

Christian W. Hess

## Mapping the Linguistic Landscapes of Mesopotamia

### Summary

Though Ancient Near Eastern Studies has increasingly paid attention to language contact and areal linguistics in recent years, there have so far been but few systematic attempts at placing the relevant languages on a map. The essay provides a survey of maps of the languages of the Ancient Near East from the first areal maps in the 19th century to the artefact maps in recent publications. The different visual grammars used in the cartography of these ancient languages also imply widely varying narratives of linguistic geography. The recent move towards artefact mapping shifts the discussion away from static interpretations of language as a strong correlate of ethnicity towards an interpretation of language as a public expression of linguistic identity within the landscapes of Mesopotamia.

Keywords: Ancient Near East; language change; language mapping; linguistic geography; linguistic landscapes

Obwohl sich die Altorientalistik in den vergangenen Jahren zunehmend der Untersuchung von Sprachkontakt und Spracharealen gewidmet hat, sind bisher nur wenige Versuche unternommen worden, die relevanten Sprachen zu kartieren. Der Aufsatz bietet einen Überblick über die bisherigen

Karten zu altorientalischen Sprachen, von den Anfängen der Spracharealen im 19. Jh. bis hin zur Kartographie einzelner Artefakte in rezenten Publikationen. Die unterschiedlichen Kartierungsgrammatiken, die in den Karten angewendet werden, implizieren z. T. weit auseinanderliegende Narrative von Sprachgeographie. Die rezente Tendenz zur Kartierung einzelner Artefakte deckt sich dabei mit der Tendenz, Sprache nicht einfach als statischen Spiegel ethnischer Identität zu sehen, sondern als öffentlichen Ausdruck sprachlicher Identitäten innerhalb der Landschaften Mesopotamiens.

Keywords: Alter Vorderer Orient; Sprachkartierung; Sprachwechsel; Linguistische Geographie; Linguistische Landschaften

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Ce n'est pas ... [la géographie] qui se trompe, c'est le linguiste qui se trompe sur elle.  
– Lucien Febvre, *La terre et l'évolution humaine*.

## 1 Introduction

The connection between language and place has long been one of the central concerns of linguistics, closely connected to the ways in which spread and regression, contact and convergence, diversification and simplification, and language death are understood. Geographers and linguists continue to share many of the same concerns, from the relevance of scale and the nature of shifts to larger questions of identity and power.<sup>1</sup> Even most sociolinguistic studies, which tend to emphasize issues of class and social interaction, have until recently relied on the tacit assumption that language serves as an index to place, conceived in coherent and physical terms.<sup>2</sup> In this view, linguistic interaction naturally implies competition for and succession within linguistic space.

The study of Ancient Near Eastern languages is no exception to these concerns. They are reflected on the one hand in increased attention to the concept of the Ancient Near East as an early example of a *Sprachbund* or linguistic area where language features converge through long-term contact.<sup>3</sup> On the other hand, studies have highlighted the Ancient Near East as the earliest example of a linguistic 'spread zone,' characterized by relative diversity, a classic dialect geography with strong center/periphery relationships among the languages, no

net long-term increase in diversity, and rapid language spread, with the spreading language serving as the *lingua franca*.<sup>4</sup> In each case, geography is thought to directly reflect and affect the ways Ancient Near Eastern languages behave.

Few of these claims have been examined in detail, though the Ancient Near East certainly offers enough raw material.<sup>5</sup> During the long span from the invention of writing in the mid-4th millennium BC to the end of the 1st millennium BC, Mesopotamia hosted at least sixteen major languages, spread across at least six language families, including: Sumerian, Elamite, Hurrian/Urartian, Kassite (all isolates, with no established genetic relationship to other languages); Akkadian, Amorite, Aramaic, Ugaritic, Phoenician, Hebrew/Canaanite, Ancient North Arabian/Dispersed Oasis North Arabian (all Semitic); and Hittite, Palaic, Luwian, Old Persian, and, finally, Greek (all Indo-European).<sup>6</sup> These languages are attested in a geographically open area from western Turkey to eastern Iran and from the Black Sea to the tip of the Arabian Peninsula.<sup>7</sup>

Despite this wealth of raw data, there have been few systematic attempts at mapping the languages of the Ancient Near East in detail. Among the over 300 individual maps of the *Tübinger Atlas des Vorderen Orients*, the most comprehensive attempt at cartography of the Near and Middle East so far, not a single map is devoted exclusively to the languages in antiquity.<sup>8</sup> Even works more narrowly devoted to language history often confine themselves to maps of sites and places mentioned in the text.<sup>9</sup> Most attempts at language maps are

1 See Johnstone 2010, 12 on the common concerns of geography and linguistics, including the importance of scale and change as "series of incremental shifts in patterns that emerge at different grain sizes", and "questions of identity, power, and resistance".

2 Coupland 2007, 121.

3 Nichols 1997; Nichols 1992, 13–24 and 192–195; Aikhenvald and Dixon 2001, 11–19; Bickel and Nichols 2008, 480–481; Heine and Kuteva 2005, 182–218; Bisang 2010 431. Among the steadily growing secondary literature on the topic, see particularly Watkins 2001 on Anatolia, Pedersen 1989 and Michalowski 2007, 166–169, on Sumerian, Rubio 2006, 138, on Akkadian and Huehnergard and Rubin 2011, 266, on Semitic in general. The negative assessment of the usefulness of linguistic areas in Campbell 2004 and Zaborski 2013, 270, serves at least to emphasize the need for more detailed study.

4 The list of tendential features follows Nichols 1992, 16–17. The Ancient Near East thus provides the earliest example for trends also observed in regions as diverse as the Eurasian steppes of the Indo-European languages, Western Europe, Central Australia, interior North America, and Mesoamerica.

5 Useful surveys of the languages involved are provided, for example, by Woodard 2004, Streck 2007, Postgate 2007, and Gzella 2009.

6 Each is in turn often attested in numerous synchronic and diachronic varieties, including both geographically bounded dialects as well as literary and administrative registers. See the overview in Kouwenberg 2010, 9–27, on Akkadian varieties and Black and Zólyómi 2007 on the "wide variety of communicative situations" and "different locations" in which Sumerian is attested (Black and Zólyómi 2007, 1).

7 Sporadic finds of inscribed objects, as recently at Tas Silġ on Malta, extend this reach even further; see Cazzella, Pace, and Recchia 2011. See Schmitt 1983, 572, on multilingualism as a persistent feature of Near Eastern history as well as the recent discussion on Dura-Europos in Kaizer 2009.

8 The historical maps, such as B IV 13 on "The Neoassyrian Empire", however, include within the greater imperial boundaries smaller labels for population groups assigned to sub-regions, such as *māt Kaššī* ('Land of the Kassites'), Arameans, or Itū'u-Arameans. See the remarks in Röllig 1991 on the general principles underlying the maps of the project.

9 See the map of "sites antiques et modernes", with labels confined to individual cities, areas, and larger states, in Laroche 1980, 16; and the map of "places mentioned" in Postgate 2007, Figs. 3.1 and 5.1, on Akkadian and Aramaic.

scattered throughout various publications as supplementary illustrations. Instead, recent research on dialects has more often highlighted the difficulties involved in such attempts, including the fundamental problem of extrapolating dialect areas from textual sources.<sup>10</sup>

This contribution will thus provide a survey of the few attempts at mapping the ‘messy contingencies’ of Ancient Near Eastern linguistic geography.<sup>11</sup> The main focus will be on the different methods and visual grammars used, with particular attention paid to Akkadian from the 3rd to the 1st millennium BC in the region of Mesopotamia proper, that is, the region between and around the Euphrates and Tigris rivers which stretches roughly from southern Anatolia to the Persian Gulf. The contribution stands out from most of the others in the present volume in at least one important respect. Since linguistic mapping in Mesopotamian studies itself is, with few exceptions, largely confined to the last four or five decades, the following essay is engaged in a discussion still very much ongoing. The basic questions, however, remain the same: How does linguistic mapping reflect and feed into the ways language is understood? What does the visual grammar of the maps imply about the understanding of language use and change in the Ancient Near East?<sup>12</sup> One of the recurrent themes of the conference was the inherent problem in mapping the ‘subjunctive’, that is, in distinguishing uncertainties in a concrete visualization. In this sense, the point made in Peter Behnstedt und Manfred Woidich’s concise introduction to Arabic dialect geography remains valid here: language itself is an abstract good, with no inherent connection to place beyond that of its users or, we can add, material expressions.<sup>13</sup> Accordingly, one of the main goals of the following will be to highlight some of the issues which have arisen in collapsing what is essentially an intangible social and cultural resource onto a two-dimensional space.

## 2 Areas, borders, and boundaries

The first language maps of the Ancient Near East to include Akkadian consisted of three historical maps printed on a single page and appended to Fritz Hommel’s *Semitische Sprachen und Völker*.<sup>14</sup> Each covers a defined historical period, from ca. 2000–500 BC, 500 BC – 700 AD, and 700 AD to the present. The next significant attempt is provided by a map of the Semitic and Afro-Asiatic languages, published as part of Antoine Meillet and Marcel Cohen’s *Les Langues du Monde* in 1924.<sup>15</sup> Both maps assign colored, contiguous, and coherent areas to each language or language group. Though separated by over forty years, both are also comparable in content, scale, and approach.

The hesitant development of language maps is particularly noteworthy since the rise of Ancient Near Eastern Studies in the middle of the 19th century coincided with both rapid developments in cartographic practices and their increased currency among a broader public. As texts and languages were being deciphered and expeditions mounted to unearth new finds, European maps of the Ottoman territories were quickly redrawn to keep pace. Both the ‘Euphrates Expedition’ of Colonel Chesney in the years 1835–1837, organized under the auspices of King William IV, and the expeditions of Felix Jones produced detailed topographic maps of the areas surveyed.<sup>16</sup> The German cartographer Heinrich Kiepert, who had already made a name for himself in historical mapping through his *Historisch-geographischer Atlas*, his maps of the Holy Land, and his *Atlas antiquus*, also produced a map of the Euphrates and Tigris regions in 1854 to accompany Carl Ritter’s descriptions.<sup>17</sup> His 1855 map of the contemporary Ottoman Empire, through parts of which he himself had travelled, marked the location of

10 The issue was recently highlighted in Sommerfeld 2012, 265, on 3rd millennium sources in his review of Hasselbach 2005. On the problem of source bias, including the fact that sources are unevenly distributed and predominantly derived from select centers, see Chambers and Trudgill 1998, 29.

11 The quote is taken from Livingstone 1992, 28.

12 Harley 1987, 2. See also Livingstone 1992, 29. Cf. also the focus in Pickles 2004, 12–13, on “the ways in which mappings function: how they act, in what context, and what are their effects?”

13 Behnstedt and Woidich 2005, 34. Note the comments in Cancik-Kirschbaum 2013 on the extended spatial and temporal dimensions of language transmission through writing and writtleness.

14 Hommel 1883; see the map printed in Wiedemann, this volume, Fig. 2.

15 Meillet and M. Cohen 1924. The work has been described as a late distillation of the grand 19th century tradition of universal, encyclopedic anthropology in Dessaint 1988.

16 See the comments in F. Jones 1854, assessed in Hilprecht 1903, 62–66, as well as the overview in Fagan 2007, 69–78.

17 Kiepert 1848; Kiepert 1854, to which he later added his detailed plans of the ruins of Babylon (Kiepert 1883). The importance of Kiepert’s work is treated in Zögner 1999, especially Dörflinger 1999: *Zu den Sprachen- und Völkerkarten von Heinrich Kiepert*. On Kiepert’s maps of Israel and Palestine, see the contribution by Goren and Schelhaas in this volume.

archeological ruins, including the ruins of Babylon, Hellenistic Ctesiphon on the Tigris, and Assyrian Nineveh. Cartographers and Assyriologists fast entered into a symbiotic relationship. As the former brought a wealth of new targets for excavation into visual form, the latter contributed corrections and observations through their reports from the field.<sup>18</sup>

Specifically linguistic mapping has an equally long tradition within the history of cartography, developing almost simultaneously with the first thematic maps.<sup>19</sup> First, tentative steps can already be seen in the *Slesiae Descriptio* (Book I, Map 14) in Sebastian Münster's *Cosmographia Universalis* of 1544, which marked the River Oder not only as a divider between Germans and Slavs, but between Germanic and Slavic.<sup>20</sup> The 19th century boom in linguistic cartography, caught between universalist and nationalist aspirations, naturally covered the Near and Middle East as well. Julius Klaproth's *Asia Polyglotta*, which had the explicit ethnographic aim of using language to determine "the relationship and origin of the various peoples of the earth", also included a language atlas meant to bring visual order into the multitude of modern languages between the western Ottoman Empire and Japan.<sup>21</sup>

Even before Akkadian (Assyro-Babylonian) was deciphered, both the Hebrew Bible and Classical sources had provided numerous targets for the geographic imagination. Particularly the latter could be used to confine Assyria between the Tigris in the East and the Median Zagros in the West, between the Armenian highlands in the North and Babylonia and the Susiana in the South.<sup>22</sup>

While few maps were devoted exclusively to the Semitic languages, scholars had by the middle of the 19th century come to rely on a geographical model which assigned each branch to a particular region and which would remain dominant until well into the 20th century.<sup>23</sup> When August Ludwig Schlözer derived the term *Semitic* from the Table of Nations in Genesis 10 in 1781, the notion that each language was geographically bound was already self-evident: Aramaic was assigned to the North, Canaanite to the center, Arabic to the South.<sup>24</sup> Kiepert's ethnographic commentary to his *Historisch-geographischer Atlas* of 1848 explicitly refers to this model as a division of geography rather than language, with the Aramaic tribes, the Kingdom of Aram, and the Aramaic language extending eastwards from Syria up to the Euphrates and Tigris.<sup>25</sup> Perennial debates on the linguistic and ethnic identity of Mesopotamia's earliest inhabitants before the arrival of the Semites latched on to the Chaldeans, Medians, or Elamites as predecessors to the modern Kurds, Persians, or even Slavs.<sup>26</sup> While little was known about the nature of Akkadian, Ernest Renan's 1855 *Histoire générale et système comparé des langues sémitiques* could thus argue that similarities in culture, art, religion and empire between the Assyrians and Egyptians was proof enough to identify the former as either Cushitic or, even better, Indo-European, and thus to give an eastern boundary to the Semitic languages as a whole.<sup>27</sup>

Against this background, Hommel could most easily insert Akkadian into the linguistic geography of the Middle East by again mapping the historical sources

18 See the comments in Petermann 1862, citing reports by William K. Loftus and Jules Oppert, and Hilprecht 1903, 62 on the "great influence which these maps exercised upon future archaeological research?"

19 Lameli 2010, 567–571. Reflections on more recent developments, with particular regard to shifts from print to digital formats, are offered in Labov and Preston 2013.

20 Münster 1544.

21 Klaproth 1823, vii: "die Verwandtschaft und den Ursprung der verschiedenen Voelker der Erde", citing Leibniz as inspiration.

22 See the sources cited in the entry on 'Assyria' in Kiepert 1855, 874.

23 Voigt 1987, 1–2.

24 Schlözer 1781, 161, discussed again in Johann C. Adelung's *Mithridates* (Adelung 1806, 300): "Sie theilen sich in drey Haupt-Dialecte, den *Aramäischen* in Norden, den *Cananitischen* in der Mitte, und den *Arabischen* in Süden [...]" As noted in Baasten 2003, the Table of Nations had already served Leibniz as a model for classifying languages in 1710. The familial relationship of the Semitic languages had been noticed much earlier; see Bobzin 2010, 361. On geographical interpretations of Gen 10 see most recently Gzella 2013 and Wiedemann 2014. Even in the 19th century, the equation of race and language was thus not as straightforward

as described in Bahrani 2006, 50.

25 Kiepert 1848, 2; see also Renan 1855, 2.

26 See, for example, the comments in Schlözer 1781, 121 on the identity of Chaldeans and Kurds; and Schlözer 1781, 165, and Michaelis 1786 on the Slavs. Michaelis' argument, to which Adelung 1806, 314–327, responded in detail, was largely based on the suggestion that the -sar- in both the royal name *Ναβονασσάρου* heading the Ptolemaic Canon and the Biblical *Nḫukadrešsar* be interpreted as the etymologically Slavic king of kings, the Tsar (or "*nebu godnoi Tsar*, coelo dignus princeps"). Henry C. Rawlinson's 1853 position on the Scythian or 'Median' of the Bisutūn trilingual is discussed in detail in a letter from Alexander von Humboldt to Carl Ritter in the same year, edited in Päßler 2010, 133.

27 Renan 1855, 39: "Élam, Assur, Arphaxad, Lud et Aram, ce dernier seul est sémitique dans le sens linguistique du mot [...] Assur est couchite et indo-européen [...]" The identification of Assyrian as 'West-Arisch' or Medo-Persian is shared in Kiepert 1848, 3. On the role of race in relation to language in Renan's writings, including a review of Edward Said's criticism, see Priest 2015. As shown in Bobzin 2010, Renan's linguistic contributions to Semitic Studies were overall negligible, particularly since the grammatical part of his work was never published.

onto the Oriental present.<sup>28</sup> Since the publication of Eberhard Schrader's *Die assyrisch-babylonischen Keilschriften* in 1872, the Assyrians and Babylonians had become incontrovertibly assigned to the East Semitic branch.<sup>29</sup> Hommel thus conceived his work foremost as an Assyriological answer to Ernest Renan, meant to update the Semitic narrative through the evidence provided by the decipherment of cuneiform.<sup>30</sup> The general borders, however, were largely identical to Renan's. The banks of the Tigris, which had formerly provided the eastern boundary of Renan's Semitic, now formed the division between Aramaic and Akkadian.<sup>31</sup> As the Semitic languages were extended to the Zagros, the geography of Assyria and Assyrian, Babylonia and Babylonian became coterminous. The established linguistic connection of Assyrian and Babylonian drew the final boundaries on the map down to the Persian Gulf in the South and to the Middle Euphrates in the West.<sup>32</sup>

By the time Meillet and Cohen's *Langues du Monde* was published, the need for and usefulness of language maps was generally accepted.<sup>33</sup> Maps of the Ancient Near Eastern languages, however, had changed little. Though separated from Hommel's map by over forty years, the first edition of Meillet and Cohen's *Les Langues du Monde* includes as a separate plate, pl. 2A, a map labeled as an "Essai de carte du chamito-sémitique au 5e siècle avant J.C.", which echoes Hommel's depiction in

both form and content<sup>34</sup> (Fig. 1). The map color-codes the regional distribution of six Semitic languages or language groups (Akkadian, Phoenician, Hebrew, Aramaic, Arabic, and the South Arabian languages) on a grand scale, together with Egyptian, Libyco-Berber, and Cushitic.<sup>35</sup> Phoenician occupies most of the Levantine coast, roughly from modern Tripoli to Gaza, while Hebrew occupies a small inland island. The rest of the region from modern Gaza and up to Iskenderun on the coast and inland is filled by Aramaic. Compared with Hommel's map, borders assigned to individual languages shift only slightly. The border between Aramaic and Akkadian is moved farther west towards the Middle Euphrates, approximately to the border between modern Syria and Iraq. In the accompanying text, the geographic extent is explicitly defined not in linguistic terms, but with reference to political history: the Middle Tigris and the Lower Euphrates are the seats of Akkadian, Babylonian, and Assyrian states.<sup>36</sup> Faced with the problem of inserting the burgeoning Akkadian evidence into the linguistic map of the Ancient Near East, Hommel and Meillet and Cohen chose to give primary weight to the presumed political boundaries of Assyria and Babylonia. In depicting languages as discretely bounded spaces, both maps take recourse to the territorial model of the nation-state.

28 The entry for 'Babylonia' in Kiepert 1855, 1034, for example, equates the boundaries of the region with contemporary 'Irak Arabi' before jumping to a discussion of Strabo and Ptolemy's Geography. The equation was further supported by the religious association of the modern Christian Chaldeans and Assyrians with their homonymous antique and classical predecessors, summarized in Murre-van den Berg 2009, 159–160.

29 Schrader 1872, 189–195. See Schrader 1872, 315, and Hommel 1892, 107, on the term 'East Semitic' as well as the discussion in Brockelmann 1908, 6.

30 See the remarks in Hommel 1883, 4. Hommel thus continued the emancipation of both Semitic Studies and Assyriology from the tradition of *Philologia Sacra* described in Bobzin 2010 and Gzella 2013.

31 Hommel 1883, 17, defines these as "natural boundaries" ("natürliche Grenzen"). See p. 19–20 on the boundaries of Assyrian in particular and cf. Renan 1855, 39, on "les bords du Tigre" as a "grand mélange des races sémitiques, couchites, ariennes et peut-être touraniennes [...]"

32 See the overview of Akkadian dialects in Hommel 1883, 14–16. Hommel's proposed boundary between Assyrian and Babylonian was located with remarkable precision between the 35th and 36th parallels north (p. 20).

33 As described in Behnstedt and Woidich 2013, 306–307, Gotthelf Bergsträßer's *Sprachatlas von Syrien und Palaestina* (Bergsträßer 1915) had begun the modern tradition of mapping Semitic dialects by tackling the complex web of Arabic dialects. Even his harshest critics, such as Alois Musil (Musil 1918, 98–100, cf. Bergsträßer 1922), focused on his methods

of collecting data, not the method of mapping.

34 Meillet and M. Cohen 1924, pl. 2A, reprinted in the second edition (Meillet and M. Cohen 1952) as an inset on pl. III, together with the "Langues chamito-sémitiques au XXe siècle". The map is reprinted in D. Cohen and Perrot 1988, facing p. 1, as a black and white line drawing.

35 Even before Hommel's publication, Friedrich Müller had merged the Semitic and Hamitic branches into the Hamito-Semitic (later Afro-Asiatic) language family; see, for example, Müller 1877, 235, on Hausa; and the discussion in Brockelmann 1908, 3. Heinrich Berghaus' *Physikalischer Atlas*, originally intended to illustrate Alexander von Humboldt's *Kosmos*, included in its 3rd edition a map of *Die Sprachen der Erde bis um 1890* by Georg Gerland (Gerland 1892). Gerland's map includes a large bounded area for the Semitic-Hamitic languages from North Africa to the Zagros, though an inset gives a considerably more complex picture for Ethiopia. Historical references are largely confined to hatching indicating migrations, including "Sprachen, durch Einwanderung verbreitet, mit Zurückdrängung (Aufsugung) anderer Völker und Sprachen" and "Direct übertragene Sprachen: auf sprachlich verwandte Völker". The latter is used only for Egypt and the African littoral: Arabia, Mesopotamia, and the Levant are shown as historically stable, that is, Semitic. The map is otherwise notable for including typological categories such as inflection or grammatical congruence.

36 Meillet and M. Cohen 1952, 101. The region between the Tigris valley and the Zagros, for example, already hosts "un état sémitique" ca. 2400 BC as a predecessor to the Neo-Assyrian empire.

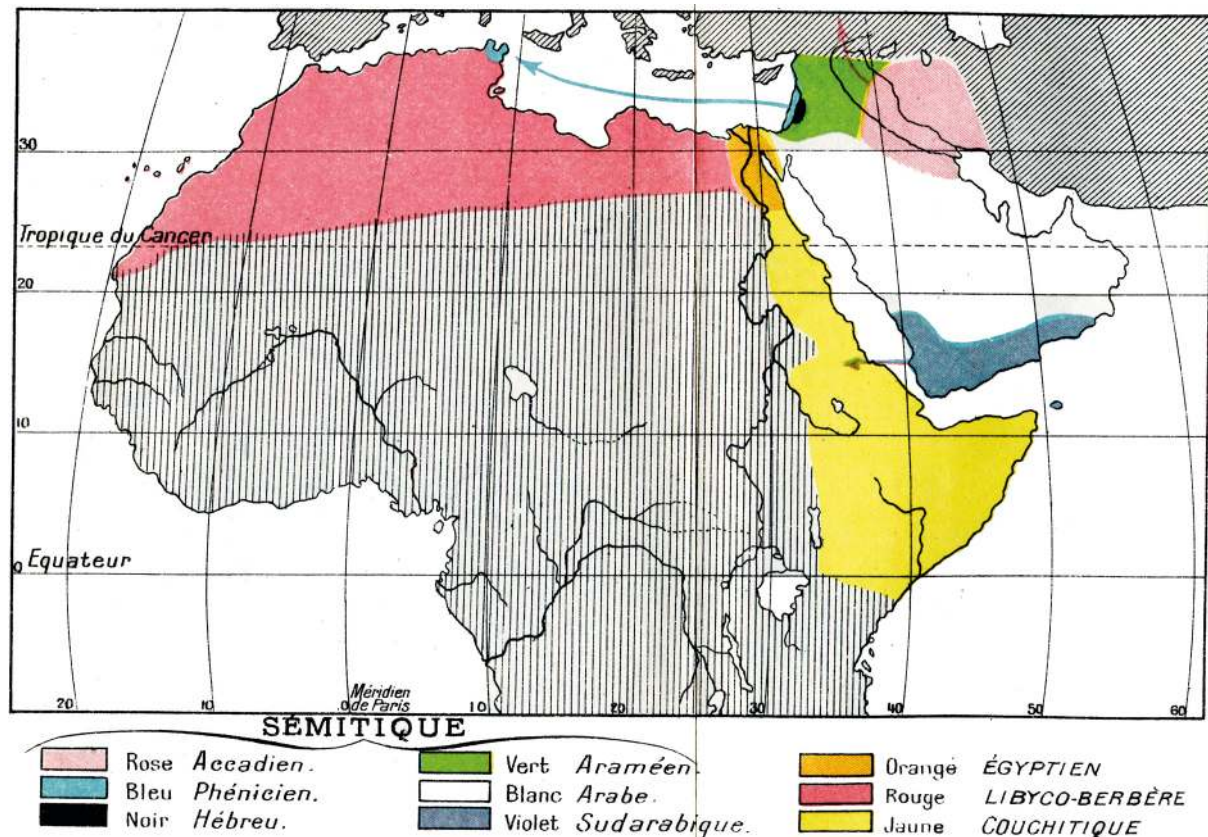


Fig. 1 “Essai de carte du chamito-sémitique au 5e siècle avant J.C.”

### 3 States, peoples, and movements

While Akkadian was inserted into the linguistic landscape by recourse to contiguous territory, the works of Hommel and Cohen and Meillet also continue another tradition of earlier works on language geography: the strong connection between language and ethnic identity. Klaproth’s *Asia Polyglotta* had dutifully marked the area of Tibetan as the place inhabited by the “Tübeter”, Georgian as the lands of the Georgians.<sup>37</sup> Kiepert’s *Atlas Antiquus* fills the “Orbis Terrarum Antiquis Notus” not only with the sites, regions, and borders of large territorial states and empires, but color-coded speaker groups filling vast areas: red for the *Gentes Aricae* and blue for the *Gentes Semiticae*.<sup>38</sup> Friedrich Delitzsch’s *Wo lag das Paradies?* (1881) was accompanied by a map of Babylo-

nia indicating not only the land of Sumer and Akkad but also population groups such as the Gutians (“Kutû”), Kassites (“Kaššî”), and Suteans (“Sutû”).<sup>39</sup>

Similarly, Hommel’s *Semitische Sprachen und Völker* pairs the language map at the end of the volume with a physical map of the Near East indicating geographic regions, including Arabia and the Syrian-Arabian desert, and political areas such as Media and Elam.<sup>40</sup> The area east of the Levant and west of Tigris, corresponding to the Aramaic of the language map, is filled by the ‘Aramæer’ (“Arameans”). Meillet and Cohen illustrate the description of the older Semitic languages with another map labeled “Pays et Villes dans l’Antiquité”.<sup>41</sup> The line drawing shows coasts and major rivers. Instead of languages, however, the map labels individual towns and a few larger areas: Cappadocia, Mesopotamia, the

37 See the discussion in Lameli 2010, 570.

38 Kiepert 1869, pl. 2. A third group, the *Reliqua Hominum Coloris Albi* (!), occupies most of the African litoral as well as Spain and parts of the Caucasus.

39 Delitzsch 1881, map facing p. 346.

40 Hommel 1883, map facing title page. Hommel’s own *Geschichte Babylonien und Assyriens*, a work very much concerned with the long-term succession of languages and cultures, included only a modified version of Kiepert’s detailed physical map (Hommel 1885).

41 Meillet and M. Cohen 1924, 113.

Syrian Desert, as well as Chaldea, Akkad, and Sumer.<sup>42</sup> The label ‘Sumer’ already implied an approximate distribution of Sumerian, ‘Babylon’ suggested a center of gravity for the spread of Babylonian. The late start to the linguistic mapping of the Ancient Near East can be ascribed at least in part to this equation of linguistic and ethnic identity: “very few people questioned the assumption that language group and ethnic group were inextricably bonded together.”<sup>43</sup> The equation suggests another explanation for the hesitant development of Ancient Near Eastern language maps. As long as place, people, and language were more or less strongly equated, there was little need to mark them separately.

Hommel had thus overturned Renan’s ethnic and linguistic identification of the Assyrians while simultaneously changing little in his linguistic geography. To explain the sedentary, imperial, and polytheistic Assyrians, he turned to the influences of an earlier, non-Semitic predecessor.<sup>44</sup> He readily identified these predecessors as the Sumero-Akkadians or Proto-Chaldeans, from whom the Assyrians inherited their religion, culture, and cuneiform writing.<sup>45</sup> The necessary consequence was that the Assyrians and Babylonians together with Assyro-Babylonian were drawn into Renan’s narrative of migration.<sup>46</sup> Just as the true character of the Semitic peoples was intrinsically linked with their persistent nomadism, most pristinely preserved among the modern Arabs, the Assyrians had replaced both the older pre-existing peoples already settled in Mesopotamia and their language.<sup>47</sup>

Based on this strong identity of peoples and lan-

guages, Meillet and Cohen could depict the spread of Akkadian in the map of Afro-Asiatic languages in *Les langues du Monde* by borrowing from the cartographic grammar of migration. Phoenician originates in the Levant, but spreads to northern Africa, with an arrow stretching across the Mediterranean and pointing to Carthage. Another arrow lets the South Arabian languages hop across the Red Sea to the Horn of Africa, while a third moves Akkadian across the Aramaic zones into Anatolia.<sup>48</sup> The development of Akkadian could thus conveniently be defined as “the language of Semites who invaded a land of Sumerian language and civilization.”<sup>49</sup>

A more recent example, published as the “Geo-Chronological Distribution of Akkadian Dialects and of Amorite,” uses much the same imagery to depict language movement.<sup>50</sup> The maps again depict areas in which Akkadian was attested, but divided diachronically, with each miniature meant to represent the area covered during major dialect stages of Babylonian and Assyrian. Old Akkadian (ca. 2400–2000 BC), applied to all Akkadian dialects of the 3rd millennium, hugs both banks of the Euphrates and Tigris as well as the Ḫābūr triangle in northeastern Syria. A small branch reaches from the Euphrates elbow to the Levantine coast, while southern Mesopotamia, below a line stretching roughly from modern Kūt on the Tigris to Dīwāniya on the Euphrates, or beneath ancient Nippur, is left blank, presumably for Sumerian. Arrows are used to show Middle Babylonian radiating from the Levantine and Syrian coast to Cyprus, Egypt, and Anatolia. Assyrian

42 The depiction is considerably expanded in detail in the map “Proche-Orient: localisations relatives aux langues anciennes” in D. Cohen and Perrot 1988, 30.

43 Dalley 1998, 2. Jason Hansen’s recent work on ethnographic mapping in the run-up to the First World War clearly shows that scholars of the Ancient Near East were certainly not alone in this assumption. See Hansen 2015 on the complicated relationship of linguistic and ethnic mapping in Germany in the 19th and early 20th century, particularly the summary on p. 27–28.

44 Hommel 1883, 12. As pointed out in Bobzin 2010, 375, though Renan’s work was seldom cited directly in the following years, “Viele von Renans Gedanken leben in den Werken seiner Nachfolger wie Nöldeke, Brockelmann oder Bergsträsser fort, ohne dass diese Renans Namen immer nennen.”

45 Sumerian and the Sumerians would later be folded into the same narratives of migration cycles in the form of the ‘Sumerian Problem’, first clearly formulated in a Turkish article by Benno Landsberger in 1944 and reprinted in Landsberger 1974. He stated the problem simply: “At what point in this early period, in terms of culture strata, did the Sumerians enter Mesopotamia?” (Landsberger 1974, 9). See the critical review in Ru-

bio 1999 and Bahrani 2006, 52–53.

46 Hommel 1883, 6.

47 See Bobzin 2010, 371 on Renan. Delitzsch 1884, 5, offers a clear description of Mesopotamia as a target of linguistic and ethnic migration: “Darum begegnen wir auf babylonischem Boden auch noch mancherlei anderen Völkern und Stämmen, sei es nun dass sie in das Land erobernd einfielen, sei es dass sie nomadisierend das natürlicher Grenzen ermangelnde Land durchstreiften oder auch als sesshafte Einwohner Aufnahme in die babylonischen Städte fanden.”

48 The use of such movement indicators is sharply reduced on the inset map in Meillet and M. Cohen 1952 and disappears completely from the modified map in D. Cohen and Perrot 1988.

49 Meillet and M. Cohen 1924, 92: “la langue de Sémites qui ont envahi un pays de langue et de civilisation sumériennes”. Cf. p. 94: “C’est la araméen qui s’est substitué à l’accadien comme langue parlée et comme langue diplomatique.” The revised edition (Meillet and M. Cohen 1952, 100 and 102) retains the same basic text, though here the Akkadian-speaking Semites no longer *envahir*, but *occuper* (p. 100).

50 Buccellati 1997, 8 Map 1; cf. Buccellati 1996, 2, which omits Amorite.

Akkadian, narrowly confined to the Assyrian Heartland, spreads from this imperial core to Syria and southeastern Anatolia in the Middle Assyrian Period. Later, at the height of the Neo-Assyrian empire, this spread reaches Babylonia as well. West Semitic Amorite, often viewed geographically and linguistically as a possible ancestor to later Aramaic, is indicated solely by arrow lines. Amorite interacts with both Old Akkadian and Old Babylonian by radiating from the Middle Euphrates into the surrounding steppes and into the areally bounded, neighboring states.<sup>51</sup>

In each case, languages are sifted primarily by ethnic affiliation, secondarily by presumed state relations. Particular languages such as Sumerian and Akkadian are linked to state formations and assigned a static territory. Subsequent language interaction is relegated to models of invasive population movement, as nomadism and military conquest become the main conduits of linguistic diffusion.<sup>52</sup> In the case of Amorite, this interaction is interpreted as a regular movement of speakers in seasonal, semi-nomadic transhumance within and around a semi-territorial state. In the case of Assyrian, the arrows on the map represent the sporadic, intentional movement of warfare, deportation, and resettlement accompanying the development towards a territorial state and, finally, an empire in the latter 2nd and early 1st millennium.<sup>53</sup> Linguistic spread is depicted as a natural outgrowth of this process.

The drawbacks of the area mapping represented by the “Essai de carte du chamito-sémitique” and the “Geo-Chronological Distribution” become readily apparent once they are connected with narratives of language change.<sup>54</sup> There is no doubt that migration and move-

ment played a significant role.<sup>55</sup> The history of the Ancient Near East is replete with such episodes, and each forced or voluntary migration, resettlement, military expansion, or destruction will have affected language as well. In depicting languages as speech communities with well-defined limits, the linguistic maps push the questions of change and interaction towards a specific direction in which migration and movement are primary determinants.<sup>56</sup> As soon as migration becomes less convincing as an explanation for social and political change, and nomadism less of a cultural and ethnic absolute, the models suggested by the maps begin to collapse.

#### 4 Problems of scale

The area maps support an interpretation of language change as an outlier of a well-defined and bounded relationship of core and periphery. If the Ancient Near East is to be interpreted as a spread zone, the maps give a concrete visual boundary to a monolingual center of gravity from which language can spread and into which outside influences can penetrate.<sup>57</sup> There is little wonder that this static view of language as a closed system led the archeologist Robert McC. Adams to abandon the “linguistic paradigm” in favor of more dynamic landscape models for settlement patterns, reflecting “shifting, converging social and natural circumstances rather than outgrowths of possibilities inherent in earlier arrangements displaying an unfolding internal momentum of their own.”<sup>58</sup> As should become clear in the following section, the ‘linguistic paradigm’ to which he refers is a particularly poor model for languages as well.

- 51 More popular examples of this type of marking include the 1959 atlas accompanying Arnold Toynbee’s eclectic *A Study of History* (Toynbee 1959, Map 16: “The Aegean, Egypt, and South-West Asia on the Eve of the Barbarian Invasions at the Turn of the 13th and 12th Centuries B.C.”). Arameans, Hebrews, and Chaldeans emerge from the Arabian Peninsula along “lines of advance of invading and migrating peoples.” Toynbee 1935, 138 fn. 3 (with reference to Meyer 1928, 7–8) and p. 398, describes the process as the “sudden explosive discharges of Nomad invaders” or as “Nomad outbreaks which have taken their victims as completely unawares as the most malign of the eruptions of Vesuvius.” See also the “Principal West Asian Languages 1000–1 BC” in Nicholas Ostler’s *Empires of the Word* (Ostler 2006, 42), as well as the attempt at mapping Old Akkadian in relation to Sumerian in Breyer 2014, 19–20.
- 52 Cf., for example, the definition of Amorite in Buccellati 1997, 9: “the language of the rural classes of the Middle Euphrates, which extended originally to the steppe and began towards the end of the 3rd millennium to migrate towards southern Mesopotamia.” The same visual grammar was

- used to map patterns of transhumance in Buccellati 1990.
- 53 Behnstedt and Woidich 2005, 37.
- 54 This tendency is already seen “from the very beginnings of the development of linguistic atlases” (Kehrein 2014, 483).
- 55 As noted in Cooper 1973, 241 (cited in Michalowski 2007, 178), language change is a relatively slow process, “barring violent incidents, such as wholesale annihilation, deportation, or deliberate suppression.” Cf. Garr 1985, 11, on the problem of “transplanted languages.”
- 56 See Yoffee 1995, 282, on the problem of migration as an explanation for social and political change. The first explicit challenge to the view of nomadism as an absolute contrast to sedentism was provided in Rowton 1974.
- 57 On the notion of the geographic center of gravity, see Nichols 1997, 371–372. As remarked in Sinopoli 1994, 169, this center “may be defined differently depending on variables considered (e.g., economic, political, or ideological).”
- 58 Adams 1981, xviii.



The limits of the types of area maps described above emerge most clearly when attention turns not to the individual languages, but to the modes of interaction among them. In defining the language boundaries in the Ancient Near East, the area maps not only assign a bounded territoriality to the individual languages, but also define the areas of interaction where language contact should have taken place, at least initially. In Meillet and Cohen's area map, the modern border between Syria and Iraq is roughly equal to the boundary between Aramaic and Akkadian, while the steppes and desert south of the Euphrates represent the boundary between Akkadian, Aramaic, and Arabic. The Zagros again imply a boundary between Akkadian and the Iranian languages such as Elamite. The Syrian Ġazīra, in which Akkadian and Aramaic or otherwise Northwest Semitic languages intermingled, and the area of north-eastern Iraq, in which Akkadian interacted with Kassite, Elamite, Hurrian/Urartian, and Persian, become linguistic borders or borderlands.<sup>59</sup> As two languages are depicted as occupying distinct areas, as in the maps described above, the line where these areas meet automatically becomes an area of linguistic contact.<sup>60</sup>

The first significant attempt at addressing the question of discrete linguistic boundaries was published in Igor Diakonov's 1967 monograph on the *Languages of Ancient Western Asia* (Fig. 1).<sup>61</sup> According to the legend provided, the map depicts the "Semitic languages and peoples from the 3rd to the 1st millennium BC": "Major places" include larger cities such as Babylon (Вавилон) and the Assyrian capital at Assur (Ашшур). Different markers – an empty square, a filled circle, and a double circle, decoded in the legend, see the figure – distinguish

cities where Akkadian peoples are attested in the 3rd millennium BC, cities where Akkadian and West Semitic peoples are attested together in the 2nd millennium, and cities where West Semitic peoples are attested in the 1st millennium.<sup>62</sup> A number of further symbols indicate the diachronic and synchronic relationships among the languages. The relationship between Akkadian and Amorite (labelled as 'tribes') in the 2nd millennium is suggested by a word label for the latter – Амореи in Fig. 2 – which arcs from the western Syrian Orontes river to southern Mesopotamia. Boundaries of the first half of the 1st millennium are indicated separately for each language. A solid line indicating Aramaic encompasses the region from northern Syria to the eastern Tigris, down to the Arabian Gulf and across to the Levant. Within this great circle, simple, diagonal hatching indicates the use of Akkadian along the Euphrates and Tigris rivers and up to the Ḥābūr in eastern Syria. The lower reaches of the Euphrates and Tigris up to the Arabian Gulf are assigned to Chaldean, indicated by dotted shading, while Arabic again pushes up against Chaldean, Akkadian, and Aramaic from the Arabian deserts.

Diakonov's map to some degree follows many of the same conventions described above. The labels largely equate peoples and their languages, and reassert the dichotomy of nomadic tribes in contact with city-states.<sup>63</sup> The map is remarkable, however, not only for its attempt at condensing a large amount of relevant information on three millennia and eight languages into a single space, but also for its use of various techniques in order to convey a sense of common space among the peoples and languages in question. Where the "Essai de carte du chamito-sémitique" marks fixed boundaries

59 Thus, Parker 2006, 93, notes the influx of resettled population groups into the Upper Tigris River valley in the wake of the Neo-Assyrian expansion, which "dramatically changed the ethnic and linguistic character of the Tigris borderlands."

60 The terminological distinction is taken from Parker 2006. Starting with the word 'boundary' as the most general term, Parker distinguishes 'borders' as linear dividers, 'frontiers' as zones of interpenetration between two previously distinct entities, and 'borderlands' as the areas in which various processes may interact "to create borders or frontiers" (Parker 2006, 80). Each term refers to a type of geographic space, and can in turn encompass various other types of boundaries, including geographic, political, demographic, cultural, and economic, each of which also subsumes other subcategories. Even where a border exists, it need not function equally for all categories. A border can, for example, be politically fixed, but remain socially or economically fluid. See, for example, Brown 2013, 103, on the Tūr 'Abdīn mountains as both boundary and communication. Dinkin 2013, 4–5, also adds the category of *null* bound-

aries, in which no spatial contact between linguistic communities can be established.

61 Diakonov 1967, 25. Though the work is rarely cited in Ancient Near Eastern studies, it is one of the few covering Ancient Near Eastern languages cited in Johanna Nichols' *Linguistic Diversity in Space and Time* and in its breadth and scope seems to have provided a basis for defining the Ancient Near East as a linguistic area. An earlier overview was published in English as Diakonoff 1965, the importance of which was underscored in Edzard 1967.

62 The label identifying major 1st millennium sites explicitly excludes Akkadian ("[...] вне пределов распространения аккадцев" "outside the limits of Akkadian diffusion").

63 Cf. Diakonoff 1965, 104 fn. 4, on the "wave-like intrusions of the Semites towards the North". Diakonov distinguishes himself from his predecessors by presenting the reconstruction of migrations as the result of rather than the preface to his linguistic discussion.

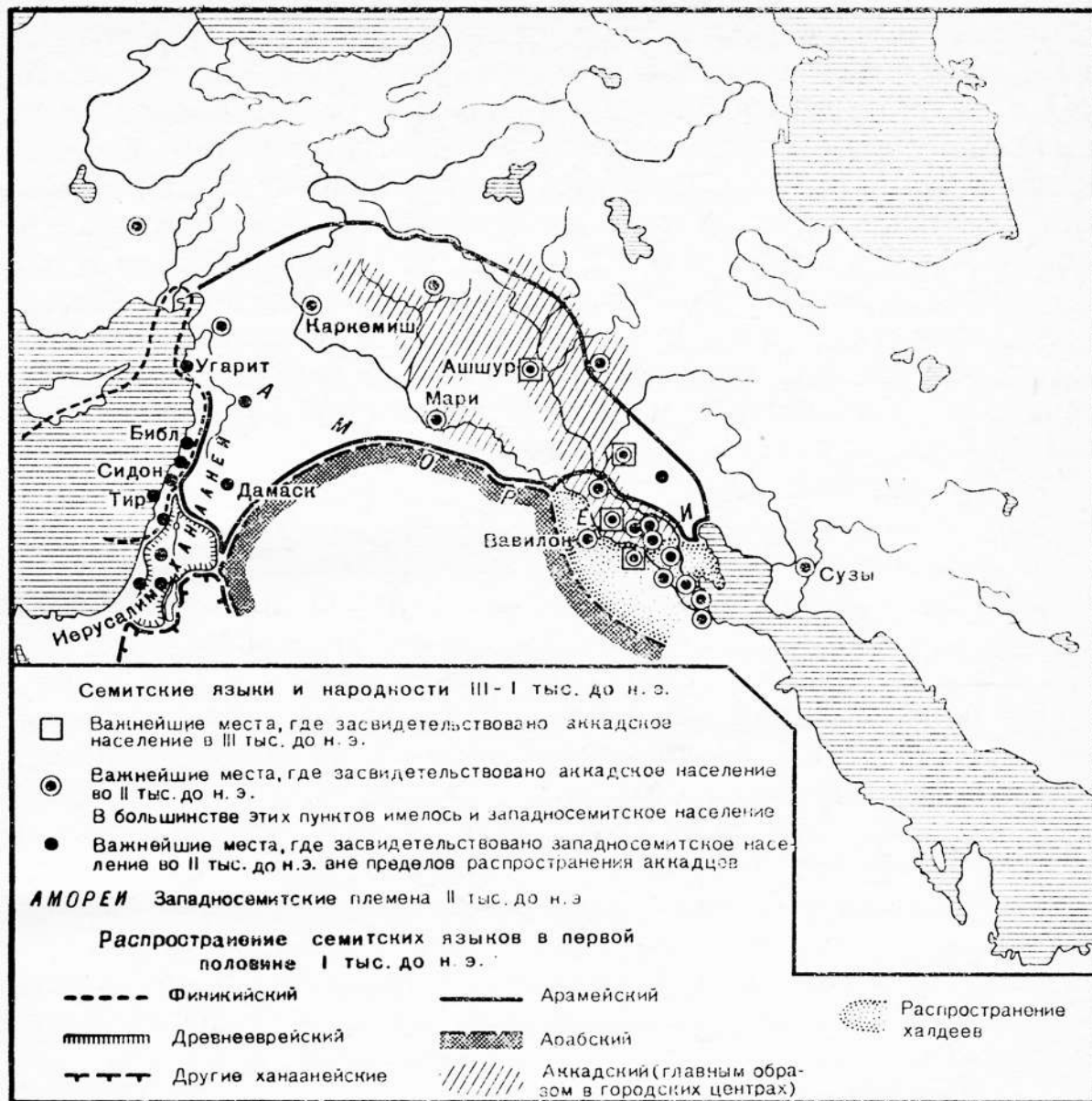


Fig. 2 'Semitic languages and peoples from the 3rd to the 1st millennium BC'

between Akkadian and Aramaic, Diakonov’s “Semitic languages and peoples” has both Akkadian and West Semitic Aramaic occupying much of the same space. Particular cities, especially in the 2nd millennium, are highlighted as points of contact between Akkadian and West Semitic. Diakonov’s map thus not only directly contradicts but negates the boundaries set by earlier maps en-

tirely, as interaction between Akkadian and Aramaic is set across almost the entire space in which Akkadian is attested.<sup>64</sup> In this way, the map leaves ample room for the long-term bilingualism postulated for Sumerian and Akkadian as well as Akkadian and Aramaic.<sup>65</sup>

One way to interpret the change in mapping is simply as a problem of scale, both of geography and of

64 The same essential picture is also provided by overviews of language use in the 1st millennium, as, e.g., in Faist 2003 or Fales 2007.

65 See Kraus 1970, 99, Cooper 1973, 240, and Hallo 2006, 87, on ‘symbiosis’

to describe intensive language contact between Sumerian and Akkadian, and Fales 1986, 44, Kaufman 1989, 97, and Lemaire 2008, 87 on Akkadian and Aramaic, and cf. Goedgebuure 2008 on Luwian and Hattian.

data.<sup>66</sup> Geographically, all of the maps mentioned so far were meant to illustrate or supplement an historical narrative and depict the area in broad strokes. All but a few of the maps lack even a bar scale or lexical scale. The second edition of the “*Essai de carte du chamito-sémitique*”, for example, is relegated to an inset to a map scaled at 1:30,000,000. At the same time, from the standpoint of the data used, all of these maps depict the presence of a given language as a whole. None draw a distinction between the types of data, from personal names to individual genres to individual grammatical features, which have played such a large role in discussing language shifts. Viewed as large-scale processes, these depictions leave little room for more detailed reflection on linguistic boundaries. Diakonov’s map begins a shift in focus from large-scale regions to either specific areas or individual sites.

The issue of scaled boundaries is raised more clearly by the maps accompanying Guy Jucquois’ *Phonétique comparée des dialectes Moyen-Babyloniens*.<sup>67</sup> The map represents one of the few attempts at mapping not individual languages, but dialect features. The problem is framed by the spread of Akkadian throughout the Near East in the Late Bronze Age, in the second half of the 2nd millennium BC, when Akkadian served as a diplomatic and administrative language within the system of great powers which dominated relations with one another and with their numerous vassals. Considerable differences have been observed among the local dialects of Akkadian used in the various centers, which can be attributed partially to varying local traditions of writing, including various continuations of Old Babylonian practice, and partially to substantial influence from diverse substrates.<sup>68</sup>

In order to establish patterns of traditions, Jucquois begins by identifying the major urban centers in which Akkadian texts are attested, including Ugarit and Qatna

in modern Syria, Alalakh and Hattusa in modern Turkey, and the 18th Dynasty Egyptian capital at Amarna. The distribution of individual features is then represented on eight individual maps.<sup>69</sup> “*Carte VI: Le sort de -w- ancien intervocalique*”, following p. 241, is a representative example (see Fig. 3). The loss of phonemic /w/ is generally seen as a distinguishing feature of the shift from Old to Middle Babylonian as well as Old to Middle Assyrian after the end of the Middle Bronze Age.<sup>70</sup> The discussion that precedes the map established four different results of this shift, divided into four different areal types. In the majority of attestations from Egypt and from Assyria in northern Mesopotamia, /w/ either did not shift at all or, in the case of Assyria, shifted to /b/. In northern Syria between the Euphrates and Hābūr, in Anatolian Hattusa, and in the Levant, west of the Orontes river, /w/ most often changed to /m/. In Syria east of the Orontes, on Cyprus, and in Palestine, no shift from /w/ to /m/ seems to have taken place at all. The pattern matched that of Middle Babylonian in southern Mesopotamia only in Tyre (Lebanon), where intervocalic /w/ consistently shifted to /m/.

Of particular interest is the way in which the available sources from specific points are extrapolated to derive areas (see Fig. 3). Looking at the sources used, represented on the map by individually numbered sites, the Levantine coast is represented by texts from Tunip, Ugarit, and Amurru (Qatna). Northern Syria is covered by the texts from Mittani, Anatolia solely by the Hittite capital at Hattusa, Northern Mesopotamia and the eastern Tigris region by Assur and Nuzi. Finally, all of Egypt is represented by the texts from Amarna. Both here and in the other maps in the volume, these individual areas are further grouped according to substrate influences.<sup>71</sup> Sources from individual sites are seen as representative for larger areas. In contrast to the broad areas

66 The term ‘scale’ has traditionally served as a fundamental organizing principle for understanding geographic patterns, understood here as a “nested hierarchy of differentially sized and bounded spaces”, following the consensus definition in Marston, J. P. Jones, and Woodward 2005, 416–417, with reference to Taylor 1982 on world, state or nation, and city as three fundamentally distinct scales of political geography. Cf. the recent overview of various definitions in Lloyd 2014. The notion of scale has been variously applied to Ancient Near Eastern Studies, as, for example, Glatz and Plourde 2011, 38 on the “scale of political interaction” in the placement of public monuments.

67 Jucquois 1966.

68 See, for example, the overviews of peripheral Middle Babylonian in

Moran 1992, xviii–xxii; Mynářova 2007, 40–52; van Soldt 2013.

69 Keys to the individual maps are given in an appendix in Jucquois 1966, 316–317. Cf. the point overlap with the two maps of regional, urban centers in the Late Bronze Age before and after ca. 1340 BC in van Soldt 2013, 23.

70 Cf. the varying interpretations in Knudsen 1989–1990, 75–77, Edzard 1994, and Streck 2011, 374.

71 Note, e.g., the north/south pattern in the confusion of masculine and feminine gender, attributable to Hurrian influence in “*Carte II*”, in Jucquois 1966, following p. 88. A summary of features attributable to individual substrate languages is given in Jucquois 1966, 294–295.

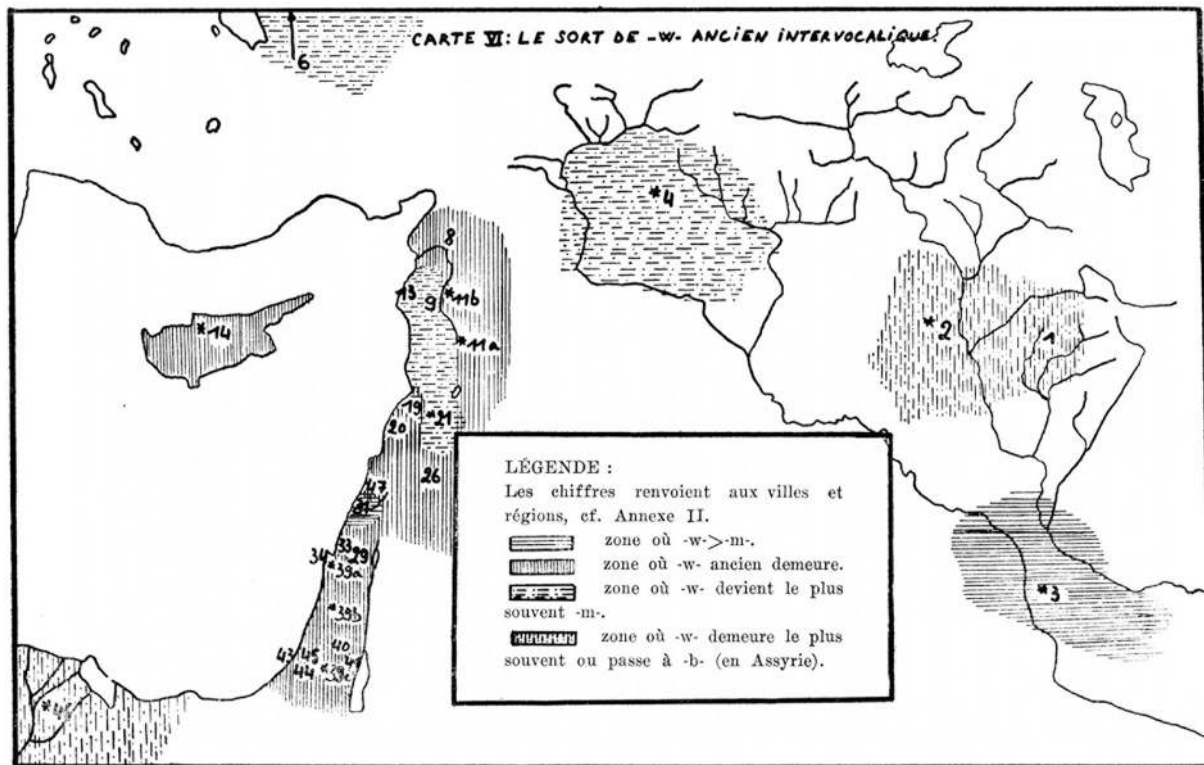


Fig. 3 “Carte VI: Le sort de -w- ancien intervocalique”

established by the “Essai de carte du chamito-sémitique” (Fig. 1 above), however, the linguistic boundaries in Jucquois’ feature maps shift the focus to localized networks of language use, closely linked to individual centers together with their rural hinterlands.

### 5 Artefact mapping and the linguistic landscape

As Jucquois’ maps make clear, the ways in which scale is chosen also serve to reconfigure the way language boundaries are drawn. This same principle underlies W. Randall Garr’s *Dialect Geography of Syria-Palestine*, which picks up a few hundred years after the point where Jucquois’ *Phonétique comparée* leaves off, covering much the same area.<sup>72</sup> The maps are again centered around individual cities, reflecting the individual inscriptions, personal names, and, to a more limited degree, place names.

As in previous studies, the goal is to resolve features into linguistic areas or dialect clusters, with solid lines indicating linguistic boundaries, dotted lines encircling linguistic islands which display features in common with areas beyond their immediate neighbors. Again, the maps are confronted with the problem of the concurrent use of several languages or dialects in a single place: Akkadian and Aramaic in Tall Faḥīrija; Phoenician and Hittite in Karatepe; Phoenician, Aramaic, and Samʿalian in Samʿal.<sup>73</sup> Numbers index the co-occurrence of competing features within a city.<sup>74</sup>

Later maps show scalar distinctions ranging from larger regions to points derived from individual texts. As noted above, Buccellati had defined the relationship between Akkadian and Amorite as a dimorphic opposition between urban and rural. Addressing the same problem of Amorite presence in Mesopotamia, Michael P. Streck divides the region into four distinct areas.<sup>75</sup> Differently weighted shading of each area represents the

72 Garr 1985.

73 Garr 1985, 12.

74 See the map of “The correspondences of \*d̥” Map 2 in Garr 1985, 25, marking Arslan Taş, Samʿal, and Ekron as cities in which orthographic

<š> and <q> both vary as reflex of /s/ (&grave;d̥). On prestige as a motivator for language shifts at Samʿal, see Gzella 2015, 77.

75 Streck 2004, 336.

relative percentage of Amorite in relation to Akkadian personal names. Such contiguous areas have then occasionally been interpreted as dialect continua, chains of dialect areas in which each dialect shares individual features with its direct neighbors, with progressively greater differences correlated with distance.<sup>76</sup> Streck's depiction of the area of Isin as a linguistic island of Sumerian within a more heavily Amorite environment shows that this pattern of contiguous progression is certainly not obligatory. Jucquois' depiction of Tyre provides another good example of non-contiguous relationships. Instead of forming a direct boundary with its neighbors, the city shares features otherwise found predominantly in southern Mesopotamia.<sup>77</sup>

Both Jucquois' and Garr's maps address the problem of feature variation within an inherently multilingual environment. Jucquois' work begins with the premise that the Akkadian described was not that of native speakers, but "des indigènes ou des scribes asiennes ou hourrites 'importés'", functionally distinguishable from the language of the individual areas.<sup>78</sup> Though none of these other languages are included in the maps, the study thus moves not only from the regional to local scale, but from mapping of exclusive dialect to language use. As the racial and ethnic associations of the 19th and earlier 20th centuries were abandoned, the strong equation of language and ethnicity also began to dissolve as well.<sup>79</sup> Govert Van Driel's 2005 review of ethnicity in Assyriological studies reached the conclusion that language may still serve as a "prime indicator of ethnic identity", but also a "highly problematic one".<sup>80</sup> Language, much like

forms of material culture, was increasingly understood as neither a necessary nor sufficient criterion of ethnicity: "[...] it is merely one parameter, among many others, which may manifest different variations in different settings."<sup>81</sup> While the two were still closely linked, they were no longer automatically identical.

The regressively scalar view of individual areas negates the clear regional divisions of earlier maps. Divorced from the strong equation of language as a primary marker of ethnicity, the maps naturally raise the question of how the languages are to be understood. Given the long-term trends implied by a spread zone, how should the co-existence of multiple languages within a shared geographic space be interpreted? The implicit premise of dialect geography in the Ancient Near East has been that the presence of a language at a particular place primarily serves as an indicator of a socially and geographically constrained dialect. After separating literary texts as a distinct sub-group within the corpus, the remaining sources from each center or urban area are synthesized as reflections of local language use. Variations within the dialects are then examined to determine possible centers of innovation with regard to later dialects.<sup>82</sup>

Language shifts, however, also entail a shift from primary language to other uses. None of these languages simply disappears. The spread of both Akkadian and Aramaic as a *lingua franca* in the latter half of the 2nd millennium and throughout the 1st millennium, respectively, involves secondary language use where language and ethnicity are entirely separate.<sup>83</sup> The same issue is

76 Downes 1998, 18, Chambers and Trudgill 1998, 5–7. In other words, proximity along the continuum is correlated with mutual intelligibility. The concept was applied to Amorite in Albright and Lambdin 1970, 136, discussing types of language relationships, and to the Semitic languages of Syria-Palestine in Garr 1985, 204–240 (see now Gzella 2015, 48–49). See more recently Durnford 2013, 63, on Anatolia; Rubio 2006, 112, and Kouwenberg 2010, 21, on Akkadian; Michalowski 2007, 165, on Sumerian and southern Mesopotamia; Izre'el 2012, 203, on Canaanite-Akkadian.

77 The status of the Akkadian in Tyre with respect to the other Canaanite cities is also treated in Rainey 1996, 21, on nasalization of geminated consonants and p. 91 on the use of "Akkadian forms (without WS prefixes), a practice typical of the Tyrian correspondence on the whole". Garr 1985, 229–230, had already noted the difficulty in fitting the later position of Hebrew, Edomite, Old Byblian, and Sam'alian into a neat dialect continuum of Syria-Palestine. Cf. also Sallaberger 2011 on the southern Mesopotamian settlement of Garšana as an essentially Akkadian enclave in the Sumerian South. At the most detailed level, Wilfred van Soldt's study of the Akkadian of Ugarit examines language across individual archives in a city (van Soldt 1991). Though no maps are included in the volume, van Soldt at least opens the possibility of mapping language pat-

terns within the confines of a single urban space.

78 Jucquois 1966, 8.

79 See Yoffee 1995, 290, and the summary remarks in Pollock 1999, 167, on the role of language and ethnicity in the "Sumerian Problem"; and cf. the overview in Bahrani 2006 on the history of race and ethnicity in Mesopotamian studies.

80 Van Driel 2005, 4.

81 Hall 1997, 177. See also the similar point made in Bagnall 1993, 230, on Egypt in Late Antiquity, and cf. the remarks in Fales 2013 on the Neo-Assyrian empire, with additional references.

82 See the critique of method in Sommerfeld 2012, 265.

83 The suggestion of alloglottography, "writing a text in a language different from the language in which it is intended to be read" (Rubio 2007, 8), stands at the extreme end of this spectrum. This interpretation has been proposed for both Akkadian in the 1st millennium (Rubio 2007) and in the West in the Late Bronze Age (von Dassow 2010), as in the situation depicted by Jucquois. See, most recently, the arguments against this interpretation of the Late Bronze Age dialects in Canaan in Izre'el 2012. Taken at face value, the interpretation as alloglottography essentially precludes the possibility of the sort of bi- or multilingualism such as that,

raised by the presence of official or literary languages and local dialects in both the Old Akkadian period (official Sargonic Akkadian vs. local dialects) and 1st millennium Babylonia (Standard Babylonian vs. Neo- or Late Babylonian).<sup>84</sup> In each case, they represent a more restricted form of co-existence in which particular forms of a language are conditioned by use, possibly confined to scribal or political elites.<sup>85</sup> In each case, language is viewed less as the sum of its dialects, and more as a reflection of a multitude of ideological, political, and social uses.<sup>86</sup> As Garr observes: “It is unclear, then, whether native speakers were multilingual or whether only the scribes were versed in different speech forms.”<sup>87</sup>

The diachronic series of maps in Walther Sallaberger’s investigation of the language death of Sumerian begins with a similar problem in tracing the relationship between Akkadian and Sumerian (see Fig. 4).<sup>88</sup> The succession of maps on the Old Akkadian, Ur III, and Early Old Babylonian periods is embedded in a discussion of the “tipping point” in the shift from Sumerian to Akkadian as the dominant language and used to support an interpretation both of long-term bilingualism between the two and of a late Early Old Babylonian date for the death of Sumerian.<sup>89</sup> The landscape itself is of secondary interest: the Euphrates and Tigris are marked, as well as individual urban centers, but little else. Each center is marked as a point where larger collections of artefacts rather than single inscriptions are attested. Data are included for Sumerian, Akkadian, and “other”, focused on the evidence provided by the linguistic affiliation of personal names. Streck’s maps of Amorite and Akkadian

personal names had already introduced the use of statistical weight in defining areas. Sallaberger again connects each point with quantitative information. The proportional weight of personal names at each point is represented in the form of a bar graph next to individual cities.<sup>90</sup>

A growing number of maps addresses the evidence at the smallest scale by mapping individual artefacts.<sup>91</sup> Garr’s *Dialect Geography* often derives point data from individual texts. The features from Tall Faḥīrīja, for example, are largely taken from a single bilingual statue. At the smallest scale of inquiry, maps record the presence of an artefact connected with a specific site, either an inscription, a tablet, a monument, or a rock relief. Ariel Bagg’s recent monograph on the geography of the Levant in the early 1st millennium BC includes a map of stelae and rock reliefs.<sup>92</sup> Claudia Glatz and Aimée M. Plourde, arguing for the use of stone monuments to mediate territorial claims, map the distribution of monuments across the landscape of Late Bronze Age Anatolia.<sup>93</sup> A few of these maps further correlate artefacts with language. Mario Liverani and Lucio Milano’s *Atlante storico*, Tav. XV maps the distribution of inscriptions throughout the Near East in the Late Bronze Age.<sup>94</sup> As explained in the legend, different icons explicitly connect these with linguistic information: hollow circles mark a “pre-Akkadian Semitic inscription” (“iscrizione semitica pre-accadica”), filled circles mark an “Akkadian inscription” (“iscrizione accadica”), filled stars mark the site of a Sumerian text (“iscrizione sumerica”), and hollow triangles mark the site of a Hurrian text

for example, described at Garšana at the end of the 3rd millennium in Sallaberger 2011.

84 Cooper 1999, 69; Sommerfeld 2012, 200; Beaulieu 2013, 359. The distinction also underlies the map of “Standard Babylonian” in Buccellati 1997, 8 Map 1.

85 At the other end of the spectrum is at least temporarily stable bi- or multilingualism, in which both languages share the same space over a prolonged period, argued separately from different perspectives for Sumerian in Woods 2007 and Sallaberger 2004. Cf. the summary of the issues involved in Black and Zólyómi 2007, 10. Kouwenberg 2010, 9, also assumes a “prolonged period of bilingualism” for Akkadian and Aramaic.

86 Hilgert 2003.

87 Garr 1985, 12.

88 See, for example, Sallaberger 2004, 116.

89 The notion of the ‘tipping point’ of Sumerian, in which an historical event serves as the catalyst for change in an otherwise stable linguistic equilibrium, is discussed in Michalowski 2007, 178–179.

90 Note a similar mapping of weighted artefact presence in Steele 2013, 20 Map 1, “Distribution of Cypro-Minoan on Cyprus”, in which numerals index the number of inscriptions at a particular site.

91 Meillet and M. Cohen 1924, 299 also includes a map on the “diffusion approximative des noms asianiques” which marks the location of individual monuments. Artefact mapping is discussed in Orton and Hughes 2013, 238, in terms of “a hierarchy of increasing information content” in point-pattern analysis. Cf. the basic distinction of “display maps” and “interpretive maps” drawn in Chambers and Trudgill 1998, 25.

92 Bagg 2011, Karte 3.7: Stelen und Felsreliefs.

93 Glatz and Plourde 2011, 34. See the similar maps of landscape monuments in Glatz 2009, 137, and Harmanşah 2013, 51. The recent volume on *History and Philology*, published as part of the project on *Associated Regional Chronologies of the Ancient Near East*, includes numerous maps marking the distribution of texts. The separate notation of tablets written in the official ductus (“palaeography”), as in “Map 8: Early Sargonic empire: Sargon, Manishtushu, Rimush I” (Sallaberger and Schrakamp 2015, 106), is embedded in the discussion on chronology and makes no explicit reference to language, but moves the discussion closer to the distinction of official registers of language use argued in Sommerfeld 2012.

94 Liverani and Milano 1992, Tav. XV (“Bronzo antico: Testimonianze epigrafiche e altri reperti”).

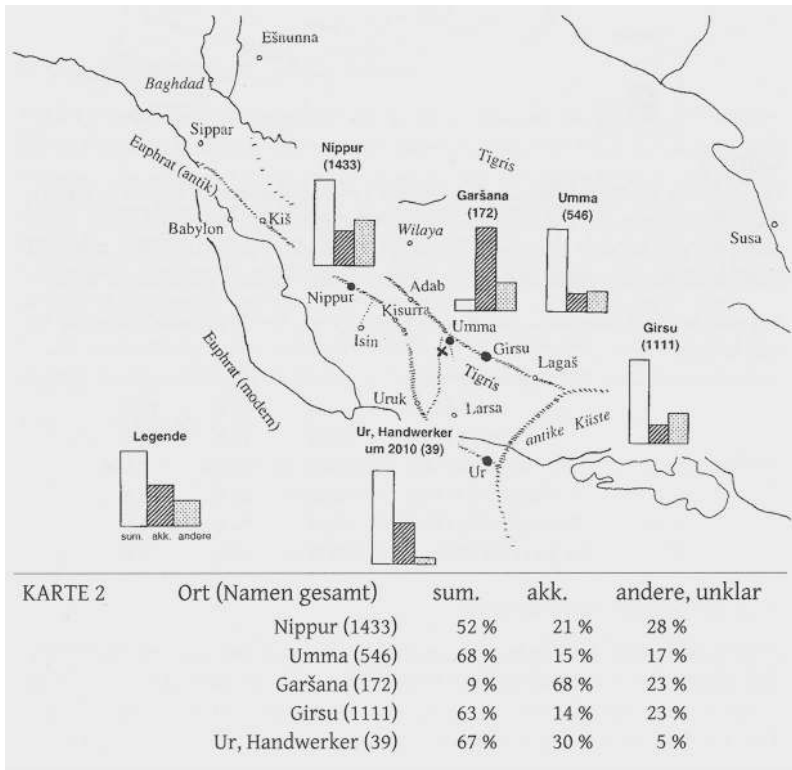


Fig. 4 Relative distribution of Sumerian, Akkadian, and ‘other’ personal names from the Ur III period.

(“iscrizione hurrita”). Further markers differentiate material forms of the inscriptions, including tablets, seals, statues, bricks, and pottery.<sup>95</sup>

The regression from interpretive to small-scale display maps can be seen as a focused response to a landscape of variation.<sup>96</sup> Garr focuses on individual points to establish a clearer sense of boundaries and dialect areas. Sallaberger maps language relations at individual points to clarify the diachronic and areal nature of a language shift.<sup>97</sup> As soon as static assumptions of primary, areal dialect are no longer self-evident, the discussion moves towards the marking of material and immaterial objects as constitutive elements of the linguistic landscape. Instead of markers of ethnicity or primary language, artefacts and personal names become public expressions of language and linguistic identity.<sup>98</sup> The basic problem

of extrapolating linguistic areas persists. However, all of these maps bring the basic, underlying evidence into sharper focus.

## 6 Conclusions

The history of mapping has often been described as a progressive move towards greater accuracy and precision.<sup>99</sup> For the 19th century, this precision was expressed by a growing reliance on cartographers such as Kiepert. For most recent studies, this precision is reflected in the tendency towards precisely marked point data. The maps reviewed above suggest that while the drive towards precision is essential, the underlying questions and models of linguistic geography are equally important.

95 Other examples include Oettinger 2002, 55 in an exhibition catalogue on the empire of the Hittites, who anticipates the maps in Glatz 2009 by mapping the point distribution of Hittite cuneiform tablets and Luwian rock inscriptions. Colored shading and outlines denote political boundaries within the same area. Stephen Durnford applies different icons to distinguish monuments inscribed with Lydian, Lycian, Carian, and Pamphylian (Durnford 2013, 56).

96 The problem of variation also motivated Bergsträßer’s *Sprachatlas von Syrien und Palaestina* (Bergsträßer 1915). As noted in Lameli 2010, 577, and Kehrein 2014, 480, Georg Wenker’s groundbreaking German

*Sprachatlas* of 1878 was similarly devoted to an area known for a great degree of dialect variation.

97 See Sallaberger 2004, 112–113, and Sallaberger 2011, 336, on the advantages and disadvantages of using personal names instead of texts as evidence for language change in aggregate. Cf. Woods 2007, 97–100, and Fales 2013, 50–53, on the limits and possibilities of personal names as data for Sumerian and for Neo-Assyrian, respectively, as well as the skeptical remarks in Michalowski 2007, 179.

98 Hélot, Janssens, and Barni 2012; Ben-Rafael, Shohamy, and Barni 2010.

99 Crone 1953, xi. Cf. the same essential argument in Eckert 1921–1925.

Abandoning the static linguistic views criticized by Adams naturally raises the question of which models should replace them. The continuing lack of models in Ancient Near Eastern Studies to describe historical processes of transfer, adaptation, and diffusion certainly applies to language as well.<sup>100</sup> Though the preceding remarks have only touched on demographic, cultural, and economic factors, any fuller description of the relationship also has far-reaching implications for broader questions of language contact and change.<sup>101</sup> As has long been recognized, “political, economic, cultural-religious, and military factors” can all affect the way language spreads.<sup>102</sup> William Labov, for example, observes that communal dialects also imply a set of “well-defined limits, a common structural base and a unified set of sociolinguistic norms.”<sup>103</sup> Similarly, Labov highlights the long-term modes of transmission (“native-language acquisition by children”) and diffusion (adult language contact) as a model for overcoming the wave models. In discussing the distinction of “localist” and “distributed” language strategies, David W. Anthony notes the correlation with the “underlying ecology of social relationships,” including the relative weakness or strength of economic and social ties.<sup>104</sup> All of these issues affect the way Ancient Near Eastern languages are related to linguistic space and offer new perspectives on the way linguistic mapping is conceived.<sup>105</sup>

While both the work of Hommel and that of Meillet and Cohen relied to some degree on the equation of presumed natural, geographic and linguistic boundaries, a closer examination of the geography of Syria and Iraq has heavily revised the view of both territories as a largely open and undifferentiated space.<sup>106</sup> Discus-

sions on other boundary types indicates that more finely grained depictions would contribute to solving some of the issues raised by Diakonov’s map.<sup>107</sup> Buccellati’s depiction of territorially bounded Akkadian and mobile Amorite suggested a more local interaction between urban and rural hinterlands.<sup>108</sup> Similarly, in defining 1st-millennium Babylonia as a single, integrated economic space, Michael Jursa highlights the presence of an “interregional system of communications,” in which each major city acted as “the focus of a local network governing the movement of people and the flow of goods.”<sup>109</sup> Each urban hub in turn controlled subsidiary, local networks of rural settlements, agricultural and pastoral land, including ‘tribal’ areas dominated by Chaldeans and Arameans. The network thus also generated a dynamic of localized center – periphery relations between the urban centers and rural hinterlands. Regional economic geographies can be distinguished through the ways in which individual agents exploited, invested in, or otherwise engaged with these economic resources. Parker’s distinction of geographic, political, demographic, cultural, and economic boundaries both draws attention to different types of interaction associated with each domain and renews the discussion of the possible relationships among them.<sup>110</sup> A cursory glance at the dialect geography of the modern Near and Middle East is instructive. The isolated city dialect of Dêr ez-Zôr in Syria, the communal dialect of the former Jewish community of Baghdad, and the distribution of the Bedouin and sedentary dialects of Arabic suggest various patterns of geography at different scales.<sup>111</sup> All suggest possible configurations for the languages of the Ancient Near East as well.

100 See the remarks in Cancik-Kirschbaum 2013, 103 n. 1.

101 See the observations in Huehnergard 1996, 267–271.

102 Garr 1985, 235.

103 Labov 2010, 309.

104 Anthony 2007, 115.

105 See Labov 2010, 307, on the distinction between transmission (“native-language acquisition by children”) and diffusion (adult language contact) as long-term modes of interaction; see also the discussions in Hall 1997, 162–170, and Versteegh 2013, 78, on the competition of family tree and wave models.

106 Eugen Wirth’s *Agrargeographie des Irak*, for example, distinguishes geographically among at least eighteen different geographic zones (“ländliche Kulturlandschaften”), based on a wide range of factors from elevation, types of cultivation, animal husbandry, precipitation and irrigation patterns to patterns of land tenure (Wirth 1962, 127–184). Based on similar criteria, he divides Syria into seven geographic zones, including the Mediterranean littoral, the agricultural plains of the Northeast,

and the desert steppes (Wirth 1971, 361–449).

107 Cf. the criticism of method applied to the mapping of Assyria as a territorial state in Brown 2014, 93.

108 Cf. the differentiation of linguistic landscapes in recent discussions on late 3rd millennium Garšana (Sallaberger 2011) and early 1st millennium Dūr-Katlimmu in Syria (Röllig 2014).

109 Jursa 2010, 754. The description recalls the political model of the close-meshed network proposed in Liverani 1988 to explain the development of the Neo-Assyrian empire.

110 The place of language, variously relegated to a subset of either demographic (Parker 2002, 391) or cultural boundaries (Parker 2006, 87), remains problematic.

111 See, e.g., the classic study of Blanc 1964 on Jewish Arabic in Baghdad; Jastrow 1978, 26 on Dêr ez-Zôr; or Owens 2006, 243, on Bedouin vs. sedentary dialects. As indicated in Palva 2009 or Versteegh 2010, these patterns are by no means uncontroversial.



As stated in the introduction, there has so far been no systematic attempt at mapping the languages of the Ancient Near East. All of the maps mentioned were drawn as supplementary illustrations, none is particularly visually complex, and none comes close to either the “computational handling of maps and atlases” seen as the “current focus of attention” in linguistic mapping or the sorts of dynamic, pluridimensional language atlases designed precisely to address the problem of multifaceted communicative practices in the creation of lin-

guistic space.<sup>112</sup> In applying a specific visual grammar to a depiction, each method also implies a particular narrative about the way in which forms of language are connected to space, ranging from patterns of bounded territoriality to marked points within a larger linguistic landscape. These patterns emerge differently at different scales. As noted by John Harley, cartography forms “but one small part of this general history of communication about space.”<sup>113</sup>

112 See Lameli 2010, 567, on computational atlases and Thun 2010 and Kehrein 2014, 485–486, on pluridimensional atlases.

113 Harley 1987, 1.

## Appendix

Map	Label	Languages	Description
Anthony 2007, 44	“The ancient languages of Anatolia at about 1500 BCE”	Hattic, Hittite, Hurrian, Luwian, Palaic, Semitic	Regional labels, separation of Indo-European and non-Indo-European
Bagg 2011, Karte 2.8	“Die Levante vor der assyrischen Eroberung (9. Jh.)”	Aramaic/Luwian, Luwian, West Semitic	Colored areal shading
Breyer 2014, 19–20	–	Sumerian, Akkadian (“Southeast Semitic” and “Northeast Semitic”)	Areal shading, arrow lines
Buccellati 1997, 8 Map 1 <sup>114</sup>	“Geo-Chronological Distribution of Akkadian Dialects and of Amorite”	Akkadian (dialects), Amorite	Regional shading, arrow lines indicate spread of Amorite and spread of individual dialects
Diakonoff 1965, map following p. 105	“Distribution of Semito-Hamitic Languages in the 3rd Millennium B.C.”	Akkadian, Amorite, Canaanite, Egyptian, Elamite, Hurrian, Libyan, Sumerian	Regional shading, arrow lines indicate spread of individual languages
Diakonov 1967, 25	“Семитские языки и народности III–I тыс до н.э.” (Fig. 2, above)	Akkadian, Amorite, Arabic, Aramaic, Canaanite, Chaldean, Hebrew	Linear boundaries, areal shading, weighted points to indicate chronological distribution
Durnford 2013, 56	“Localised Iron Age Text Groups Known or Suspected to be Luwic”	Lydian, Lycian, Carian, Pamphylian, Other	Sites of individual monuments
Garr 1985, 25 Map 2	“The correspondences of *dʿ”	Northwest Semitic, Akkadian	Feature distribution, points of individual sites
Hommel 1883, maps following p. 68	–	Babylonian-Assyrian, Aramaic, Hebrew, Phoenician, Arabic, Sabaic and Ethiopian	Areal coloring, divided by period
Jucquois 1966, following p. 241	“Carte VI: Le sort de -w- ancien intervocalique” (Fig. 3, above)	Akkadian	Feature distribution, areal shading of regional patterns
Liverani and Milano 1992, Tav. XV	“Bronzo Antico: Testimonianze epigrafiche e altri reperti”	Pre-Akkadian Semitic, Akkadian, Sumerian, Hurrian	Point distribution of sites and monuments

Tab. 1 List of language maps discussed.

Map	Label	Languages	Description
Meillet and M. Cohen 1924, 299	“Diffusion approximative des noms asiatiques”	“Hittite”	Areal hatching, points indicating the location of (inscribed) monuments and sites
Meillet and M. Cohen 1924, pl. 2A <sup>115</sup>	“Essai de carte du chamito-sémitique au 5e siècle avant J.C.” (Fig. 1, above)	Akkadian, Arabic, Aramaic, Cushitic, Egyptian, Hebrew, Libyco-Berber, Phoenician, South Arabian Languages	Colored areal shading, arrows indicating movement
Oettinger 2002, 52	“Die anatolischen Sprachen um 1600 v. Chr.”	Hittite, Luwian, Lydian, Palaic	Regional labels for languages
Oettinger 2002, 55	“Fundorte hethitischer Keilschrifttexte (16.–13. Jh. v. Chr.) und hieroglyphen-luwischer Inschriften (14.–13. Jh. v. Chr.)”	Hittite, Luwian	Point distribution of sites and monuments
Ostler 2006, 42	“Principal West Asian Languages 1000–1 BC”	Akkadian, Aramaic, Armenian, Elamite, Hebrew, Iranian, Median, Persian, Phoenician, Phrygian, Urartian	Regional labels for languages, arrows indicating movement
Sallaberger 2004, 116 <sup>116</sup>	– (Fig. 4, above)	Sumerian, Akkadian, Other/Undefined	Statistical distribution of personal names in individual cities
Steele 2013, 20 Map 1	“Distribution of Cypro-Minoan on Cyprus”	Cypro-Minoan	Point distribution of sites with numerical weight
Streck 2004, 336.	“Amurritische Namen in Mesopotamien ca. 1820–1650 v.Chr.”	Amorite	Areal shading according to statistical percentages of Amorite personal names by region
Woodard 2004, Map 2	“The Ancient Languages of Anatolia and Surrounding Regions”	Akkadian, Aramaic, Armenian, Carian, Cypro-Minoan, Eblaite, Georgian, Greek, Hittite, Hurrian, Luwian, Lycian, Lydian, Palaic, Phoenician, Phrygian, Thracian, Ugaritic, Urartian,	Regional labels for languages

Tab. 2 List of language maps discussed (cont.).

# Bibliography

## Adams 1981

Robert McC. Adams. *Heartland of Cities: Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates*. Chicago: University of Chicago Press, 1981.

## Adelung 1806

Johann Christoph Adelung. *Mithridates oder allgemeine Sprachkunde mit dem Vater Unser als Sprachprobe in bey nahe fünfhundert Sprachen und Mundarten, erster Teil*. Berlin: Vossische Buchhandlung, 1806.

## Aikhenvald and Dixon 2001

Alexandra Y. Aikhenvald and Robert M. W. Dixon. "Introduction". In *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics*. Ed. by A. Y. Aikhenvald and R. M. W. Dixon. Oxford: Oxford University Press, 2001, 1–29.

## Albright and Lambdin 1970

William F. Albright and Thomas O. Lambdin. "The Evidence of Language". In *The Cambridge Ancient History, 3rd Edition, Vol. I, Pt. 1: Prolegomena and Prehistory*. Ed. by I. E. S. Edwards, C. J. Gadd, and N. G. L. Hammond. Cambridge: Cambridge University Press, 1970, 122–155. DOI: 10.1017/CHOL9780521070515.005.

## Anthony 2007

David W. Anthony. *The Horse, the Wheel, and Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*. Princeton: Princeton University Press, 2007.

## Baasten 2003

Martin F. J. Baasten. "A Note on the History of 'Semitic'". In *Hamlet on a Hill: Semitic and Greek Studies Presented to Professor T. Muraoka on the Occasion of His Sixty-Fifth Birthday*. Ed. by M. F. J. Baasten and Wido Th. van Peursen. *Orientalia Lovaniensia Analecta* 118. Leuven: Peeters, 2003, 57–72.

## Bagg 2011

Ariel M. Bagg. *Die Assyrer und das Westland: Studien zur historischen Geographie und Herrschaftspraxis in der Levante im 1. Jt. v. u. Z.* *Orientalia Lovaniensia Analecta* 216. Leuven: Peeters, 2011.

## Bagnall 1993

Roger S. Bagnall. *Egypt in Late Antiquity*. Princeton: Princeton University Press, 1993.

## Bahrani 2006

Zainab Bahrani. "Race and Ethnicity in Mesopotamian Antiquity". *World Archaeology* 38.1 (2006), 48–59.

## Beaulieu 2013

Paul-Alain Beaulieu. "Aspects of Aramaic and Babylonian Linguistic Interference in First Millennium BC Iraq". *Journal of Language Contact* 6 (2013), 358–378.

## Behnstedt and Woidich 2005

Peter Behnstedt and Manfred Woidich. *Arabische Dialektgeographie: Eine Einführung*. *Handbuch der Orientalistik* 78. Leiden and Boston: Brill, 2005.

## Behnstedt and Woidich 2013

Peter Behnstedt and Manfred Woidich. "Dialectology". In *The Oxford Handbook of Arabic Linguistics*. Ed. by J. Owens. Oxford: Oxford University Press, 2013, 300–325.

## Ben-Rafael, Shohamy, and Barni 2010

Eliezer Ben-Rafael, Elana Shohamy, and Monica Barni. "Introduction: An Approach to an 'Ordered Disorder'". In *Linguistic Landscape in the City*. Ed. by E. Ben-Rafael, E. Shohamy, and M. Barni. Bristol: Multilingual Matters, 2010, xi–xxviii.

## Bergsträßer 1915

Gotthelf Bergsträßer. "Sprachatlas von Syrien und Palaestina". *Zeitschrift des Deutschen Palaestina-Vereins* 38 (1915), 169–222.

## Bergsträßer 1922

Gotthelf Bergsträßer. "In Sachen meines 'Sprachatlas'". *Zeitschrift für Semitistik* 1 (1922), 218–226.

## Bickel and Nichols 2008

Balthasar Bickel and Johanna Nichols. "The Geography of Case". In *The Oxford Handbook of Case*. Ed. by A. Malcucho and A. Spencer. Oxford: Oxford University Press, 2008, 479–493.

## Bisang 2010

Walter Bisang. "Areal Language Typology". In *Language and Space. An International Handbook of Linguistic Variation, Vol. 1: Theories and Methods*. Ed. by P. Auer and J. E. Schmidt. *Handbücher für Sprache und Kommunikation* 30.1. Berlin: De Gruyter, 2010, 419–440.

## Black and Zólyómi 2007

Jeremy Black and Gábor Zólyómi. "Introduction to the Study of Sumerian". In *Analyzing Literary Sumerian: Corpus-Based Approaches*. Ed. by J. Ebeling and G. Cunningham. London: Equinox, 2007, 1–32.

## Blanc 1964

Haim Blanc. *Communal Dialects in Baghdad*. Harvard Middle Eastern Monographs 10. Cambridge, MA: Harvard University Press, 1964.

## Bobzin 2010

Hartmut Bobzin. "Was ist semitisch? Anmerkungen zu Ernest Renan und seiner Sicht der Semitistik?". In *Kritische Religions-Philosophie: Eine Gedenkschrift für Friedrich Niewöhner*. Berlin: De Gruyter, 2010, 357–375.

## Breyer 2014

Francis Breyer. *Altakkadisches Elementarbuch*. *Subsidia et Instrumenta Linguarum Orientis* 3. Wiesbaden: Harrassowitz, 2014.

- Brockelmann 1908**  
Carl Brockelmann. *Grundriss der vergleichenden Grammatik der semitischen Sprachen, I. Band: Laut- und Formenlehre*. Berlin, 1908.
- Brown 2013**  
Brian Brown. "The Structure and Decline of the Middle Assyrian State: The Role of Autonomous and Nonstate Actors". *Journal of Cuneiform Studies* 65 (2013), 97–126. DOI: 10.5615/jcunestud.65.2013.0097.
- Brown 2014**  
Brian Brown. "Settlement Patterns of the Middle Assyrian State: Notes toward an Investigation of State Apparatuses". In *The Archaeology of Political Spaces: The Upper Mesopotamian Piedmont in the Second Millennium BC*. Ed. by D. Bonatz. Berlin: De Gruyter, 2014, 85–105.
- Buccellati 1990**  
Giorgio Buccellati. "River Bank, 'High Country', and 'Pasture Land': The Growth of Nomadism on the Middle Euphrates and the Khabor". In *Tall al-Hamidiya 2: Symposion on Recent Excavations in the Upper Region, Berne, December 9–11, 1986*. Ed. by S. Eichler, M. Wäfler, and D. Warburton. Orbis Biblicus et Orientalis, Series Archaeologica 6. Freiburg: Universitätsverlag Freiburg, 1990, 87–117.
- Buccellati 1996**  
Giorgio Buccellati. *A Structural Grammar of Babylonian*. Wiesbaden: Harrassowitz, 1996.
- Buccellati 1997**  
Giorgio Buccellati. "Akkadian and Amorite Phonology". In *Phonologies of Asia and Africa, Vol. 1*. Ed. by A. S. Kaye. Winona Lake: Eisenbrauns, 1997, 3–38.
- Campbell 2004**  
Lyle Campbell. "Historical Linguistics: The State of the Art". In *Linguistics Today – Facing a Greater Challenge*. Ed. by P. van Sterkenburg. Amsterdam: John Benjamins, 2004, 109–140.
- Cancik-Kirschbaum 2013**  
Eva Cancik-Kirschbaum. "Überlegungen zu Schrift, Schriftlichkeit und der ‚Mobilität von Wissen‘ im Alten Orient". In *Mobilität und Wissenstransfer in diachroner und interdisziplinärer Perspektive*. Ed. by E. Kaiser and W. Schier. Topoi: Berlin Studies of the Ancient World 9. Berlin and Boston: De Gruyter, 2013, 103–114. DOI: 10.1515/9783110258912.103.
- Cazzella, Pace, and Recchia 2011**  
Alberto Cazzella, Anthony Pace, and Giulia Recchia. "The Late Second Millennium BC. Agate Artefact with Cuneiform Inscription from the Tas-Silg Sanctuary in Malta: An Archaeological Framework". *Scienze dell'Antichità* 17 (2011), 599–609.
- Chambers and Trudgill 1998**  
Jack K. Chambers and Peter Trudgill. *Dialectology*. 2nd ed. Cambridge and New York: Cambridge University Press, 1998.
- D. Cohen and Perrot 1988**  
David Cohen and Jean Perrot, eds. *Les langues dans le monde ancien et moderne, troisième partie: Les langues chamito-sémitiques*. Paris: Éditions du Centre National de la Recherche Scientifique, 1988.
- Cooper 1973**  
Jerrold S. Cooper. "Sumerian and Akkadian in Sumer and Akkad". *Orientalia*. New Series 42 (1973), 239–246.
- Cooper 1999**  
Jerrold S. Cooper. "Sumerian and Semitic Writing in Most Ancient Syro-Mesopotamia". In *Languages and Cultures in Contact: At the Crossroads of Civilizations in the Syro-Mesopotamian Realm*. Ed. by K. van Lerberghe and G. Voet. *Orientalia Lovaniensia Analecta* 96. Leuven: Peeters, 1999, 61–78.
- Coupland 2007**  
Nikolas Coupland. *Style: Language Variation and Identity*. Cambridge: Cambridge University Press, 2007.
- Crone 1953**  
Gerald R. Crone. *Maps and Their Makers: An Introduction to the History of Cartography*. 1st ed. London: Hutchinson University Library, 1953.
- Dalley 1998**  
Stephanie Dalley. "Introduction". In *The Legacy of Mesopotamia*. Oxford: Oxford University Press, 1998, 1–8.
- von Dassow 2010**  
Eva von Dassow. "Peripheral Akkadian Dialects, or Akkadography of Local Languages". In *Language in the Ancient Near East: Proceedings of the 53rd Rencontre Assyriologique Internationale, Vol. 2*. Ed. by L. Kogan, N. Koslova, S. Loesov, and T. Tishchesko. Winona Lake: Eisenbrauns, 2010, 895–924.
- Delitzsch 1881**  
Friedrich Delitzsch. *Wo lag das Paradies? Eine biblisch-assyriologische Studie*. Leipzig: Hinrichs, 1881.
- Delitzsch 1884**  
Friedrich Delitzsch. *Die Sprache der Kossäer: Linguistisch-historische Funde und Fragen*. Leipzig: Hinrichs, 1884.
- Dessaint 1988**  
Michel Dessaint. "Antoine Meillet et Les langues du Monde (1924)". *Histoire Épistémologie Langage* 10.2 (1988), 187–194.
- Diakonoff 1965**  
Igor M. Diakonoff. *Semito-Hamitic Languages: An Essay in Classification*. Moscow: Nauka, 1965.
- Diakonov 1967**  
Igor M. Diakonov. *Yazyki Drevney Peredney Azii*. Moscow: Nauka, 1967.
- Dinkin 2013**  
Aaron J. Dinkin. "Settlement Patterns and the Eastern Boundary of the Northern Cities Shift". *Journal of Linguistic Geography* 1 (2013), 4–30. DOI: 10.1017/jlg.2013.2.
- Dörflinger 1999**  
Johannes Dörflinger. "Zu den Sprachen- und Völkerkarten von Heinrich Kiepert". In *Antike Welten – Neue Regionen: Heinrich Kiepert 1818–1899*. Ed. by L. Zögner. Berlin: Kiepert KG, 1999, 31–43.
- Downes 1998**  
William Downes. *Language and Society*. 2nd ed. Cambridge: Cambridge University Press, 1998.

- van Driel 2005  
Gert van Driel. "Ethnicity, How to Cope with the Subject". In *Ethnicity in Ancient Mesopotamia: Papers Read at the 48th Rencontre Assyriologique Internationale, Leiden, 1–4 July 2002*. Ed. by W. H. van Soldt. Publications de l'Institut historique-archéologique néerlandais de Stamboul 102. Leiden: Nederlands Instituut voor het Nabije Oosten, 2005, 1–10.
- Durnford 2013  
Stephen Durnford. "People and Maps – Nomenclature and Definitions". In *Luwian Identities: Culture, Language, and Religion between Anatolia and the Aegean*. Ed. by A. Mouton, I. Rutherford, and I. Yakubovich. Culture and History of the Ancient Near East 64. Leiden: Brill, 2013, 41–69.
- Eckert 1921–1925  
Max Eckert. *Die Kartenwissenschaft: Forschungen und Grundlagen zu einer Kartographie als Wissenschaft*. 2nd ed. 2 vols. Berlin: De Gruyter, 1921–1925.
- Edzard 1967  
Dietz Otto Edzard. "Die semitohamitischen Sprachen in neuer Sicht". *Revue d'Assyriologie et d'archéologie orientale* 61.2 (1967), 137–149.
- Edzard 1994  
Dietz Otto Edzard. "Namir ‚Er ist glänzend‘". *Acta Sumerologica Journal* 16 (1994), 1–14.
- Fagan 2007  
Brian M. Fagan. *Return to Babylon: Travelers, Archaeologists, and Monuments in Mesopotamia*. Revised Edition. Boulder: University Press of Colorado, 2007.
- Faist 2003  
Betina Faist. "Sprachen und Schriften in Assur". In *Wiedererstehendes Assur: 100 Jahre deutsche Ausgrabungen in Assyrien*. Ed. by B. Salje and J. Marzahn. Mainz: Philipp von Zabern, 2003, 149–156.
- Fales 1986  
Frederick Mario Fales. *Aramaic Epigraphs on Clay Tablets of the Neo-Assyrian Period*. Roma: Università degli Studi 'La Sapienza', 1986.
- Fales 2007  
Frederick Mario Fales. "Multilingualism on Multiple Media in the Neo-Assyrian Period: A Review of the Evidence". *State Archives of Assyria Bulletin* 16 (2007), 95–122.
- Fales 2013  
Frederick Mario Fales. "Ethnicity in the Assyrian Empire: A View from the Nisbe 1. Foreigners and 'Special' Inner Communities". In *Literature as Politics, Politics as Literature: Essays on the Ancient Near East in Honor of Peter Machinist*. Ed. by D. S. Vanderhooft and A. Winitzer. Winona Lake: Eisenbrauns, 2013, 47–73.
- Garr 1985  
W. Randall Garr. *Dialect Geography of Syria-Palestine, 1000–586 BC*. Philadelphia: University of Pennsylvania Press, 1985.
- Gerland 1892  
Georg Gerland. *Berghaus' Physikalischer Atlas, Abteilung VII: Atlas der Völkerkunde*. Gotha: Justus Perthes, 1892.
- Glatz 2009  
Claudia Glatz. "Empire as Network: Spheres of Material Interaction in Late Bronze Age Anatolia". *Journal of Anthropological Archaeology* 28.2 (2009), 127–141. DOI: 10.1016/j.jaa.2008.10.003.
- Glatz and Plourde 2011  
Claudia Glatz and Aimée M. Plourde. "Landscape Monuments and Political Competition in Late Bronze Age Anatolia: An Investigation of Costly Signaling Theory". *Bulletin of the American Schools of Oriental Research* 361 (2011), 33–66.
- Goedegebuure 2008  
Petra Goedegebuure. "Central Anatolian Languages and Language Communities in the Colony Period: A Luwian-Hittian Symbiosis and the Independent Hittites". In *Anatolia and the Jazira during the Old Assyrian Period*. Ed. by J. G. Dercksen. Publications de l'Institut historique-archéologique néerlandais de Stamboul 111. Leiden: Nederlands Instituut voor het Nabije Oosten, 2008, 137–180.
- Gzella 2009  
Holger Gzella, ed. *Sprachen aus der Umwelt des Alten Testaments*. Darmstadt: Wissenschaftliche Buchgesellschaft, 2009.
- Gzella 2013  
Holger Gzella. "Expansion of the Linguistic Context of the Hebrew Bible/Old Testament: Hebrew Among the Languages of the Ancient Near East". In *Hebrew Bible/Old Testament. The History of Its Interpretation, Volume III: From Modernism to Post-Modernism (The Nineteenth and Twentieth Centuries). Part I: The Nineteenth Century – A Century of Modernism and Historicism*. Ed. by M. Sæbø. Göttingen: Vandenhoeck & Ruprecht, 2013, 134–167.
- Gzella 2015  
Holger Gzella. *A Cultural History of Aramaic*. Handbuch der Orientalistik 111. Leiden and Boston: Brill, 2015.
- Hall 1997  
Jonathan M. Hall. *Ethnic Identity in Greek Antiquity*. Cambridge: Cambridge University Press, 1997.
- Hallo 2006  
William W. Hallo. "A Sumerian Apocryphon? The Royal Correspondence of Ur Reconsidered". In *Approaches to Sumerian Literature: Studies in Honour of Stip (H. L. J. Vanstiphout)*. Ed. by P. Michalowski and N. Veldhuis. Cuneiform Monographs 35. Leiden and Boston: Brill, 2006, 85–104.
- Hansen 2015  
Jason D. Hansen. *Mapping the Germans: Statistical Science, Cartography, and the Visualisation of the German Nation, 1848–1914*. Oxford: Oxford University Press, 2015.
- Harley 1987  
John B. Harley. "The Map and the Development of the History of Cartography". In *The History of Cartography*. Vol. 1: *Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean*. Ed. by J. B. Harley and D. Woodward. Chicago: University of Chicago Press, 1987, 1–42. URL: [http://www.press.uchicago.edu/books/HOC/HOC\\_V1/Volume1.html](http://www.press.uchicago.edu/books/HOC/HOC_V1/Volume1.html) (visited on 10/31/2017).

- Harmanşah 2013**  
Ömür Harmanşah. *Cities and the Shaping of Memory in the Ancient Near East*. Cambridge: Cambridge University Press, 2013.
- Hasselbach 2005**  
Rebecca Hasselbach. *Sargonic Akkadian: A Historical and Comparative Study of the Syllabic Texts*. Wiesbaden: Harrassowitz, 2005.
- Heine and Kuteva 2005**  
Bernd Heine and Tania Kuteva. *Language Contact and Grammatical Change*. Cambridge: Cambridge University Press, 2005.
- Hélot, Janssens, and Barni 2012**  
Christine Hélot, Rudi Janssens, and Monica Barni. "Introduction". In *Linguistic Landscapes, Multilingualism and Social Change*. Ed. by C. Hélot, R. Janssens, and M. Barni. Sprache, Mehrsprachigkeit und sozialer Wandel 16. Frankfurt a. M.: Peter Lang, 2012, 17–26.
- Hilgert 2003**  
Markus Hilgert. "New Perspectives in the Study of Third Millennium Akkadian". *Cuneiform Digital Library Journal* 4 (2003), 1–14. URL: [http://cdli.ucla.edu/pubs/cdlj/2003/cdlj2003\\_004.html](http://cdli.ucla.edu/pubs/cdlj/2003/cdlj2003_004.html) (visited on 07/04/2017).
- Hilprecht 1903**  
Hermann V. Hilprecht, ed. *Explorations in Bible Lands during the 19th Century*. With Nearly Two Hundred Illustrations and Four Maps. Edinburgh and Philadelphia: Holman, 1903.
- Hommel 1883**  
Fritz Hommel. *Die semitischen Völker und Sprachen*. Leipzig: Otto Schulze, 1883.
- Hommel 1885**  
Fritz Hommel. *Geschichte Babyloniens und Assyriens*. Berlin: Grote, 1885.
- Hommel 1892**  
Fritz Hommel. *Aufsätze und Abhandlungen arabistisch-semitologischen Inhalts*. München: G. Franz'sche Hofbuchhandlung, 1892.
- Huehnergard 1996**  
John Huehnergard. "New Directions in the Study of Semitic Languages". In *The Study of the Ancient Near East in the Twenty-First Century: The William Foxwell Albright Centennial Conference*. Ed. by J. S. Cooper and G. M. Schwartz. Winona Lake: Eisenbrauns, 1996, 251–272.
- Huehnergard and Rubin 2011**  
John Huehnergard and Aaron Rubin. "Phyla and Waves: Models of Classification of the Semitic Languages". In *The Semitic Languages: An International Handbook*. Ed. by St. Weninger. Handbücher zur Sprach- und Kommunikationswissenschaft 36. Berlin: De Gruyter, 2011, 259–278.
- Izre'el 2012**  
Shlomo Izre'el. "Canaanite-Akkadian: Linguistics and Sociolinguistics". In *Language and Nature: Papers Presented to John Huehnergard on the Occasion of His 60th Birthday*. Ed. by R. Hasselbach and N. Pat-El. Studies in Ancient Oriental Civilization 67. Chicago: Oriental Institute of the University of Chicago, 2012, 171–218.
- Jastrow 1978**  
Otto Jastrow. *Die mesopotamisch-arabischen qeltu-Dialekte*. Vol. 1: *Phonologie und Morphologie*. Abhandlungen für die Kunde des Morgenlandes 43.4. Wiesbaden: Franz Steiner, 1978.
- Johnstone 2010**  
Barbara Johnstone. "Language and Geographical Space". In *Language and Space. An International Handbook of Linguistic Variation, Vol. 1: Theories and Methods*. Ed. by P. Auer and J. E. Schmidt. Handbücher für Sprache und Kommunikation 30.1. Berlin: De Gruyter, 2010, 1–17.
- F. Jones 1854**  
Felix Jones. "Topography of Nineveh, Illustrative of the Maps of the Chief Cities of Assyria; And the General Geography of the Country Intermediate Between the Tigris and the Upper Zab". *Journal of the Royal Asiatic Society of Great Britain and Ireland* 15 (1854), 297–397.
- Jucquois 1966**  
Guy Jucquois. *Phonétique comparée des dialectes Moyen-Babyloniens du Nord et de l'Ouest*. Bibliothèque du Muséon 53. Leuven: Institut Orientaliste, Publications Universitaires, 1966.
- Jursa 2010**  
Michael Jursa. *Aspects of the Economic History of Babylonia in the First Millennium BC: Economic Geography, Economic Mentalities, Agriculture, the Use of Money and the Problem of Economic Growth*. Alter Orient und Altes Testament 377. Münster: Ugarit, 2010.
- Kaizer 2009**  
Ted Kaizer. "Religion and Language at Dura-Europos". In *From Hellenism to Islam: Cultural and Linguistic Change in the Roman Near East*. Ed. by H. Cotton, R. G. Hoyland, J. J. Price, and D. J. Wasserstein. Cambridge and New York: Cambridge University Press, 2009, 235–253.
- Kaufman 1989**  
Stephen A. Kaufman. "Review of 'Assyro-Aramaica: Aramaic Epigraphs on Clay Tablets of the Neo-Assyrian Period' by Mario Fales". *Journal of the American Oriental Society* 109.1 (1989), 97–102. DOI: 10.2307/604340.
- Kehrein 2014**  
Roland Kehrein. "Linguistic Atlases: Empirical Evidence for Dialect Change in the History of Languages". In *The Handbook of Historical Sociolinguistics*. Ed. by J. M. Hernández-Campoy and J. C. Conde-Silvestre. Chichester: Blackwell-Wiley, 2014, 480–500.
- Kiepert 1848**  
Heinrich Kiepert. *Historisch-geographischer Atlas der Alten Welt, zum Schulgebrauch bearbeitet und mit erläuternden Bemerkungen begleitet*. Weimar: Druck und Verlag des Geographischen Instituts, 1848.

**Kiepert 1854**

Heinrich Kiepert. *Die Euphrat-Tigris-Länder oder Armenien, Kurdistan und Mesopotamien zu C. Ritter's Erdkunde, Buch III. West Asien, Theil X. und XI.* Berlin: Reimer, 1854.

**Kiepert 1855**

Heinrich Kiepert. *General-Karte des türkischen Reiches in Europa und Asien, nebst Ungarn, Südrussland, den kaukasischen Ländern und West-Persien.* Berlin: Reimer, 1855.

**Kiepert 1869**

Heinrich Kiepert. *Atlas Antiquus: Zwölf Karten zur Alten Geschichte.* 5th, revised ed. Berlin: Reimer, 1869.

**Kiepert 1883**

Heinrich Kiepert. "Zur Karte der Ruinenfelder von Babylon". *Zeitschrift der Gesellschaft für Erdkunde zu Berlin* 18 (1883), 1–26, with pl. I.

**Klaproth 1823**

Julius Klaproth. *Asia Polyglotta.* Paris: A. Schubart, 1823.

**Knudsen 1989–1990**

Ebbe Egede Knudsen. "Akkadian in Greek Orthography: Evidence of Sound Change in an Ancient Traditional Pronunciation". *Orientalia Suecana* 38–39 (1989–1990), 71–80.

**Kouwenberg 2010**

Norbertus J. C. Kouwenberg. *The Akkadian Verb and Its Semitic Background.* Languages of the Ancient Near East 4. Winona Lake: Eisenbrauns, 2010.

**Kraus 1970**

Fritz R. Kraus. *Sumerer und Akkader: Ein Problem der altesopotamischen Geschichte.* Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde, Nieuwe reeks 33.8. Amsterdam: North-Holland Publishing, 1970.

**Labov 2010**

William Labov. *Principles of Linguistic Change.* Vol. 3: *Cognitive and Cultural Factors.* Language in Society 39. Oxford: Blackwell-Wiley, 2010.

**Labov and Preston 2013**

William Labov and Dennis R. Preston. "Foreword". *Journal of Linguistic Geography* 1 (2013), 1–3. DOI: 10.1017/jlg.2013.6.

**Lameli 2010**

Alfred Lameli. "Linguistic Atlases – Traditional and Modern". In *Language and Space. An International Handbook of Linguistic Variation, Vol. 1: Theories and Methods.* Ed. by P. Auer and J. E. Schmidt. Handbücher für Sprache und Kommunikation 30.1. Berlin: De Gruyter, 2010, 567–592.

**Landsberger 1974**

Benno Landsberger. *Three Essays on the Sumerians.* Sources and Monographs on the Ancient Near East 1/2. Malibu: Undena Publications, 1974.

**Laroche 1980**

Emmanuel Laroche. *Glossaire de la langue hourrite.* Paris: Klincksieck, 1980.

**Lemaire 2008**

André Lemaire. "Remarks on the Aramaic of Upper Mesopotamia in the Seventh Century BC". In *Aramaic in its Historical and Linguistic Setting.* Ed. by H. Gzella and M. L. Folmer. Veröffentlichungen der Orientalischen Kommission 50. Wiesbaden: Harrassowitz, 2008, 77–92.

**Liverani 1988**

Mario Liverani. "The Growth of the Assyrian Empire in the Habur/Middle Euphrates Area: A New Paradigm". *State Archives of Assyria Bulletin* 2 (1988), 81–98.

**Liverani and Milano 1992**

Mario Liverani and Lucio Milano. *Atlante storico del Vicino Oriente Antico.* Vol. 3.1. Roma: Università degli Studi 'La Sapienza', 1992.

**Livingstone 1992**

David N. Livingstone. *The Geographical Tradition: Episodes in the History of a Contested Enterprise.* Oxford: Blackwell, 1992.

**Lloyd 2014**

Christopher D. Lloyd. *Exploring Spatial Scale in Geography.* Chichester: Blackwell-Wiley, 2014.

**Marston, J. P. Jones, and Woodward 2005**

Sallie A. Marston, John Paul Jones, and Keith Woodward. "Human Geography without Scale". *Transactions of the Institute of British Geographers, New Series* 30.4 (2005), 416–432. DOI: 10.1111/j.1475-5661.2005.00180.x.

**Meillet and M. Cohen 1924**

Antoine Meillet and Marcel Cohen. *Les Langues du Monde.* Paris: Librairie Ancienne Édouard Champion, 1924.

**Meillet and M. Cohen 1952**

Antoine Meillet and Marcel Cohen. *Les Langues du Monde.* Nouvelle édition. Paris: Centre National de la Recherche Scientifique, 1952.

**Meyer 1928**

Eduard Meyer. *Geschichte des Altertums II/2.* 2., völlig neubearb. Auflage. Stuttgart: Cotta, 1928.

**Michaelis 1786**

Johann David Michaelis. "Ueber das Vaterland der Chaldäer". *Neue orientalische und exegetische Bibliothek* 1 (1786), 84–89.

**Michalowski 2007**

Piotr Michalowski. "The Lives of the Sumerian Language". In *Margins of Writing, Origins of Cultures.* 2nd, revised printing. Ed. by S. Sanders. Oriental Institute Seminars 2. Chicago: Oriental Institute of the University of Chicago, 2007, 163–188.

**Moran 1992**

William L. Moran. *The Amarna Letters.* Baltimore, MD: Johns Hopkins University Press, 1992.

**Muenster 1544**

Sebastian Muenster. *Cosmographia: Beschreibung aller Lender.* Basel: Henrichum Petri, 1544.



- Müller 1877**  
Friedrich Müller. *Grundriss der Sprachwissenschaft, I. Band, II. Abtheilung: Die Sprachen der Wollhaarigen Rassen*. Wien: Alfred Hölder, 1877.
- Murre-van den Berg 2009**  
Heleen Murre-van den Berg. "Chaldaeans and Assyrians: The Church of the East in the Ottoman Period." In *The Christian Heritage of Iraq: Collected Papers from the Christianity of Iraq I–V Seminar Days*. Ed. by E. Hunter. Piscataway, NJ, 2009, 146–164.
- Musil 1918**  
Alois Musil. *Zur Zeitgeschichte von Arabien*. Leipzig: Hirzel, 1918.
- Mynářova 2007**  
Jana Mynářova. *Language of Amarna – Language of Diplomacy: Perspectives on the Amarna Letters*. Praha: Czech Institute of Egyptology, 2007.
- Nichols 1992**  
Johanna Nichols. *Linguistic Diversity in Space and Time*. Chicago: University of Chicago Press, 1992.
- Nichols 1997**  
Johanna Nichols. "Modeling Ancient Population Structures and Movement in Linguistics." *Annual Review of Anthropology* 26 (1997), 359–384.
- Oettinger 2002**  
Norbert Oettinger. "Indogermanische Sprachträger lebten schon im 3. Jahrtausend v. Chr. in Kleinasien: Die Ausbildung der anatolischen Sprachen." In *Die Hethiter und ihr Reich: Das Volk der 1000 Götter*. Ed. by H. Willinghöfer and T. Özgüç. Stuttgart: Theiss, 2002, 49–55.
- Orton and Hughes 2013**  
Clive Orton and Michael Hughes. *Pottery in Archaeology*. 2nd ed. Cambridge: Cambridge University Press, 2013.
- Ostler 2006**  
Nicholas J. Ostler. *Empires of the Word: A Language History of the World*. New York: Harper Perennial, 2006.
- Owens 2006**  
Jonathan Owens. *A Linguistic History of Arabic*. Oxford: Oxford University Press, 2006.
- Palva 2009**  
Heikki Palva. "From qeltu to gelet: Diachronic Notes on Linguistic Adaptation in Muslim Baghdad Arabic." In *Arabic Dialectology: In Honour of Clive Holes on the Occasion of his Sixtieth Birthday*. Ed. by E. al-Wer and R. de Jong. Studies in Semitic Languages and Linguistics 53. Leiden and Boston: Brill, 2009, 17–40. DOI: 10.1163/ej.9789004172128.i-298.12.
- Parker 2002**  
Bradley J. Parker. "At the Edge of Empire: Conceptualizing Assyria's Anatolian Frontier ca. 700 BC." *Journal of Anthropological Archaeology* 21.3 (2002), 371–395. DOI: 10.1016/S0278-4165(02)00005-3.
- Parker 2006**  
Bradley J. Parker. "Toward an Understanding of Borderland Processes." *American Antiquity* 71.1 (2006), 77–100. DOI: 10.2307/40035322.
- Päßler 2010**  
Ulrich Päßler. *Alexander von Humboldt – Carl Ritter, Briefwechsel*. Berlin, 2010.
- Pedersén 1989**  
Olof Pedersén. "Some Morphological Aspects of Sumerian and Akkadian Linguistic Areas." In *DUMU-E2-DUB-BA-A: Studies in Honor of Åke W. Sjöberg*. Ed. by H. Behrens, D. T. Loding, and M. T. Roth. Occasional Publications of the Samuel Noah Kramer Fund 11. Philadelphia: University Museum, 1989, 429–438.
- Petermann 1862**  
August Heinrich Petermann. "Bemerkungen zu Oberst-Lieut. Julius' Karte von einem Theil des Euphrat-Thales." *Petermanns Geographische Mitteilungen* 8 (1862), 428–432.
- Pickles 2004**  
John Pickles. *A History of Spaces: Cartographic Reason, Mapping, and the Geo-Coded World*. London: Routledge, 2004.
- Pollock 1999**  
Susan Pollock. *Ancient Mesopotamia: The Eden That Never Was*. Cambridge: Cambridge University Press, 1999.
- Postgate 2007**  
John N. Postgate, ed. *Languages of Iraq, Ancient and Modern*. London: British School of Archaeology in Iraq, 2007.
- Priest 2015**  
Robert D. Priest. "Ernest Renan's Race Problem?" *The Historical Journal* 58.1 (2015), 309–330.
- Rainey 1996**  
Anson F. Rainey. *Canaanite in the Amarna Tablets: A Linguistic Analysis of the Mixed Dialect Used by the Scribes from Canaan*. Vol. II: *Morphosyntactic Analysis of the Verbal System*. Handbuch der Orientalistik 25.2. Leiden and New York: Brill, 1996.
- Renan 1855**  
Ernest Renan. *Histoire générale et système comparé des langues sémitiques*. Paris: L'Imprimerie Impériale, 1855.
- Röllig 1991**  
Wolfgang Röllig. "Ziele – Methoden – Ergebnisse der Arbeit am Tübinger Atlas des Vorderen Orients." In *Von der Quelle zur Karte*. Ed. by W. Röllig. Weinheim: VCH Verlagsgesellschaft, 1991, 1–17.
- Röllig 2014**  
Wolfgang Röllig. *Die aramäischen Texte aus Tall Šēḥ Ḥamad/Dür-Katlimmu/Magdalū*. Berichte der Ausgrabungen in Tall Šēḥ Ḥamad/Dür-Katlimmu 17. Wiesbaden: Harrassowitz, 2014.
- Rowton 1974**  
M. Rowton. "Enclosed Nomadism." *Journal of the Economic and Social History of the Orient* 17 (1974), 1–30.

- Rubio 1999**  
Gonzalo D. Rubio. "On the Alleged 'Pre-Sumerian Substratum'". *Journal of Cuneiform Studies* 51 (1999), 1–16.
- Rubio 2006**  
Gonzalo D. Rubio. "Eblaite, Akkadian, and East Semitic". In *The Akkadian Language in Its Semitic Context: Studies in the Akkadian of the Third and Second Millennium BC*. Ed. by G. Deutscher and N.J.C. Kouwenberg. Publications de l'Institut historique-archéologique néerlandais de Stamboul 106. Leiden: Nederlands Instituut voor het Nabije Oosten, 2006, 110–139.
- Rubio 2007**  
Gonzalo D. Rubio. "Writing in Another Tongue: Alloglottography in the Ancient Near East". In *Margins of Writing, Origins of Cultures*. Ed. by S. Sanders. 2nd, revised printing. Chicago: Oriental Institute of the University of Chicago, 2007, 33–70.
- Sallaberger and Schrakamp 2015**  
W. Sallaberger and I. Schrakamp, eds. *Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean*. Vol. III: *History & Philology*. ARCANÉ 3. Turnhout: Brepols, 2015.
- Sallaberger 2004**  
Walther Sallaberger. "Das Ende des Sumerischen: Tod und Nachleben einer altmesopotamischen Sprache". In *Sprachtod und Sprachgeburt*. Ed. by P. Schrijver and P.-A. Mumm. Bremen: Hempen-Verlag, 2004, 108–140.
- Sallaberger 2011**  
Walther Sallaberger. "Sumerian Language Use at Garšana: On Orthography, Grammar, and Akkado-Sumerian Bilingualism". In *Garšana Studies*. Ed. by D. I. Owen. Cornell University Studies in Assyriology and Sumerology 6. Bethesda: CDL Press, 2011, 335–372.
- Schlözer 1781**  
August Ludwig Schlözer. "Von den Chaldäern". *Repertorium für biblische und morgenländische Literatur* 8 (1781), 113–176.
- Schmitt 1983**  
Rüdiger Schmitt. "Die Sprachverhältnisse in den östlichen Provinzen des Römischen Reiches". In *Sprachen und Schriften (Fortsetzung)*. Ed. by W. Hase. Aufstieg und Niedergang der Römischen Welt II.29.2. Berlin: De Gruyter, 1983, 554–586.
- Schrader 1872**  
Eberhard Schrader. *Die assyrisch-babylonischen Keilinschriften: Kritische Untersuchung der Grundlagen ihrer Entzifferung*. Leipzig: F. A. Brockhaus, 1872.
- Sinopoli 1994**  
Carla M. Sinopoli. "The Archaeology of Empires". *Annual Review of Anthropology* 23 (1994), 159–180. DOI: 10.1146/annurev.an.23.100194.001111.
- van Soldt 1991**  
Wilfred Hugo van Soldt. *Studies in the Akkadian of Ugarit: Dating and Grammar*. Alter Orient und Altes Testament 40. Kevelaer: Butzon & Bercker, 1991.
- van Soldt 2013**  
Wilfred Hugo van Soldt. "The Extent of Literacy in Syria and Palestine during the Second Millennium BCE". In *Time and History in the Ancient Near East: Proceedings of the 56th Rencontre Assyriologique Internationale at Barcelona, 26–30 July 2010*. Ed. by L. Feliu et al. Winona Lake: Eisenbrauns, 2013, 19–31.
- Sommerfeld 2012**  
Walter Sommerfeld. "'Sargonic Akkadian. A Historical and Comparative Study of the Syllabic Texts'. Ein Rezensionartikel". *Wiener Zeitschrift für die Kunde des Morgenlandes* 102 (2012), 193–284.
- Steele 2013**  
Philippa M. Steele. *A Linguistic History of Ancient Cyprus: The Non-Greek Languages, and Their Relations with Greek, c. 1600–300 BC*. Cambridge: Cambridge University Press, 2013.
- Streck 2004**  
Michael P. Streck. "Die Amurriter der altbabylonischen Zeit im Spiegel des Onomastikons: Eine ethno-linguistische Evaluierung". In *2000 v. Chr.: Politische, wirtschaftliche und kulturelle Entwicklung im Zeichen einer Jahrtausendwende*. 3. Internationales Colloquium der Deutschen Orient-Gesellschaft, 4.–7. April 2000 in Frankfurt/Main und Marburg/Lahn. Ed. by J.-W. Meyer and W. Sommerfeld. Colloquien der Deutschen Orient-Gesellschaft 3. Saarbrücken: Saarbrücker Druckerei und Verlag, 2004, 313–355.
- Streck 2007**  
Michael P. Streck, ed. *Sprachen des Alten Orients*. 3., durchgesehene Auflage. Darmstadt: Wissenschaftliche Buchgesellschaft, 2007.
- Streck 2011**  
Michael P. Streck. "Babylonian and Assyrian". In *The Semitic Languages: An International Handbook*. Ed. by St. Weninger. Handbücher zur Sprach- und Kommunikationswissenschaft 36. Berlin: De Gruyter, 2011, 359–395.
- Taylor 1982**  
Peter J. Taylor. "A Materialist Framework for Political Geography". *Transactions of the Institute of British Geographers, New Series* 7.1 (1982), 15–34. DOI: 10.2307/621909.
- Thun 2010**  
Harald Thun. "Pluridimensional Cartography". In *Language and Space. An International Handbook of Linguistic Variation, Vol. 1: Theories and Methods*. Ed. by P. Auer and J. E. Schmidt. Handbücher für Sprache und Kommunikation 30.1. Berlin: De Gruyter, 2010, 506–524.
- Toynbee 1935**  
Arnold J. Toynbee. *A Study of History*. Vol. III: *The Growth of Civilizations*. 2nd ed. Oxford: Oxford University Press, 1935.
- Toynbee 1959**  
Arnold J. Toynbee. *A Study of History*. Vol. XI: *Historical Atlas and Gazetteer*. Oxford: Oxford University Press, 1959.
- Versteegh 2010**  
Kees Versteegh. "Review of 'A Linguistic History of Arabic' by Jonathan Owens". *Language* 86.1 (2010), 241–244.

**Versteegh 2013**

Kees Versteegh. "Your Place or Mine? Kinship, Residence Patterns, and Language Change". In *Language Ecology for the 21st Century: Linguistic Conflicts and Social Environments*. Ed. by W. Vandebussche, E. H. Jahr, and P. Trudgill. Oslo: Novus Press, 2013, 65–93.

**Voigt 1987**

Rainer M. Voigt. "The Classification of Central Semitic". *Journal of Semitic Studies* 32.1 (1987), 1–21.

**Watkins 2001**

Calvert Watkins. "An Indo-European Linguistic Area and Its Characteristics: Ancient Anatolia. Areal Diffusion as a Challenge to the Comparative Method?" In *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics*. Ed. by A. Y. Aikhenvald and R. M. W. Dixon. Oxford: Oxford University Press, 2001, 44–63.

**Wiedemann 2014**

Felix Wiedemann. "Klios Ärger mit den Söhnen Noahs: Wanderungsnarrative in den Wissenschaften vom Alten Orient und die Rolle der Völkertafel". In *Genealogie und Migrationsmythen im antiken Mittelmeerraum und auf der arabischen Halbinsel*. Ed. by A.-B. Renger and I. Toral-Niehoff. Berlin Studies of the Ancient World 29. Berlin: Edition Topoi, 2014, 59–84.

**Wirth 1962**

Eugen Wirth. *Agrargeographie des Irak*. Hamburger Geographische Studien 13. Hamburg: Institut für Geographie und Wirtschaftsgeographie der Universität Hamburg, 1962.

**Wirth 1971**

Eugen Wirth. *Syrien: Eine geographische Landeskunde*. Wissenschaftliche Länderkunden 4/5. Darmstadt: Wissenschaftliche Buchgesellschaft, 1971.

**Woodard 2004**

Roger D. Woodard, ed. *The Cambridge Encyclopaedia of the World's Ancient Languages*. Cambridge: Cambridge University Press, 2004.

**Woods 2007**

Christopher Woods. "Bilingualism, Scribal Learning, and the Death of Sumerian". In *Margins of Writing, Origins of Cultures*. 2nd, revised printing. Ed. by S. Sanders. Oriental Institute Seminars 2. Chicago: Oriental Institute of the University of Chicago, 2007, 95–124.

**Yoffee 1995**

Norman Yoffee. "Political Economy in Early Mesopotamian States". *Annual Review of Anthropology* 24 (1995), 281–311.

**Zaborski 2013**

Andrzej Zaborski. "Big and Small Problems of the Biggest Panorama of the Semitic Languages". *Brill's Annual of Afroasiatic Languages and Linguistics* 5.1 (2013), 253–304. DOI: 10.1163/18776930-00501008.

**Zögner 1999**

L. Zögner, ed. *Antike Welten – Neue Regionen: Heinrich Kiepert 1818–1899*. Berlin: Kiepert KG, 1999.

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ing p. 241. 4 Courtesy of Sallaberger 2004, 116, Karte 2.

**TABLES:** 1 Christian W. Hess.

**CHRISTIAN W. HESS**

is a research associate in the Institute for Ancient Near Eastern Studies of the Freie Universität Berlin. His research is focused on the geography of Mesopotamia, the historical grammar of Akkadian, and the reception of Mesopotamian literature in the second and first millennia BC.

Dr. Christian W. Hess  
Institut für Altorientalistik  
Freie Universität Berlin  
Fabeckstraße 23–25  
14195 Berlin, Germany  
E-Mail: cw Hess@zedat.fu-berlin.de