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## World-Systems from ‘the Theory’ to ‘a Perspective’: On Social Interconnections in Bronze Age Afro-Eurasia

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# World-Systems from ‘the Theory’ to ‘a Perspective’: On Social Interconnections in Bronze Age Afro-Eurasia

Boundaries, limits and frontiers are topics of special interest to those involved in studying interconnectivity among different societies, both past and present. World-Systems Analysis (WSA), derived from World-Systems Theory (WST) is a macro-theoretical perspective which allows approaching interconnectivity in the long-term and in broad territorial scenarios. In this contribution I shall reappraise the key concepts of the original WST, the main theoretical discussions related to WSA, and the incidence of these theoretical approaches in Bronze Age Afro-Eurasian studies.

interconnectivity; World-Systems Theory; World-Systems analysis; Afro-Eurasia; Bronze Age

Grenzen aller Art sind Themen von besonderem Interesse für diejenigen, die die Interkonnektivität zwischen verschiedenen Gesellschaften sowohl in der Vergangenheit als auch in der Gegenwart erforschen. Die Weltsystemanalyse (WSA), abgeleitet von der Weltsystemtheorie (WST), ist eine makro-theoretische Perspektive, die eine Annäherung an die Interkonnektivität in langfristigen und in ausgedehnten territorialen Szenarien ermöglicht. In diesem Beitrag werde ich die Schlüsselbegriffe der ursprünglichen WST, die wichtigsten auf die WSA bezogenen theoretischen Diskussionen und die Auswirkung dieser theoretischen Ansätze auf die bronzzeitlichen afro-eurasischen Studien neu aufarbeiten.

Interkonnektivität; Weltsystemtheorie; Weltsystemanalyse; Afro-Eurasien; Bronzezeit

## 1 Introduction

The conference held at Berlin in May 2014 entitled *Economic and political interaction on the edges of the ancient empires* was proposed to discuss different trends about the situation of boundaries, limits, and frontiers in antiquity. Particularly, these topics have been of special interest to those involved in studying interconnectivity among different societies in past and present societies from macro-theoretical perspectives. One of them is the so-called World-Systems Analysis (WSA).

Precisely, countless accounts of ‘the state of the art’ have been written during the past decades in the endeavour to distinguish between the former (original version of the) theory presented by Immanuel Wallerstein (WST, World-Systems Theory) and the successive efforts to build a derived theoretical dispositive able to explain interconnectivity in pre-modern bounded networks of interaction, usually known as World-Systems Analysis (WSA).<sup>1</sup> This perspective goes through diverse social sciences and humanities, mainly sociology, anthropology, archaeology, history, economics, and political science. Fostering the dialogue among researchers coming from all those different – but overlapping –

I am very grateful to David A. Warburton for improving my English and editing my article. I am also indebted to the anonymous reviewers for their comments and suggestions. Naturally, responsibility for any errors remains my own.

1 One of the most recent reviews in Hall, Kardulias, and Chase-Dunn 2011, 235–238.

fields of expertise enriches the networks of interaction among them although sometimes misdirected criticisms emerge.

In this contribution I shall reappraise the key concepts of the original WST, the main theoretical discussions related to WSA, and the incidence of these theoretical approaches in Bronze Age Afro-Eurasian studies.

## 2 From WST to WSA: opening paths for studying pre-modern macro-social interconnectedness

The strong impact World-System Theory (WST) had on social studies devoted to social change is undeniable. It consisted of a macro-theory able to explain the rise of the capitalist 'world-economy' in Western Europe in the late 15th to early 16th centuries, and which continues to exist nowadays: the so-called 'modern world-system'.

The author, the sociologist and historian Immanuel Wallerstein, understood such a 'world-economy' as a unique historical phenomenon based upon an international division of labor. Several key points can be drawn from this theoretical framework. Wallerstein emphasized the relevance of the unequal exchange of bulk goods (low-wage products – i.e. raw materials- and high-wage products – i.e. manufactures) which gave this self-contained 'world' the quality of being a 'system'.

Such unequal exchange generated a regional scenario characterized by asymmetrical relationships of dominance-dependence among areas, leading to the distinction between economically distinctive zones named 'cores,' 'peripheries' and 'semi-peripheries.'<sup>2</sup> Wallerstein gave a loose definition of the relationally paired concept 'core-periphery': a 'core' (or 'centre') was defined as "the powerful and developed centres of the system" while its counterpart ('periphery') was integrated by "those regions that have been forcibly subordinated to the core through colonialism or other means."<sup>3</sup>

The transitional concept of 'semi-periphery' ("former core areas turning in the direction of peripheral structures"<sup>4</sup> or vice-versa) referred to areas that were interposed between cores and peripheries and often acted as intermediaries between them or as buffer zones. Beyond peripheral areas integrated into the world-economy lay the 'external arena' which "consists of those other world-systems with which a given world-economy has some kind of trade relationship, based primarily on the exchange of preciosities, what was sometimes called the "rich trades."<sup>5</sup> Trade in luxuries was thus reduced by Wallerstein to the exchange between different world-systems.

Another key point remarked by Wallerstein was that the reproduction of the modern world-system was not based upon the 'accumulation of capital' but on the "*ceaseless* accumulation of capital," a feature that distinguished it, while in the course of time, alternate economic cycles of expansion and contraction were detected.<sup>6</sup>

2 "The concept of core and periphery was first developed in the 1950s by Raúl Prebisch, the director of the Economic Commission for Latin America (ECLA). Dependency theory posited a bimodal model of core, or metropolitan states that had historically conquered and colonized regions that became satellites, or peripheral areas of world capitalism." Robinson 2011, 729.

3 Robinson 2011, 728–729. In his book on WSA published in 2004, Wallerstein not only maintained but highlighted this simple definition: "The basic idea was very simple. International trade was not, [...] a trade between equals. Some countries were stronger economically than others (the core) and were therefore able to trade on terms that allowed surplus-value to flow from the weaker countries (the periphery) to the core. Some would label this process 'unequal exchange.' This analysis implied a remedy for the inequality: actions by the states in the periphery to institute mechanisms that would equalize the exchange over the middle run." Wallerstein 2004, 12.

4 Wallerstein 1974a, 103. On the concept 'semi-periphery' cf. Chase-Dunn and Hall 1997, chapter 5.

5 Wallerstein 1974a, 302.

6 Wallerstein 1993, 293 (emphasis in the original); also Wallerstein 2004, 23–41.

After this brief sketch of the main elements of the theory, it is worth mentioning that it was conceived during the '60s and published in the early '70s (the first volume appeared in 1974),<sup>7</sup> as a reaction against western functionalist approaches to social change which were at their height at that time, mainly modernization and centralization of the nation-state.<sup>8</sup>

Ultimately, these approaches maintained that underdeveloped countries could be transformed into developed countries with external help and substantial inner changes. Wallerstein's exposure to the realities of the so-called 'Third World,' predominantly his knowledge of African and Latin American post-colonial socio-historical situations paved the way for his interest in giving an alternate explanation to such a perspective on development.

Precisely, as seen above, his approach focused on explaining the emergence and setting-up of modern capitalism, taking as a point of departure the fact that by the late 15th and early 16th century a "European world-economy" emerged, a "kind of social system" not known before which became the "distinctive feature of the modern world-system."<sup>9</sup>

Wallerstein's line of argument was summarized in a contribution published shortly after the first volume of the WST, entitled *Rise and the Future Demise of the Capitalist World-System: Concepts for Comparative Analysis*. There, he referred to the main theoretical lines underlying WST. He made a clear reference to the Braudelian conception of historical time (mainly the *longue durée*) and to the Marxist approach to social change as a totality. His main concern – to which he returned again and again – was the existence of *ahistorical* theoretical models of social change – where he even included ahistorical versions of Marxism. As a result, his proposal was a macro-theoretical approach rooted in history, where the unit under analysis was not a particular political entity – a socialist, capitalist or feudal state – but the 'world-system' itself, defined as "[...] a unit with a single division of labor and multiple cultural systems" and added "It follows logically that there can, however, be two varieties of such world-systems, one with a common political system and one without. We shall designate these respectively as world-empires and world-economies."<sup>10</sup>

He maintained that pre-modern world-economies were 'structures' which disappeared or turned into world-empires – where a political entity extended over the whole system – because they were redistributive states, following Karl Polanyi's substantivist differentiation among the ways economies were embedded in social relationships. Polanyi's proposal distinguished three forms of integration: 'reciprocity,' 'redistribution' and 'market exchange.'<sup>11</sup> In Wallerstein's view, only a 'market exchange' (a capitalist one, where obtaining profit was a relevant practice) was able to maintain a world-economy running without turning it into a world-empire or leading to its disappearance. As mentioned above, the modern world-system was characterized by the strong bonds of bulk or staples exchange, while luxuries remained a relevant feature of exchange *between* different world-systems, not belonging to the inner circle of bonds of the modern world-system itself.<sup>12</sup> A synthesis of Wallerstein's approach to the systemic logic of the modern world-system was given by

7 Wallerstein 1974a; other volumes followed: Wallerstein 1980; Wallerstein 1989; Wallerstein 2011.

8 Denmark and B. Gills 2012, 164.

9 Wallerstein 1974a, 15. Critics pointed to some sort of circular reasoning: the "capitalist system is cause and consequence of historical developments at the same time." Cf. Kümmel 2005, 1.

10 Wallerstein 1974b, 390.

11 The reference to the three ways of integration of the economy proposed by Polanyi Polanyi, Arensberg, and Pearson 1957, 243-270, in Wallerstein 1974b, 390, n. 6.

12 "That is, each can export to the other what is in its system socially defined as worth little in return for the import of what in its system is defined as worth much. This is not a mere pedantic definitional exercise, as the exchange of preciosities between world-systems can be extremely important in the historical evolution of a given world-system. The reason why this is so important is that in an exchange of preciosities, the importer is 'reaping a windfall' and not obtaining a profit. Both exchange-partners can reap windfalls simultaneously but only one can obtain maximum profit, since the exchange of surplus-value within a system is a zero-sum game." Wallerstein 1974b, 398.

Christopher Chase-Dunn and Thomas Hall, who characterized it as a combination of Polanyi's analysis of modes of integration with Marx's analysis of mode of production.<sup>13</sup>

It is worth mentioning that the idea of the existence of 'worlds' as autonomous and self-sufficient units strongly interconnected through underlying economic bonds had been proposed long before the WST was published. The French historian Fernand Braudel acknowledged that the economist Fritz Rörig was the first to use the concept 'world-economy' (*Weltwirtschaft*) in the same way Braudel himself had in his monumental *La Méditerranée et le monde méditerranéen à l'époque du Philippe II*, published in 1949.<sup>14</sup> Moreover, Braudel chose to emphasize the geographical area where economic bonds created a 'world' from the title itself (the 'Mediterranean' and the 'Mediterranean world') over the political figure who ruled the Spanish empire at that time (Philip II), a feature taken up by Wallerstein.<sup>15</sup>

As stated above, Wallerstein was not interested in exploring the formation and development of earlier world-economies because he held that after a time they disappeared or became 'world-empires':

There were world-economies before. But they were always transformed into empires: China, Persia, Rome. The modern world-economy might have gone in that same direction-indeed it has sporadically seemed as though it would-except that the techniques of modern capitalism and the technology of modern science, the two being somewhat linked as we know, enabled this world-economy to thrive, produce, and expand without the emergence of a unified political structure.<sup>16</sup>

The theory received criticisms that came from many sides, and not only its economical, Eurocentric and evolutionist approach was discussed but also the role given to cores in detriment to peripheries and its tendency to generalization.<sup>17</sup> However, at the same time, sociologists, historians, anthropologists, archaeologists and other social scientists entered the discussion about the underlying premises and main concepts of the theory to explain macro dynamics of social change not only in Western Europe but also in ancient and/or non-western socio-historical scenarios.

These efforts are known as world-systems analysis (WSA).<sup>18</sup> It is undeniable that WST is at the foundations of WSA, but WSA is not an automatic conceptual transfer from WST.

Here I shall focus on describing the main elements of WSA, as it remains a valuable tool to analyse long-term processes of social change in large-scale scenarios, mainly where "tightly integrated systems of inter-regional interaction" can be detected.<sup>19</sup> Its main theo-

13 Chase-Dunn and Hall 1997, 24.

14 Braudel 1949, 370–371.

15 In a later contribution, Braudel returned to the analysis of 'world-economies' including the appreciations of Wallerstein on the different 'levels' a world-economy had ('core', 'periphery', and 'semi-periphery' – a contribution of dependency theory – but criticizing several of his conclusions. Naturally, Braudel's approach was devoted to discussing the European socio-historical situation during the 15th–16th centuries Braudel 1984).

16 Wallerstein 1974a, 16.

17 Although WST was largely influenced by Braudelian and Marxist theoretical views as Wallerstein has recognized, criticism arrived from both sides. In this way, Wallerstein was considered 'too Marxist' or a 'Marxist too unorthodox,' or 'too Braudelian' or an 'unorthodox Braudelian' (Aguirre Rojas 2003, 32). His work has been considered as having a marked Eurocentric and evolutionist bias, due to the dominance of an "active and progressive" core which "subordinates and transforms a passive and backward (i.e. primitive) periphery," cf. Goodman and Redclift cited by Rowlands 1987, 8.

18 Hall, Kardulias, and Chase-Dunn 2011, 235–244.

19 Kohl 2011, 85. One conference accommodated specialists from different disciplines, areas and periods to discuss many issues related to world-systems. It was held in 1995 at the University of Lund (Sweden), and the volume published in 2000. The editors distinguished five main challenges related to the discussion on world systems at that time: epistemological; methodological; temporal scope; intellectual breadth and appraisal Denmark, Friedman, et al. 2000.

rists focused on redefining concepts in order to be applied to different pre-modern world-systems, including Bronze Age Afro-Eurasia. In this way, their contributions overlapped with those presented by specialists in that specific subfield, mainly archaeologists, historians and anthropologists. It is worth mentioning that the theoretical efforts – addressed by Christopher Chase-Dunn, P. Nick Kardulias and Thomas Hall among others – were directed not only at highlighting the differences between WST and WSA but also towards the creation or refinement of concepts when approaching social interconnectivity, which included the recognition of several problems. One of them was precisely related to the involvement of scholars coming from different disciplines, which created semantic difficulties based on the elaboration of competing concepts.<sup>20</sup> Another relevant misunderstanding that emerged was labelled as ‘misdirected criticism:’ a criticism that equates WST to WSA without acknowledging the task that WSA academics have given themselves over the last forty years.<sup>21</sup>

At the very foundation of WSA lies one of the more acute contributions to the arising debate which started as soon as the WST was published, directed to analyse the way inter-connectedness is displayed in world-systems. In 1977, political theorist and anthropologist Jane Schneider observed that Wallerstein’s “reluctance to apply the concepts, ‘core’ and ‘periphery,’ to pre-capitalist transformations” was “a product of the way he views the luxury trade.”<sup>22</sup> This particular observation led her to develop a more discriminating conception of the genesis of the capitalist world-economy: while Wallerstein proposed that it was a completely new and radical situation which divided history with a watershed dividing a ‘before’ (where world-empires took place) and an ‘after’ (the realm of the long-lasting capitalist world-economy), Schneider proposed the existence of a far-reaching *continuum* between the pre-capitalist and the capitalist world-economy. Wallerstein had given the bulk goods trade the *exclusive* property of being *systemic*, while Schneider pointed out that his consideration of luxuries and bulk goods as opposite categories was a false dichotomy “that obscures the *systemic properties of the luxury trade.*”<sup>23</sup> The theoretical debate around systemic approaches to the ancient world increased, as well as the one regarding the relation between macro-theories and evidence.

Another relevant contribution was made by German economist and economic historian André Gunder Frank. He had participated during the ’70s in the discussion on dependency theory – and gave a new reading to WST during the ’80s, where he defended the existence of a unique world system (without hyphen) which encompassed the last five thousand years and not only the last five hundred.<sup>24</sup> Although several theorists disagreed with his arguments on that, his non-Eurocentric view of structuring and developing world

20 Chase-Dunn and Hall 1997, 12; Hall, Kardulias, and Chase-Dunn 2011, 266.

21 Cf. Knappett 2013, 5. Most of his criticism is appropriate or at least can be discussed (the ‘zonal’ approach to regional space and the possibility of analysing intra-societal dynamics) though some refers to the typical misdirected observations on core-periphery assumptions (i.e. the ‘core-driven’ perspective). Cf. also Harding 2013, 378–400.

22 Schneider 1991, 48.

23 Schneider 1991, 48 (my emphasis). Wallerstein considered the exchange of luxuries as a transaction where each part exported to the other what in its own system was defined as low valued, and took what was considered of high value. He sustained that in this kind of exchange none obtained profit at the expense of the other; thus it lacked the force to start the modern world-system. On the contrary, such a force – the systemic one – was rooted in the bulk goods exchange.

24 A. G. Frank represents the so-called ‘continuist’ line on WS approach, “which stresses the continuities between the modern world-system and the earlier regional world system that emerged out in West Asia in the 4th millennium BC,” while others – as Christopher Chase-Dunn – represent the ‘comparativist’ line, which stresses not only the systemic continuities but also the differences; seeing similarities between different state-based world-systems; and maintains the existence of classless or stateless world-systems. It also proposes that markets and capitalism have existed for millennia without being dominant until the rise of European hegemony. Cf. comments by C. Chase-Dunn to Frank, Algaze, et al. 1993, 407.

history was a significant departure, based upon his idea that trade was an important force that biased all times in history – even criticizing the fundamental Marxist idea of social evolution through different modes of production displayed over time. During the '90s, his collaboration with Barry Gills addressed many other issues, mainly the revision of discontinuity between pre-capitalist and capitalist world-systems sustained by several WS scholars, which was based on the idea that social processes that existed in pre-capitalist world-systems were fundamentally different, requiring a focus on change and 'transition(s)'.<sup>25</sup> Their main contributions to the perspective lay precisely in the possibility of writing a 'world system history' leaving Eurocentric points of view aside and their proposal of focusing on disruptions, collapses and crisis where profound transformations can be recognized. Criticism to the approach was mainly related to the treatment of the evidence.

As mentioned above, during the past forty years efforts were directed at giving precision to concepts, taking into account that the main theorists devoted to these matters proposed that WSA was an "approach that provides a conceptual framework to comprehend how systems operate."<sup>26</sup> It is worth mentioning that their main goal is to study world-systems comparatively, in order to "facilitate comparisons of very different kinds of intersocietal networks with the modern system."<sup>27</sup>

Although researchers dealing with ancient world-systems could neither be directly involved in this specific goal nor even share the concerns set out by the authors on this regard, they could benefit from all the substantial work those theorists made in detecting different theoretical points of view and in redefining relevant concepts related to pre-modern networks of interaction.

Precisely, the ambitious contribution by Christopher Chase-Dunn and Thomas Hall entitled *Rise and Demise: Comparing world-systems* (1997) focused on significant conceptual issues regarding pre-modern world-systems. Here, they reviewed other scholars' theoretical positions, and gave their own point of view regarding three relevant topics: the unit of analysis, the bounding of world-systems and the systemic logic. Their proposal highlighted the wide variety of ways in which world-systems can be integrated throughout history.

First and foremost, they considered that the unit of analysis is a world-system, departing from the idea that societies do not now, *nor did they in the past*, exist in absolute isolation, while world-systems follow cycles or patterns of expansion and retraction (world-systems 'pulsation').<sup>28</sup> World-systems are defined as "intersocietal networks in which the interactions (trade, warfare, intermarriage, information, etc.) are important for the reproduction of the internal structures of the composite units and importantly affect changes that occur in these local structures."<sup>29</sup> There, the "fundamental unit of historical development is the world-system, not the society"<sup>30</sup> and where the changes which take place in one part of the network have the potential of exerting an effect on others.

Without losing sight of the long-term large-scale character of the WSA perspective, there is an emphasis on interaction as a central factor to cultural and social change. World-systems are "intersocietal networks that are systemic"<sup>31</sup> and follow patterns of reproduction and development. Precisely, 'interaction' is a keyword in their approach, deserving

25 Denemark and B. Gills 2012, 166.

26 Hall, Kardulias, and Chase-Dunn 2011, 240. Cf. the discussion about the origin of the modern world-system between 'continuationists' and 'comparativists' and an approach to both perspectives in Chase-Dunn and Hall 1997, 11–26.

27 Chase-Dunn and Hall 1997, 17.

28 Chase-Dunn and Hall 1997, 147.

29 Chase-Dunn and Hall 1993, 855.

30 Chase-Dunn and Hall 1993, 851.

31 Chase-Dunn and Hall 1997, 4.



a discussion on the specific kinds of interconnectedness in world-systems, which admit a wide variability depending on what features researchers decide to emphasize.<sup>32</sup>

Secondly, the bounding of world-systems is directly related to the kind of connectedness which researchers decide to highlight. In this way, Chase-Dunn and Hall notice several different ways of bounding world-systems, detecting three main topics where researchers find common ground: the type of interaction world-systems developed, the frequency of interactions that constitutes a system, and the distances over which interactions have important consequences.<sup>33</sup>

In this regard, they propose four types of interactions for bounding world-systems, taking into account the notion of ‘fall-off’ proposed by Colin Renfrew<sup>34</sup> and the idea that interaction must be *two-way* and *regularized* to be systemic. The types defined are bulk-goods networks (BGNs); prestige-goods networks (PGNs); political/military networks (PMNs) and information networks (INs), emphasizing that the “relative sizes of these four boundary criteria remain a theoretical and *empirical* problem.”<sup>35</sup> Thus, the relative spatial size of these networks is not uniform, and has to be determined for each particular case.

Finally, with regard to the systemic logic (the “specific way a world-system works”) they also differ from Wallerstein, who applied the Marxist concept of ‘mode of production’ to conceptualize it.<sup>36</sup> They instead refer to the ‘mode of accumulation,’ defined as a “deep structural logic of production, distribution, exchange and accumulation”<sup>37</sup> emphasizing that it was not just focused on production processes or class relations. Moreover, they propose four classes of systemic logics: kin-based; tributary; capitalist and socialist modes of accumulation, clearly influenced by the contributions of Samir Amin, Eric Wolf and Karl Polanyi.<sup>38</sup> They emphasize the possible coexistence – to be proved empirically – of different modes of accumulation in a system. Several different situations are proposed, from the predominance of a mode of accumulation over others, to mixed and transitional forms.

Another issue concerning world-systems is the discussion about core-periphery structures. Chase Dunn and Hall maintain that this is a feature to be demonstrated empirically, and is not a theoretical assumption. They stress the fact that different situations can take place: on occasion, some world-systems do not have core-periphery structures. Here, they refer mainly to stateless and classless world-systems – while in others several core regions,

32 With regard to the modern (capitalist) Europe-centred world-system, they referred to the commodity trade which led to consider hegemony as economic domination (Braudel) and the regional division of labor encompassing different cultural groups (Wallerstein). For pre-modern (pre-capitalist) world-systems, they mentioned the exchange of prestige goods (contributions by Schneider; Friedman and Rowlands; Blauton, Kowaleski and Feinman; Peregrine); political protection (Tilly); regularized military conflict (Wilkinson) and information exchange network (Schortman and Urban), cf. Chase-Dunn and Hall 1997, 12–15.

33 Differentiation in appraisals for bounding world-systems is also represented by those who point to “endogenous processes that are regularly interactive and systemic” and those who emphasize “exogenous impacts that may have large effects on a system but are not part of that system”, Chase-Dunn and Hall 1997, 18.

34 Renfrew 1975, 38–54. ‘Fall-off’ as a mean to consider the gradient of degradation of consequences over space Chase-Dunn and Hall 1997, 17.

35 Chase-Dunn and Hall 1997, 53 (my emphasis).

36 He explicitly referred to the transition from the feudal to the capitalist mode of production, in a Marxian sense, cf. Wallerstein 1974a, 77.

37 Chase-Dunn and Hall 1997, 99.

38 Chase-Dunn and Hall 1997, 29–30. With regard to the socialist mode of accumulation, authors maintain that it remains hypothetical. It is an empirically empty category since it has never been predominant in any society or world-system.

each with its own periphery – could coexist. There may even be peripheries that are intermediate between two non-contiguous core regions.<sup>39</sup>

In order to differentiate the original WST concept of core-periphery interaction, where the core exercised domination over its peripheries – a feature not always proven for ancient world-systems – the authors propose a distinction between a) core-periphery 'differentiation' (which involves groups of varying socio-political complexity that engage in active interchange) and b) core-periphery 'hierarchy' (which refers to situations where a group or groups dominated other groups in the system).<sup>40</sup>

Other adjustments are made with regard to the particular role often developed by peripheries. On this matter, two relevant concepts are suggested: on the one hand, P. Nick Kardulias drew attention to the role of peripheral societies in resisting and shaping incorporation into world-systems, and elaborated the concept of 'negotiated peripheral-ity'.<sup>41</sup> On the other, Mitchell Allen put forth the idea of defining bordering zones disputed among diverse political entities, and coined the concept of 'contested periphery' – "a peripheral region for which one or more core regions compete"<sup>42</sup> – and, precisely for those reasons, are considered as "zones of innovation."<sup>43</sup>

Not only the paired concept 'core-periphery' was discussed and adjusted. Chase-Dunn and Hall also propose the existence of many different kinds of semi-peripheries:

regions that mix core and peripheral forms of organization; regions spatially located between core and peripheral regions; regions located between two or more competing regions;<sup>44</sup> [...] regions in which mediating activities linking core and peripheral areas take place; and regions in which institutional features are intermediate in form between those found in an adjacent core and a peripheral area.<sup>45</sup>

To summarize, efforts are constantly made to reinforce the capability of the WSA perspective as a useful tool for understanding the way interregional networks operate. In this regard, I shall quote Christopher Monroe's point of view:

Current theorists<sup>46</sup> study how interregional information networks form and how economic structures spread and affect each other. They look at economy not as a unitary system but at the different modes of wealth accumulation practiced in structures from the state down to the individual household. This makes world-systems an incisive instrument for exposing economic practices that were not dominant in a society but significant or emerging. It is therefore useful in looking at socioeconomic development. More importantly it does not assume that the dominant mode of accumulation determines how all social groups acquire wealth.<sup>47</sup>

With regard to his expressions on the economic aspects which are at the base of the WSA, it is worth mentioning – at the risk of being redundant – that a world-system comprises all the interactions that can be detected in a system (economic, but also political and social).

Thus, I consider WSA a useful and suitable set of conceptual tools for approaching social interconnectedness, being one of its main strengths the possibility of delineating

39 Chase-Dunn and Hall 1997, 19.

40 Chase-Dunn and Hall 1997, 36.

41 Kardulias 1999; Kardulias 2007.

42 Allen 1997, chapter 1; Chase-Dunn and Hall 1997, 37.

43 Hall, Kardulias, and Chase-Dunn 2011, 243.

44 Allen 1997, 'contested peripheries'. Cf. Cline 2000, 7–16.

45 Hall, Kardulias, and Chase-Dunn 2011, 354.

46 Meaning Chase-Dunn and Hall 1997.

47 Monroe 2009, 21.

relationships among different areas at diverse scales and spheres of relations with a strong support of empirical practice. Considering it this way, WSA allows the social researcher to adjust the meaning of the concepts in order to make them operative to explain the evidence at hand. Thus, WSA should not be considered a theory or a model – and this is a substantial difference with the original WST – but a ‘perspective’ or ‘approach’ useful to explain phenomena related to social inter-relationships that are to be proved empirically. For example, the relations of areas/social nucleus with different qualities (in the political, economic, cultural, religious or any other social sphere); their mutual incidence and how they change through incorporation (expansion) or disruptive processes (collapse, crisis, dissolution); the possibility of determining their hierarchical relationships (identifying cores, peripheries, semi-peripheries); the characteristics of borders, limits and frontiers inside a world-system or between different world-systems; the characteristics of the exchange of goods; the role of technological innovations, ideologies and belief systems; and the formation and transformation of social identities, to name some but a few. In this vein, WSA expanded the temporal range of studies, introduced comparative analyses and transformed theoretical assumptions of the original WST into empirical questions.<sup>48</sup>

### 3 A WSA perspective of interconnectedness in Bronze Age Afro-Eurasia

As can be seen from the aforementioned, WSA is an extremely open and world-wide approach – in many senses – to societies in history, their changes and developments, through the interconnections they developed through time and led them to form networks. Of course, this statement means that a history of the world (system) is possible, becoming the point of departure of the approach. But, what happens with the Bronze Age Afro-Eurasia dynamics?

I shall not make an exhaustive revision of all the contributions to the different features the WSA allows to make in this regard, but I shall review the relevant trends which emerged through time and the efforts for making syntheses on social change in the long-term Bronze Age Afro-Eurasia.

Soon after the aforementioned Schneider’s reply to the WST, questions regarding the existence of an ancient world-system centred in Bronze Age Afro-Eurasia began to be formulated. One of them was Philip Kohl’s seminal contribution *The Balance of Trade in South Western Asia in the Mid-Third Millennium B.C. [and Comments and Reply]*, on the relevance of long-distance trade networks in the Iranian plateau during the mid-third millennium BC, published in 1978. After discussing several issues related to the relevance of trade in ancient Mesopotamia, he asked himself about the possibility of applying a modified Wallersteinian model because the archaeological record “becomes clearer when interpreted within a broad framework that emphasizes the differences and inequalities between regions.”<sup>49</sup> In the reply to the comments the article received, he extended his appraisal to the concept of ‘world economy’ in the way defined by Wallerstein by stating that it “is useful only if it is conceived not as an external force exercising its inexorable power over local communities or states but as a factor *essentially* linked to the historical development of social relations directing production and the emergence of social classes.”<sup>50</sup> In short, he gave a strong impulse to the debate about a macro analysis of interconnectedness in prehistorical scenarios, but always encouraging a proper use of

48 Hall, Kardulias, and Chase-Dunn 2011, 237.

49 Kohl et al. 1978, 475.

50 Kohl et al. 1978, 488 (emphasis in the original).

the evidence<sup>51</sup> (“trade must not be assumed but proved” – he rightly reflected citing Renfrew.)<sup>52</sup> He reappraised his own conclusions on this topic in a contribution published more than thirty years later where he finally dismissed the use of Wallerstein’s WST as a useful tool and proposed an alternative theoretical framework to explain long-term social change in Bronze Age Transcaucasia.<sup>53</sup>

Kohl’s theoretical journey exemplifies the way the discussions have been developing during the last forty years. Precisely, he took part in a conference held at Aarhus in 1980 where academics working in the ‘ancient world’ – most of them archaeologists but also social anthropologists and historians – became more involved in world-systems, its concepts and paradigms. In fact, the main aspects Wallerstein considered for defining a world-system – a self-contained ambit, the axial division of labor, its relationship with exploitation and dominance which led to core-periphery relationships, the role of semi-peripheries and marginal areas – were the point of departure of that conference.

The result was a volume edited by Michael Rowlands, Mogens Larsen and Kristian Kristiansen in 1987 entitled, precisely, *Centre and Periphery in the Ancient World*, in the collection *New Directions in Archaeology*. Among the contributors were the already mentioned Philip Kohl and, among others, Leon Marfoe, P.R.S. Moorey; Carlo Zaccagnini and Mario Liverani. They reappraised different features and aspects of the organization of the socio-political dynamics in the Ancient Near East, the Mediterranean and Europe during the second half of the 2nd millennium BC – including the crisis of 1200 BC and the Roman imperial expansion.<sup>54</sup> Consequently, it constituted one of the first attempts in considering the possibility of discussing WST and its viability to explain long-term social change in ancient societies, with different results. One of the main concerns at that time was to evaluate if a theory that was elaborated to explain modern socio-historical dynamics was useful to explain ancient ones (cf. Rowlands’ contribution) or if the existence of a single world system was possible in ancient times (cf. Kohl’s contribution on this regard, where he proposed the existence of multiple and partially overlapping world-systems).

Naturally, the discussion on the usefulness of the WST and its main concepts increased through time, partly due to its wide geographical and temporal scope.<sup>55</sup>

In 2005, C. Kümmel presented a typology of the ‘models’ (WST and WSA) application in archaeology up to that date.<sup>56</sup> He distinguished four groups of approaches, ordered by type of reception: 1) those which directly took the Wallersteinian model to interpret ancient world-economies or world-empires; 2) all those studies using the concept of a prestige-goods system in order to explain social changes in the periphery of ancient world-systems; 3) the ‘macro-historical perspective,’ far-reaching studies which make extensive use of WS perspective to describe longer term historical processes, without discussing details of the original model and, 4) studies dealing with ‘centre and periphery’ in a very general sense without a detailed reference to Wallerstein and their followers.

Of the increased amount of contributions published in the early ’90s, it is worth mentioning two – both published in 1993 and mentioned by Kümmel as examples of

51 Kohl et al. 1978, 466.

52 Renfrew 1969, 152.

53 Even though refinements made by WSA theorists to the original WST were not taken fully into account, he sustained that the “world system *model* has specific application and value to account for those situations in which multiple social actors are enmeshed in tightly integrated systems of inter-regional interaction.” Kohl 2011, 85 (my emphasis).

54 The volume also included contributions related to the Roman imperial expansion, not considered here.

55 Cf. Champion 1989 on comparative studies on centre and periphery in archaeology; Chase-Dunn and Hall 1991 on core-periphery interactions in pre-capitalist worlds; Amin 1991 for a comparison between the ancient and the modern capitalist world-system; and Schortman and Urban 1992 on interregional interaction processes. On the Uruk expansion from a WST perspective, cf. Algaze 1993 and Stein 1999 for an alternative theoretical framework (‘distance-parity’ and ‘trade-diaspora’ model).

56 Based on his study published in 2001: Kümmel 2001; Kümmel 2005, 1–3.

type 3 in his typology – because they are representative of the main discussions on the Bronze Age world-system at that time.

One, André Gunder Frank's *Bronze Age world-system Cycles (with comments and reply)*. Comments were made mainly by archaeologists and ancient historians – some of whom had participated in the aforementioned volume *Centre and Periphery in the Ancient World*.

The main subjects of Frank's contribution were: a) the existence of a single world system during the last five thousand years (which meant recognition of interaction and interdependency within and among regions); b) the relevance of cycles of expansion and contraction (A and B phases) and the possibility of finding synchronizations among different regions in the world system and c) the relation between those cycles to climate change and major social changes. Critical comments referred to different features of Frank's views and exposed the different sub-schools ('continuationists' and 'comparativists,' in Chase-Dunn's terms) which existed in the theoretical field and the main concerns emerging from the approach. Among them, the positive features and shortcomings evolving from macro-models in general and in Frank's model in particular; the use – and sometimes misuse – of the evidence; and some theoretical and methodological issues, mainly referred to Frank's suggested A and B cycles. Many of these issues were taken up again and clarified by Frank and Gills in their contribution published in 2000.<sup>57</sup>

The other contribution, Andrew Sherratt's *What would a Bronze Age world-system look like? Relations between temperate Europe and the Mediterranean in later Prehistory* is selected because it focused on 'cores,' 'peripheries' and 'margins' while proposing an adaptation of the Wallersteinian concept 'world system' (without hyphen) to be applied to the evidence revised in this contribution. Sherratt dedicated this paper to the review of the structure and role of long-distance contacts in prehistoric Europe, and in particular, its situation as a margin of a Bronze Age WS. He made the concept of 'margin' a valuable tool for explaining processes of formation and integration of outer regions to cores and peripheries through long-distance exchanges and technological innovations.

Nevertheless, concerns about adjusting concepts and categories derived from WSA arose during the decade and the turn of the new millennium.<sup>58</sup> A conference on the WSA approach to explain "structural change in various areas of Europe and western Asia," took place in 2008 at Sheffield. The resulting volume was published in 2011, and was entitled *Interweaving Worlds. Systemic Interactions in Eurasia, 7th to 1st Millennia BC* (eds. Toby Wilkinson, Susan Sherratt and John Bennet).

In the Introduction, Susan Sherratt stated that "the notion of a 'Bronze Age world-system' has tended to be attacked on two fronts": on the one hand, through the misunderstanding of considering the automatic transplantation of WST to the ancient world [the aforementioned "misdirected criticism"; RF]; on the other, it has been accused of ignoring the "local variations in social or cultural structures and trajectories, and of focusing on the interactions of regions at the expense of individuals"<sup>59</sup> whereas in fact the perspective allows working on those aspects, if possible.

The volume represented an effort to outline the main topics on interconnections during the Bronze Age in Eurasia at the turning of the decade, several with a long history behind them and others completely new.

Multiple issues were approached in the conference, with diverse results: the possibility of accurately employing a long-term (world-)wide WS approach (Beaujard; Warburton); attempts to produce an integrated bottom-up, top-down and climate-informed approach to large-scale historical change (Broodbank); the usefulness of WS perspective linked to the concept of 'liminality' to explain maritime contexts (Monroe); and the revision of

57 Frank and B. K. Gills 2000, 3–23.

58 Cf. Monroe 2009.

59 Sherratt 2011, 1.

different types of networks: food systems – Fuller and Rowlands; secondary products exploitation – Halstead and Isaakidou; diffusion of innovations – Rahmstorf; changes in the patterns of metal consumption – Wengrow; Bachhuber; peripheral local systems – Faust and Weiss, Greenberg, Legarra Herrero; the formation of economic systems and social institutions – Anfinset; long distance exchange – Good; and cultural interactions – Bauer, Flammini, Kristiansen, Maran, Schneider.<sup>60</sup>

The treatment of these topics also allowed a review of central discussions related to interconnectedness in the ancient world: the active role of those regions/areas considered peripheral, the agency of margins, the entanglement between different theoretical perspectives and the limits of macro and micro approaches to the evidence. It also revealed the impact and relevance the approach had in the theoretical field, exposed by the critical reflections made by Philip Kohl, who proposed an alternative theoretical model for approaching interconnectedness in the ancient world (open web-like and expanding social fields of interaction) and Norman Yoffee, who pointed to the relevance of cultural traits as the way of revealing the role of ancient Mesopotamia in its world.<sup>61</sup>

However, a particular deduction can be made from the preceding statements. Different magnitudes of academic work are devoted to exploring the Eurasian networks when compared to the African ones from a WS perspective. Despite the fact that northeastern Africa was extremely connected with the surrounding regions (mainly Sub-Saharan Africa, the Eastern Mediterranean and Western Asia), specialists in those areas are not very fond of macro-theoretical perspectives when compared to other fields of expertise where the debate is much more active.

Nevertheless, some works on ancient Egypto-Nubian and Levantine relationships attempted an appraisal from the world-system perspective or at least elaborated an explanation of the evidence from a theoretical point of view. It is worth mentioning that these approaches favoured an analysis restricted to specific historical situations limited in time and space.<sup>62</sup> Other efforts were made to explain the development of the Egyptian or northern African world-system but the extreme temporal range adopted attempted against the specificity needed to approach the topic successfully.<sup>63</sup> Nonetheless, contributions which explore interconnectedness by integrating *vis-à-vis* the different areas (Nubia, Egypt, and the Levant) from a macro perspective are not common.<sup>64</sup> In this way, an interesting new perspective remains open to further research.

To conclude, I would like to stress two features to sum up this brief overview over the possibilities a WSA perspective provides for analysing ancient networks of interconnections: on the one hand, the importance of fostering dialogue among specialists coming from different fields of expertise to define and delimit concepts regarding interconnectedness in pre-modern scenarios; and on the other, the relevance of a strong attitude towards empirical evidence.

60 All contributions published in T. Wilkinson, Sherratt, and Bennet 2011.

61 Kohl 2011; Yoffee 2011.

62 With regard to Egypto-Nubian relations c. 2000–1500 BC, cf. Flammini 2008 and Hafsas-Tzakos 2009. Stuart Smith analyses of the relationship between Egypt and Nubia during Middle and New Kingdom Egypt stressing that increasing “Egyptological interest in studies that examine key theoretical questions” is essential. He focuses on an anthropological approach to the evidence; he dismisses a world-systems perspective Smith 2003, xvii and 58–60; cf. also Smith 1995. With regard to Egypto-Levantine relationships cf. the well-documented contributions by Ezra Marcus Marcus 2002 and Marcus 2007 and the bibliography cited there. Cf. also Boor 2003 for an initial review of Old Kingdom Egypt from a world-system perspective.

63 Cf. D. Wilkinson 2004. The author equates ‘world-system’ with ‘civilization.’ He approaches a long-term description of ancient Egyptian world-system/civilization in order to explain its merging with the Mesopotamian one in what he denominated the ‘central civilization’ ca. 1500 BC.

64 Cf. Flammini 2011.

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