths to the kings, but also the lesser men swear allegiance to their lords. Hence developed complex feudo-vassalic relations. New forms of etiquette, including chivalric behavior, began to be developed and refined in royal courts. There developed a ruling class culture directed at the royal courts (Wickham 2016).

In France, King Louis VII hardly controlled any area beyond the Paris basin and the lands of the English king, though technically his vassal, encompassed nearly half of his kingdom. Louis' son Philip II Augustus, using the Paris Basin as his base, doubled his resources and quadrupled the area under his direct control. Philip's son Louis VIII expanded the territories effectively under royal control as far as the Mediterranean Coast during the Albigensian Crusade (1208–1229). In these processes of expansion, the French Kings, instead of handing local power back to local counts and dukes, sent lesser-ranking, temporary, and salaried officials. Hence, the new centralized network of power could hold together during both the minority and crusading years of Philip's grandson Louis IX. During the reign of Philip IV, political authority was firmly established, with fewer lordships left such as Flanders, Burgundy, Brittany, and English Gascony. In short, France moved away from political fragmentation towards fiscal and bureaucratic centralization (Wickham 2016). In contrast, England was unusual in avoiding political fragmentation and localization of political power in the eleventh century. Although King John failed to reconquer his French lands, this did not result in the weakening of central authority. Instead, the aristocrats imposed a comprehensive charter of liberties, the Magna Carta, in 1215. The text demonstrated that the aristocrats, instead of seeking to establish autonomous power, were trying to establish a just and complex framework of government in which the king's and their rights and obligations were defined. Hence, the English government continued to develop in its complexity in the thirteenth century. Tax-collection rights of the kings came to be seen dependent on the consent of the royal assemblies of barons and knights, and representatives of towns at the end of the thirteenth century. These assemblies were called parliaments, by 1230s. Under 1258, the leading barons tried to circumscribe the royal authority by the Provisions of Oxford (or the Oxford Parliament), where in exchange for taxes (to finance the Sicilian purchase) the barons would partially and wholly acquire

the right to set up commissions, appoint ministers, and assume local administration. Although this eventually devolved into civil war and led to the defeat of the barons in 1265, parliamentary authority had to be recognized by Edward I, who incorporated it into his political practice though his statutes in 1270s and 1280s. Hence, Magna Carta and Parliamentary Authority constituted the foundations of the British Common Law. Edward brought Wales permanently under English rule in 1280s and absorbed Scotland temporarily in 1290s. Also, at war with France, taxation demands were on the rise. Hence, the baronial leadership forced Edward to restrict arbitrary taxation in 1297 (Wickham 2016).

Conclusions

In this essay, I offered a world-ecological perspective on the High Middle Ages to overcome the spatial, temporal, and theoretical dilemmas of the Commercialization, classical Marxist, and world-systemic models. I emphasized that the Commercialization models, by equating capitalism with market expansion and viewing the High Middle Ages as early capitalism, assume the immanent existence of capitalism, do not differentiate between tributary and capitalist markets, and disregard relations of production. In contrast, the classical Marxist models, by solely focusing on relations of production and identifying the High Middle Ages with feudalism, disregard transformations in terms of peasant production, organization, and freedoms between the Early and High Middle Ages. Furthermore, they also overlook different types of market integration. Moreover, both perspectives ignore the ecological transformations between the Early and High Middle Ages. In turn, world-systems perspective, especially Wallerstein, did recognize that the feudal crisis was a result of a socio-physical conjuncture. However, by identifying all worldeconomies with capitalism and incorporating feudalism, which was not part of his typology, his account also suffered from methodological and theoretical inconsistencies. I argued that the worldecology perspective first offers a consistent and coherent methodological framework to overcome these dilemmas and to comprehend the High Middle Ages in its own terms. The basic spatiotemporal unit of socio-ecological analysis is taken to be world-ecologies. The High Middle Ages is proposed to be theorized on the basis of two world-ecologies, that is, neither markets nor feudalism. Moreover, transition from pre-capitalism to capitalism is viewed as a transition between world-ecologies³. Second, by integrating the question of nature as matrix, the world-ecology perspective allows us to overcome the previous theoretical dilemmas. Hence, tributary production, two-tiered market relations and state-building are all simultaneously theorized as socio-ecological relations and processes.

Based on these methodological and theoretical premises, I posited that the "middle ages" did not constitute a structurally coherent entity. The so-called "Early Middle Ages," was, in fact, the period of dissolution of the ancient Mediterranean world-ecology. Hence, it was neither an unnatural interlude (as with Commercialization models) nor the beginning of feudalism (as with

³ See Part II

classical Marxist models). In turn, the High Middle Ages witnessed the rise and collapse of two distinct world-ecologies; one centered on the North Sea and the Baltic; and the other around the Mediterranean. These world-ecologies expanded and contracted from circa 900 to 1350. They expanded due to the unique bundling of novel agrarian relations, technological innovations, and climatological upturn, that is, the Medieval Warm Period (Patel and Moore 2018). In the specific case of the North Sea world-ecology, it seems first more fruitful to theorize the northern world in relation to the larger tributary worlds, characteristic of High Middle Ages, especially the Mediterranean world. Second, the North Sea world-ecology was premised, not upon the Carolingian world-imperial project, but rather upon the feudal caging of the peasantry and cellularization of economic and political power (Wickham 2010; Moore 2015; Patel and Moore 2018). Combined with new technologies and the warming of the climate, more absolute surplus product accumulated in the hands of aristocrats and monarchs. This, in turn, triggered the growth commerce and manufacture. Consequently, Francia and Flanders emerged as the organizing centers of the North Sea World. As we will see in Part II⁴, when these conditions changed, the result was not a biophysical crisis in the narrow sense of soil and climate, but also the crisis of the bundles of seigneurial, commercial, and territorial power. In other words, seigneurs, merchants, and states could not reproduce themselves. Consequently, North Sea World faced an epochal crisis, which resulted in a new mode of producing nature, wealth, and power—the capitalist worldecology (Moore 2000a; 2003a; 2003b; 2007; 2015; Patel and Moore 2018).

About the Author: Çağrı İdiman is an assistant professor in the Sociology Department at Yeditepe University. He received his PhD from the Sociology Department at Binghamton University. His work concentrates on world-hegemonic competitions and the transition to capitalism. More generally, he synthesizes world-history, world-systems, and world-politics on the basis of world-ecology.

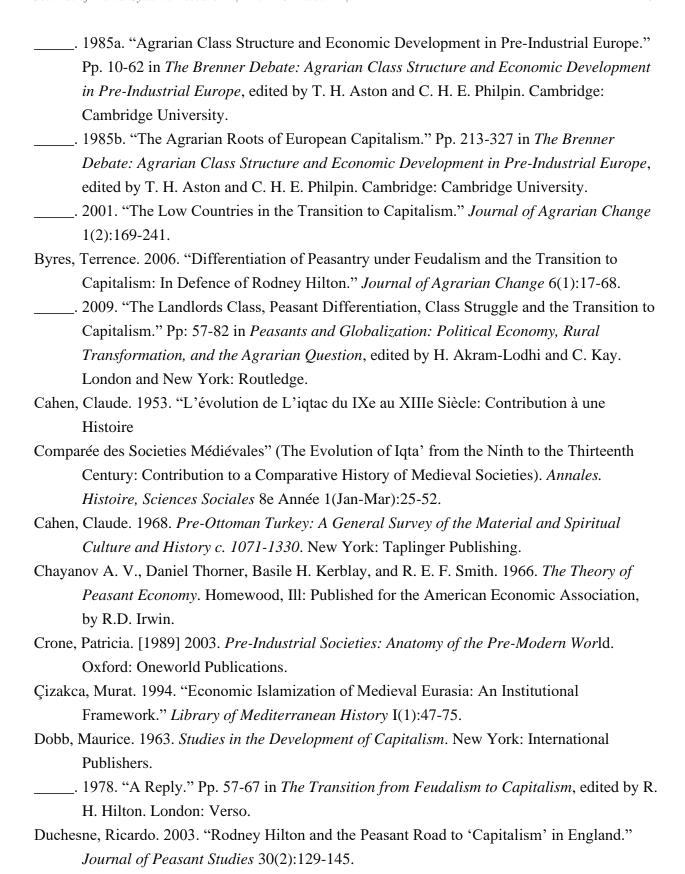
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References

- Abulafia, David. 2011. The Great Sea: A Human History of the Mediterranean. London: Allen Lane. Abu-Lughod, Janet. 1989. Before European Hegemony: The World System A.D: 1250-1350. Oxford: Oxford University Press. . 1996. "Discontinuities and Persistence." Pp. 278-291 in The World System: Five Hundred Years of Five Thousand, edited by A. G. Frank and B. K. Gills. London: Routledge. Akram-Lodhi, A. Haroon and Cristóbal Kay. 2010. "Surveying the Agrarian Question (Part 1: Unearthing Foundations, Exploring Diversity)." Journal of Peasant Studies 37(1):177-202. Anderson, Perry. 1974. Passages from Antiquity to Feudalism. London: New Left Books. Arrighi, Giovanni. 1994. The Long Twentieth Century: Money, Power, and the Origins of Our Times. London: Verso. __. 1998. "Capitalism and the Modern World-System: Rethinking the Non-Debates of the 1970s." Review 21(1):113-129. Bloch, Marc. 1947a. "Comment et Pourquoi Finit L'esclavage Antique (I)" (How and Why did the Ancient Slavery End (I)). Annales, Histoire, Histoire, Science Sociales 2e Année 1(Jan-Mar):30-44. _____. 1947b. "Comment et Pourquoi Finit L'esclavage Antique (II)" (How and Why did the Ancient Slavery End (II)). Annales, Histoire, Histoire, Science Sociales 2e Année 2(Apr-Jun):161-70. ____. 1961. Feudal Society, 2 Vols. Translated by L.A. Manyon. Chicago: Chicago University
- Braudel, Fernand. 1992. *Civilization and Capitalism 15th-18th Century. Volume III: The Perspective of the World*. Translated by Siân Reynolds. Berkeley and Los Angeles: University of California Press.
- Brenner, Robert. 1977. "The Origins of Capitalism: A Critique of Neo-Smithian Marxism." *New Left Review* 104:25- 92.



Fossier, Robert. 2006. "Rural Economy and Country Life." Pp: 27-63 in The New Cambridge

Medieval History, Vol.3 c. 900 – c. 1024, edited by T. Reuter. New York: Cambridge University Press. Goetein, Shelomo Dov. 1967. A Mediterranean Society. Berkeley and Los Angeles: University of California Press. Hilton, Rodney H. 1949. "Peasant Movements in England before 1381." Economic History Review (2nd Series) 2(2):117-136. _____. 1973. Bond Men Made Free: Medieval Peasant Movements and the English Rising of 1381. New York, NY: The Viking Press. _____. 1978a. "Introduction." Pp. 9-30 in *The Transition from Feudalism to Capitalism*, edited by R. H. Hilton. London: Verso. _____. 1978b. "A Comment." Pp. 109-117 in The Transition from Feudalism to Capitalism, edited by R. H. Hilton. London: Verso. . 1990. Class Conflicts and the Crisis of Feudalism. London: Verso. Kosminsky, Evgeniĭ Alekseevich.1956. Studies in the Agrarian History of England in the Thirteenth Century. Translated by Ruth Kisch. New York: Kelley and Millman, Inc.; Oxford, Eng.: Basil Blackwell. Lombard, Maurice. 1947. "Les Bases Monétaires d'une Suprématie Économique: L'or Musuluman du VIIe au XIe Siècle" (The Monetary Bases of an Economic Supremacy: The Muslim Gold from the Seventh to the Eleventh Century). *Annales. Histoire, Sciences* Sociales 2(2):143-160. Marx, Karl. [1894] 1991. Capital. Volume III. London: Penguin Books. . [1939] 1993. Grundrisse. London: Penguin Books. McCormick, Michael. 2001. Origins of the European economy: Communications and Commerce, A.D. 300-900. Cambridge, UK: Cambridge University Press. Moore, Jason W. 2000. "Environmental Crises and the Metabolic Rift in World-Historical Perspective" Organization & Environment 13 (2): 123–157. ____. 2003a. "The Modern World-System as Environmental History?" *Theory & Society* 32(3):307–377. _____. 2003b. "Nature and the Transition from Feudalism to Capitalism." *Review* 26(2):97–172. ____. 2003c. "Capitalism as World-Ecology." Organization & Environment 16(4):431–458. 2007. "Silver, Ecology, and the Origins of the Modern World, 1450-1640." In *Rethinking* Environmental History, edited by Alf Hornborg, J.R. McNeill, Joan Martinez-Alier, 123-

___. 2015. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London:

142. Walnut Creek: AltaMira Press.

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