

PAPER

Mapping the Z-Axis: Early Archaeological Engagement with Time and Space in the Ancient Near East

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The development of the archaeology of the ancient Near East as an independent discipline in the nineteenth century, with its focus on uncovering the peoples and places of the past, particularly from the biblical world, contributed to a visual tradition that presented the time and space of an idealized historical past often influenced by religious preconceptions. Using the physical materials from excavated sites, and linking these discoveries with literal and uncritical readings of the Bible, European and American scholars in the late nineteenth and early twentieth centuries created maps for the public showing peoples, places, routes, and events from the past imposed on the contemporary landscape of the present. In so doing, the archaeology of the ancient Near East helped to define and create visual presentations of a particularized view of the past that continues to hold significance for common understandings of history in the present.

Introduction

The visual presentation of relationships – the expression of physical, spatial, and temporal connections - forms an integral part of explaining and understanding archaeology. As a result, the development of the discipline of archaeology, and particularly the development of the sub-specialty of ancient Near Eastern archaeology, has contributed to ways in which the past is presented visually and spatially. This is particularly notable in presentations of past histories and ancient geographies linked with the biblical text and Western religious traditions. At the same time, however, the religious, social, and political biases of those Western traditions influenced the origins of Near Eastern archaeology and the trajectory of its disciplinary development. Together this has contributed to the creation of a tradition of spatial presentations of a particularized history that continues to both form and inform contemporary understandings of the landscape of the past.

Most maps generally set out information horizontally in two dimensions: the x- and y-axes. Archaeology, however, by the very nature of excavation – the act of digging into the ground – also involves a third dimension: the z-axis, or the vertical, which includes time as well as space. Accordingly, archaeological recording expresses relationships between data unearthed from the ground in both spatial and temporal perspectives, and without the accurate understanding of these relationships, excavated artefacts,

Archaeology, however, and ancient Near Eastern archaeology in particular, are also relatively young disciplines, and the sub-specialty of Palestinian archaeology is even younger. The methods and approaches utilized in these fields were pioneered only in the mid to late nineteenth century, continuing into early decades of the twentieth; the methodologies required to excavate and understand the spatial and temporal relationships between data, and the ways to effectively record that information, were subjected to considerable revision and development. The gigantic mounds of dirt, which are the extant remains of the city sites of the ancient Near Eastern world, were very different from the single period barrow sites known from European contexts. In the Near East, these ancient ruins loomed as high as 30 meters above the earth's surface and encompassed hundreds of cubic meters of dirt of complex deposition that have been aptly described as 'a kind of insane layer cake constructed by a mad pastry chef' (Larsen 1996: 11). Furthermore, these sites represent the remains of millennia of continuous human occupation. Exploration of these sites required the invention of new methods both to excavate them as well as to record what was found there. By today's standards, the methods employed during many nineteenth century excavations were both ineffective and inadequate, and resulted in a nearly criminal destruction of irreplaceable sites and irretrievable data. By the standards of their time, however,

architecture, material culture, and/or biological remains lose part or all of their meaning, as well as the significance of their temporal location. Consideration of the z-axis enables archaeology to examine and contribute to an understanding of the chronology of the past, and then to present it in spatial form.

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these excavations served as the building blocks of a new discipline, and created new systems of mapping the space and time of the human past.

Archaeological engagement with both the temporal and spatial implications of the z-axis linked the geography of the peoples and places of the ancient Near Eastern world with contemporary understanding of the Bible, as viewed by the Western religious traditions of the time. Using materials from excavated sites, together with an often literal and/or uncritical reading of the Bible, archaeologists in the late nineteenth and early twentieth centuries created maps showing the location of ancient empires and populations, along with other events mentioned in the biblical text.¹ These visual images first served to reify contemporary perspectives of the 'biblical world' and subsequently to uphold modern religious views concerning the physical landscape of the past, while simultaneously helping to erase, ignore, discount, or deny many of the other peoples and places that may have been there in the historical past, as well as many of those that were actually there in the present. Many of these maps of the ancient Near Eastern world, produced in the late nineteenth and early twentieth centuries, often presented a simplified European Christian (and later, Jewish) biblical past, not necessarily the complex social and religious realities of the present. This imagined past then became embedded in the corpus of Western 'knowledge' of history that has continued into the present (despite, ironically, further archaeological evidence that has cast considerable doubt on many of these certainties) establishing a visual tradition in which the idealized mythic past became cartographic fact.

Historical Background

The increasing number of European and American travelers to the Middle East during the nineteenth century contributed to a growing interest in this region that possessed somewhere within it – in western eyes – the physical landscape of the biblical past.² In nineteenth century Europe, particularly in Britain, a detailed knowledge of the Bible, together with familiarity with the classics, were the marks of educated men (or, more rarely, of educated women) (Bar-Yosef 2005). Place names that now seem obscure, such as Nineveh, Calah, Samaria, or Lachish, were instead part of a universal and common corpus of knowledge (Larsen 1996). These were locations where the great and wonderful deeds described in the Bible had taken place, where events of the distant past emphasized the importance and singularity of the people described in that sacred text and confirmed their unique relationship with the deity. In the nineteenth century, however, the knowledge of these places and events derived almost exclusively from biblical material:

Although the names of Nineveh and Assyria have been familiar to us from childhood, and are connected with the earliest impressions we derive from the Inspired Writings, it is only when we ask ourselves what we really know concerning them, that we discover our ignorance of all that relates to their history and even to their geographical position (Layard 1852: vii).

As the self-proclaimed inheritors of the religious tradition outlined in the Bible (Moscrop 2000: 2) European – specifically British – and American Christian identification with those early peoples and their singular relationship with their deity often caused early travelers to the Middle East and those who followed after them to view the contemporary landscape confronting them through the lens of this appropriated historical and religious past (Bar-Yosef 2005: 62; Shepherd 1987; Silberman 1982; Hallote 2006). This 'biblically-tinted' view then produced perspectives of the modern Middle Eastern landscape that reflected an imagined religious reality just as much, if not actually more so, than the contemporary reality that existed in the nineteenth century present.

The present displayed a landscape of ruins, rocks and dirt, poor Arab villages, and Ottoman over-lordship. In particular, European and American contemporary views of the 'native' population did not always fit with exalted concepts of the people who inhabited the glorious biblical past, where noble patriarchs moved in dignified splendor through the region herding flocks and communicating with the divine, and who were not, under any circumstances, to be confused or identified with 'the dirty, uncouth, uncivilized people of the type which are common in the Syrian and Transjordanian semi-desert today' (Wright 1962: 45; see also Shepherd 1987: 93–95) – a view expressed well into the mid-twentieth century. Rather than examine this often unprepossessing visual present, which clashed uncomfortably with pre-conceived views of the imagined past, many European and American travelers to the Middle East, steeped in their knowledge of the biblical text and its description of landscapes and places, began to focus on ways and means to uncover this particularized history that, by biblical definition, must have existed. Hidden in the ground, the great cities of the biblical past, populated by kings and prophets and filled with wonders, only needed to be located and their treasures unearthed.

The archaeology of the ancient Near East, therefore, whether it focused on the great buried cities of Assyria and Babylon, or sought the places and peoples of the 'holy land' in Palestine, was, from its inception, grounded in the desire to provide validation for the events described in biblical texts (Bahrani 1998: 164). This contributed to the development of a discipline linked inextricably with an attempt to 'find' the physical remains of biblical history. Subsequent archaeological activities, influenced by preconception and prejudice (both positive and negative) generated the visual presentation – the mapping, as it were – of the chronological remains of this perceived past on the landscape of the present.

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Initial Investigations of Time and Space

One of the earliest explorers of ancient Mesopotamia, whose work typifies initial European archaeological endeavours, was the British adventurer (Sir) Austen Henry Layard. Born in 1817 in Paris to an English family, Layard spent much of his youth in Italy, and early on developed an interest in art (Larsen 1996: 34). Educated in England at the expense of a wealthy, conservative uncle, Benjamin Austen, who did not deem it appropriate that his nephew live and be educated in foreign countries, Layard was then apprenticed into his uncle's business, perhaps in the expectation that he would rise to a leading position within it. Sunday salons held at the Austens' house introduced the young man, then barely out of his teens, to travelers to the Middle East, including future British Prime Minister Benjamin Disraeli, and provided Layard with a further interest in antiquities and history. As both his political and religious views developed in radically different ways from his family in London, Layard arranged to seek his fortune elsewhere - specifically in Ceylon (modern Sri Lanka) – and made plans to travel overland from England on an itinerary that would take him through those very regions of the Middle East and Asia about which he had heard so much. Layard never reached Ceylon; his travel would instead culminate in Layard becoming one of the most famous archaeologists of his generation.3

Fully decked out in 'Oriental' garb, the twenty-five year old Layard arrived, in the provincial Ottoman town of Mosul (located in present-day Iraq) in June 1842, carrying the mail. He delivered his dispatches, and then, his official duty discharged, began the preliminaries of what would eventually lead to some of the first formal exploration of the giant mounds that were the sole visible remnants of what had once been the greatest powers of the ancient Near Eastern world, the Assyrian and Babylonian Empires. Enthralled by the prospect of physically uncovering the remains of these societies, known from biblical story and lore, Layard wrote:

With these names are linked great nations and great cities dimly shadowed forth in history; mighty ruins in the midst of deserts, defying, by their very desolation and lack of definite form, the description of the traveler; the remnants of mighty races still roving over the land; the fulfilling and fulfillment of prophecies; the plains to which the Jew and the Gentile alike look as the cradle of their race (Layard 1849: 2–3).

The possibility of uncovering new and exciting discoveries hidden in the depths of the dirt mounds of ancient Assyria, a locale mentioned – mostly unfavourably – more than 130 times in the Hebrew Bible, had the potential to contribute to the map of the human historical and religious past. As one American theologian rather naively rhapsodized:

Who can tell how much more remote such records may carry us into the past? The day may not be far distant when Nimrod's Biography, Noah's History of the Flood, and Adam's Autobiography, shall become standard works among the civilized nations of the earth (Newman 1876: 360, quoted in Larsen 1996: 163).

One of the problems in finding this fabulous history that faced Layard and his contemporaries was the fact that these sites generally looked exactly like what they were: gigantic mounds of dirt. In contrast to the columns at the ancient Persian capitol of Persepolis, or the pyramids of the Old Kingdom of Egypt at Giza, where towering human accomplishments of past societies stood clearly visible for all to see, the mounds of Nineveh, Nimrud, and Khorsabad were not in the least visually striking. To address the challenges presented by the great earthen mounds, Layard and many others of his archaeological generation adopted what seemed at the time to be the most expedient method of acquiring objects: they tunneled.

At Nimrud, for example, a large ravine in the side of the site provided a point to enter the mound horizontally. Once the first remnant of a 'monument' was found, workers could then follow along its walls, removing artefacts - predominately large sculptures - as they encountered them, which both produced tangible results and allowed the explorers to 'map' the outlines of the building; these tunnels followed along the wall-lines of palaces and generally left the interior of the rooms unexcavated. This created a series of narrow trenches that wandered maze-like throughout the site, and, not surprisingly, resulted in maps and architectural plans that gave no indication whatsoever of how to situate any of these finds in broader historical, spatial, or chronological contexts. The challenge to explore the vertical in both time and space was first met by subterranean movement through the horizontal.

Finding the Past in Time and Space

In the mid to late nineteenth century, knowledge about the chronology of many of the ancient civilizations of the Near East was derived from information presented in the biblical text or discussed by classical authors. Although new discoveries in science were proving that the world was both considerably older and more complex than previously thought - ideas that were hotly debated in learned societies in both secular and religious contexts (e.g. Torrens 1998) - many popular approaches to understanding the chronology of the past, especially those associated with anything biblical, still drew on Bishop Ussher's mid-seventeenth century calculation that the creation of the world (as described in Genesis 1) took place in 4004 B.C.E. (Larsen 1996: 157–159).4 Within this chronological framework, therefore, all events in history – and particularly the history being uncovered in the part of the world described in the biblical text – had to be compressed into a period of slightly less than 6000 years.

This literal and short chronology influenced approaches to establishing the parameters of the temporal human past, and helped to provide the basis

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for initial interpretations of archaeological discoveries. The account of the spread and rise of nations in *Genesis* 10, for example, which credits the eponymous ancestor Nimrod with founding cities and kingdoms in the immediate post-diluvian shady dawn of time, provided a starting point for the explanation of archaeological discoveries in Assyria, which were then promptly popularized for the public. One such account of the archaeological finds at Nineveh, entitled *Nineveh and Its Palaces. The Discoveries of Botta and Layard, applied to the elucidation of Holy Writ*, by Joseph Bonomi, first established the historical setting for the excavations with the statement:

From the sacred writings we learn that the long forborne vengeance of Heaven, overtaking the impious pride of the antediluvian world, had swept from the face of the earth the numerous tribes of Adam, reserving only the family of Noah ... (Bonomi 1853: 38–39).

A sweeping magisterial claim further proclaimed the chronological fact that:

... within a century after the flood, and while Noah was in the full vigour of his power, his greatgrandson, Nimrod, the founder of the earliest postdiluvian cities, is introduced on the historic page (Bonomi 1853: 39).

The text also provided a description of the cities founded by Nimrod and his brothers that were understood to be some of the earliest markers of human civilization. The map accompanying this text (see **Figure 1**) showed the presumed location of these cities, with emphasis placed on the geography of antiquity. The focus of this presentation was made clear in the note to the caption for the map, which stated that: 'The first eight numbers [showing city location] refer to the cities in the order in which they occur in the tenth chapter of Genesis' (Bonomi 1853: 38).

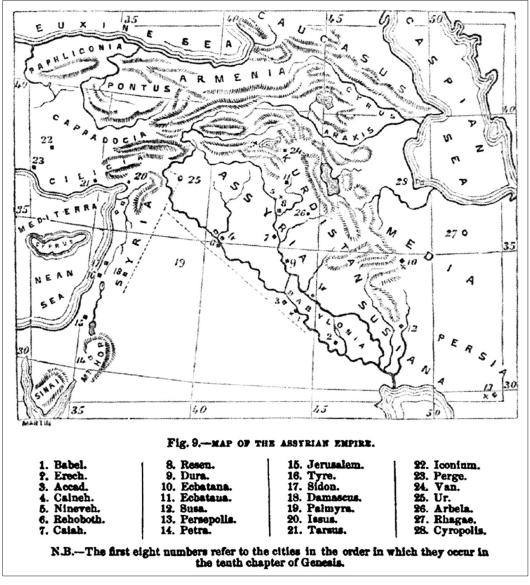


Fig. 1: Map from Bonomi's 1853 popular work on the excavations of Nineveh, showing cities in their presumed relation to *Genesis* 10 (Bonomi 1853: 38).

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This example illustrates the use of archaeological discovery to support information regarding both the geography and chronology of the past. The contemporary rise of biblical historical geography as an independent discipline, as exemplified by the pioneering work of Edward Robinson (e.g. Robinson and Smith 1841, 1856, 1865) and George Adam Smith (e.g. 1894, 1899), also provided considerable contributions to the further study of ancient places and toponyms, as well as their presentation to the public in cartographic form. The historical geography of the nineteenth century, however, while of exceptional importance for subsequent developments in cartography, was based primarily on topography and linguistics, and as such, did not provide the same physicality as did archaeology, which delved through time and space to provide tangible discoveries that illustrated the histories and peoples of the biblical past. As the finds from these locations were made public, to be marveled over in such European locations as the Louvre and the British Museum, these ancient cities and the physical information they provided concerning the past became increasingly entrenched within the public's perception of the Middle East as the spatial stage on which biblical events had occurred (MacHaffie 1981) in contrast to that same public's familiarity with and knowledge, or lack thereof, of the inhabited cities and living people of the modern contemporary landscape.

Continued excavation, however, also brought additional temporal confusion to the chronological understanding of human history. The tunneling methods of Layard and his contemporaries, while efficacious in producing monumental art for the museums of Europe and attracting public interest in their finds, and innovative for their time, were simply not suited to address complex vertical and/ or chronological relationships. While excavators could, of course, logically deduce the basic premise that material at a lower level in the ground was earlier than the material found above it, the ways in which these relationships could be linked to either regional chronology or long-term history were not yet developed. The more material that was unearthed, the more the difficulties of deciphering what was rapidly being revealed as an increasingly complex past became apparent.

For example, Layard, when faced with the discovery of additional architectural structures beneath the tombs associated with the Assyrian palace levels uncovered at Nimrud, could only speculate about the sequence of events that might have led to this construction, or the cultures it may have represented. He mused:

What race, then, occupied the country after the destruction of the Assyrian palaces? What antiquity did their presence assign to the buildings beneath them? It is difficult to answer these questions (Layard 1852: 252).

Trapped within the framework of biblical text and chronology and its presentation of both geography and history, and without recourse to methodological approaches that could place artefacts, architecture, and cultures in any relational temporal sequence (which would only be developed in future decades) Layard concluded that this architecture must be associated with events that took place in 'an epoch yet unfixed' (1852: 253).

The increasing amount of new archaeological data, together with the additional physical and temporal data produced by other sciences such as geology, thus drew attention to the insufficiency of the chronological yardstick provided by biblical and classical sources for examining the timelines of the past. To move past this conundrum, archaeological methodology needed to find the ways and means to understand both inter- and intra-site chronology. Solving the former would enable excavators to determine internal chronological sequences at an individual site. Solving the latter problem would then allow scholars to determine contemporaneity between different sites scattered in different geographic locations, thereby addressing issues of both time and space. The development of the means to do so would both influence ways to visually map the biblical past and further its presentation to the public.

The solution appeared in the late nineteenth century with the development of stratigraphic excavation - 'a seemingly obvious yet profound concept' (Cline 2009: 21) – that had its origins in geological concepts of superimposition, in which later material builds up on top of, or above, earlier material. This enabled the archaeological conceptualization of a principle that seems completely self-evident today, but at the time was both innovative and largely unrealized: as human occupation in an area continues over time the overall height of the area itself rises slowly, creating the gigantic mounds or tells so visible on the geographical landscape. Furthermore, the lower areas of occupation will almost always be earlier chronologically than those built above them. Consequently, as one digs from the top down, one is proceeding backwards chronologically, but the historical interpretation of these sites is analyzed from the bottom up, so that human progress may be charted forward through time.

The concept of superimposition alone, however, could not provide the temporal history of a specific site. This initial approach was then followed by the concept that the objects found at these sites, and specifically, the broken pieces of pottery that littered the ground could also be understood as temporal indicators as shapes and styles changed over time, providing an internal chronological map. Rather than being insignificant debris, and frequently thrown away as uninteresting or unimportant, this garbage of the past was of crucial importance: 'Pottery is the very key to digging; to know the varieties of it, and the age of each, is the alphabet of work' (Petrie 1892: 158).

This 'sequence dating' of artefacts, and primarily the sequence dating of ceramics – now known as seriation – enabled excavators to place their sites in relative temporal context in the past. Not only could the internal chronology of the sequence and the history of occupation at a single site be established with increasingly greater

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precision, but also chronological relationships between sites over a larger geographical area could now be ascertained. Once understood and put into practice in the late 1890s, and used in growing numbers of excavations into the early decades of the twentieth century, the methods of establishing temporal sequences made it increasingly possible for archaeologists to link time and space — and the peoples, places, and events of the 'biblical world' of the ancient Near East found within them — together across the landscape of the present.

The focus on identifying the tangible remains of biblical history in both time and space was also prompted by a concern to shore up biblical veracity against the encroaching claims of science (MacHaffie 1981), particularly against those derived from continued discoveries in geology and biology. The growing popularity and increasing scope of biblical 'higher criticism' - especially from 'the German school' represented by J. Wellhausen - presented a serious threat to conservative and traditional biblical knowledge. To counter this, the continuing archaeological exploration of the 'holy land' was in part a weapon in the war against the claims of higher criticism that not only deconstructed the biblical text, but also threw considerable doubt on its historicity and veracity (Bar-Yosef 2005: 9; Long 1997, 2003; MacHaffie 1981: 319; Shepherd 1987: 77). For example, the mission statement of the short-lived American Palestine Exploration Society (PES) (see Hallote 2006) founded in 1870, stated that the work supported by the society would appeal

... to the religious sentiment alike of the Christian and the Jew ... Its supreme importance is for the illustration and defense of the Bible. Modern skepticism assails the Bible at the point of reality, the question of fact. Hence whatever goes to verify the Bible history as real, in time, in place, and circumstances, is a refutation of unbelief ... (quoted in Díaz-Andreu 2007: 151).

This sentiment was echoed a few decades later by Harvard professor David Lyon:

The chief motive which prompts Palestinian study in all its phases is religious and Biblical ... As the tourist goes to that country for religious quickening or for confirmation and elucidation of the Scriptures, so the student is moved by the same motive (Lyon 1911: 4).

While in some cases the physical evidence that archaeology brought to the academic table may have challenged biblical certainty, instead, often scholars and their public perceived archaeological activities as a means to corroborate scripture by finding tangible evidence to support its claims, or at the very least, to further illustrate the history presented within it. As stated by W. F. Albright, often hailed as the 'father' of American biblical archaeology:

... these unassuming mounds among the hills of Ephraim and Benjamin [biblical names for geographic regions in Palestine] are of the greatest interest to us since they represent authentic monuments of the Israelite past. Every stone and potsherd they conceal is hallowed to us by association with the great names of the Bible (quoted in Long 1997: 117–118).

Well into the early decades of the twentieth century (and beyond in some traditions and schools of thought), the study of the ancient Near East, and of Palestine in particular, favoured a scholarly approach that married religious background with new 'scientific' and archaeological approaches that could provide 'hard' evidence for its conclusions (Long 1997: 116–117).⁵

The famous 1871–1878 'Survey of Western Palestine' produced by the British Palestine Exploration Fund (PEF 1965) stands as perhaps the most notable example of the juxtaposition of religious perception with modern landscape in spatial presentation. The opening address of the PEF, read by William Thompson, the Archbishop of York, at the founding of the society proclaimed:

We are not to be a religious society; we are not about to launch controversy; we are about to apply the rules of science, which are so well understood by us in our branches, to an investigation into the facts concerning the Holy Land (PEF 1965).

Yet the address also drew on the connection between contemporary geography and religious interests in uncovering the biblical landscape of the past. The archbishop went on to state:

No country should be of so much interest to us as that in which the documents of our Faith were written, and the momentous events they describe enacted. At the same time no country more urgently requires illustration ... Much would be gained by obtaining an accurate map of the country; by settling disputed points of topography; by identifying ancient towns of Holy Writ with the modern villages which are their successors (PEF 1965).

Consequently, the maps produced by the PEF's 'Survey of Western Palestine', and the sheer size and scope of the enterprise overall, both represent one of the greatest cartographic undertakings of the time, and illustrate the link between the spatial and temporal examination of modern landscape, and the contemporary presentation of biblical tradition and historical geography (Díaz-Andreu 2007: 154; Moscrop 2000). Following this seminal accomplishment, the cartographic corpus of the contemporary landscape produced in the late nineteenth and early twentieth centuries showed modern resources, transportation routes, water sources, and other aspects of the local terrain. Simultaneously, other maps presented the

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perceived ancient landscape of the biblical and ancient world, with its peoples, places, boundaries, and routes of travel, as augmented by the physicality and hard data produced through archaeological excavation. This, whether intentionally or not, provided the impression that the peoples and events mentioned in the biblical text were clearly identifiable in history and could be definitively charted in physical space. Nowhere was this more visible than in the cartographic presentations of past time and space produced for, and replicated in, atlases of the biblical world, in which this particularized understanding of the past was cemented together with the geography and landscape of the present.

Presenting the Idealized Past: Archaeological 'Biblical' Atlases

While many maps, such as the famous PEF 'Survey of Western Palestine' mentioned above, reflected the findings of historical geography, which identified toponyms primarily on linguistic grounds in conjunction with descriptions of the physical terrain from biblical texts and contemporary observation, the ability of archaeology to provide tangible identification through excavation of the z-axis, enabled visual presentations and maps of the biblical past to be made with the support of 'hard' data. During the early decades of the twentieth century there was a sharp increase in the production and distribution

of biblical atlases, many of which were created either by archaeological scholars themselves, or prepared in consultation with many of the leading archaeologists of the time. Publications such as: the 1942 The Graphic Historical Atlas of Palestine, co-edited and co-authored by the archaeologist and historian Benjamin Maisler (later Mazar), who was one of the founding figures of early Israeli archaeology; or the 1946 Westminster Historical Atlas to the Bible produced by G. E. Wright in collaboration with F. V. Filson, then both professors at the Presbyterian (later McCormick) Theological Seminary; and the 1964 publication of the Atlas of the Bible by Yohanon Aharoni, one of Israel's leading archaeologists and geographers, which formed the basis for the celebrated Macmillan Bible Atlas (Aharoni and Avi-Yonah 1968; Aharoni et al. 1993); all provided a wealth of information about ancient biblical geography as informed by archaeology. In addition these atlases presented famous biblical events that ranged in scope from the epic, such as the migration and subsequent wanderings of the patriarchs (see Figure 2), the Exodus (see Figure 3), and the Israelite conquest of Canaan, to the rather more individually precise traditions of Saul's peripatetic search for his lost donkeys as described in I Samuel 9, and the military maneouvering of David and his army as he asserted his control over his rivals (I Samuel 22-30).

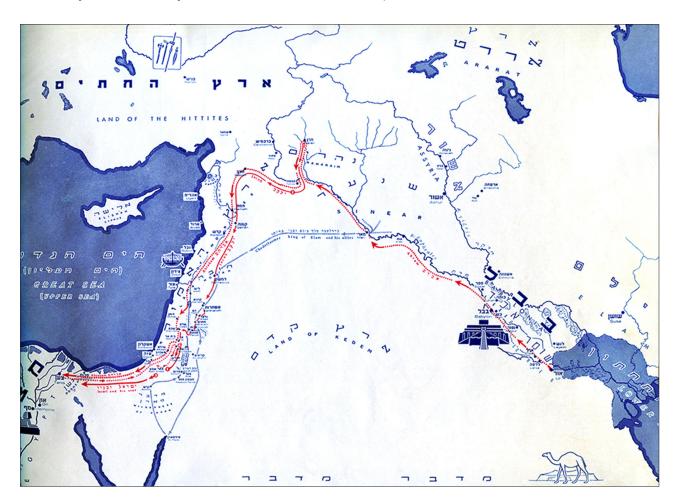


Fig. 2: Map showing the traditional route of patriarchal travel from *Genesis* in the 1942 *The Graphic Historical Atlas of Palestine* (Maisler *et al.* 1942: 10).

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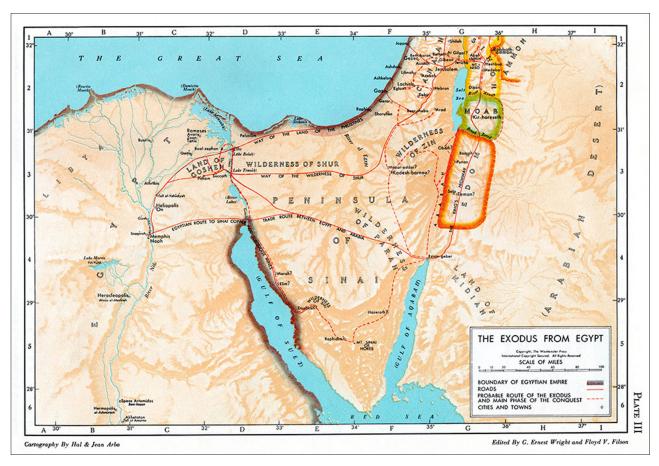


Fig. 3: Map of the projected routes of the Exodus in the 1952 edition of the *Westminster Bible Atlas* (Wright and Filson 1952: Plate III, reproduced courtesy of Westminster John Knox Press).

Regardless of scope, however, these images presented these routes and the sites associated with them against the chronological and geographical backdrop of the landscape of the past as uncovered through archaeological excavation of the z-axis. Many of the maps were further augmented with illustrations of extra-biblical archaeological material. For example, the map entitled 'The Wanderings of the Patriarchs' in the Maisler et al. 1942 The Graphic Historical Atlas of Palestine (see Figure 2), included several illustrations, in addition to the complex squiggly lines rendered in different colors with dots and dashes and arrows that illustrated the projected travels of biblical figures. The Great Sphinx at Giza crouches in the lower left corner; a collection of bronze weaponry adorns what is now modern Turkey; an oared ship sits off the Lebanese coast; and the great Ziggurat of Ur looms in southern Mesopotamia. Finally, a camel strides westward in the lower right-hand corner. The placement of these illustrations on one map showing the projected route of a few individuals in the past masks the fact that the artefacts and architecture they depict are not at all chronologically contemporary, nor are they connected culturally, socially, or even geographically.7

Similarly, and included on the same page as the map presenting 'Jacob's Travels in the Land of Canaan', in the first edition of the *Macmillan Bible Atlas* (Aharoni and Avi-Yonah 1968: 29) (see **Figure 4**), which illustrated the peregrinations of that patriarch as described in *Genesis*

32, was a line drawing of part of the 'peace side' of the famous 'Standard of Ur', excavated by Sir Leonard Woolley at Ur in 1922. Dating to ca. 2250 B.C.E., this Sumerian artefact, a hollow wooden box decorated with inlaid mosaic, depicts a banquet scene in three registers. The middle register, which shows men bringing sheep and goats - presumably for the king and notables depicted on the top register – is the one reproduced on the atlas map. The inference is clear: the standard – the physical artefactual evidence from antiquity - shows men with flocks, and Genesis presents the patriarchs as men herding flocks. Thus, physical archaeological evidence bolsters textual tradition. The fact that the artefact in question has no direct chronological, geographical, political, or social connection whatsoever to the southern Levant, or to the patriarchal traditions, and is in fact grounded in an entirely separate cultural context, remains unremarked, and the reader is allowed, or even encouraged, to draw inferences about this physical evidence that appears to support the images described in the patriarchal traditions when none, in fact, exist.

Archaeological illustrations on atlas maps served to provide a physical, visual element that helped to give the travels of the past, mapped onto the landscape of the present, a more concrete reality. As noted, however, these materials drawn from archaeological excavations were often only tangentially related to the cartographic subject at hand, if they were related at all, and often these

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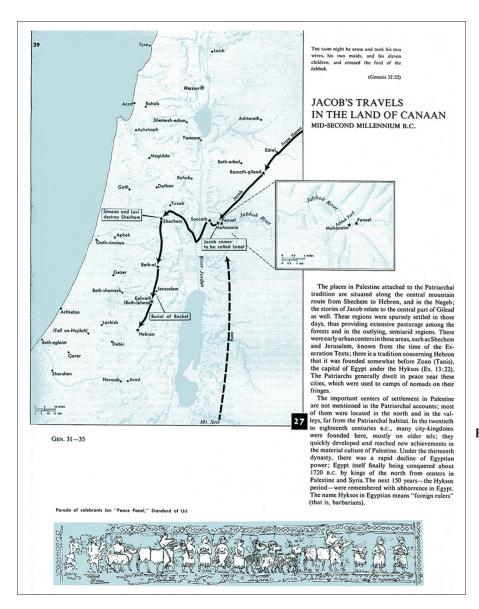


Fig. 4: Map of the tradition of Jacob's travels in Canaan, with the Standard of Ur illustration, from the 1968 edition of the *Macmillan Bible Atlas* (Aharoni and Avi-Yonah 1968: 29, reproduced courtesy Carta, Jerusalem).

visual cues were drawn from chronological contexts as great as several centuries apart. These facts, however, were unlikely to be either known, or even understood, by the atlas-reading public, and thus the perception that archaeological evidence unequivocally supported biblical traditions was reinforced within the public sphere of knowledge.

Although it can be argued that these atlas maps simply provide visual images to help readers 'see' the familiar biblical stories of childhood and prevalent Western cultural tradition, just as the maps in any work of fiction help to place the story and its actors in a realized landscape – the detailed cartographic illustrations in Tolkien's *Lord of the Rings* trilogy come to mind, among others – it is also equally true that it is (almost) universally understood that the maps in fictional works are representing fictional landscapes. No one expects that a map of the Land of Mordor shows a real landscape that existed at some point in the distant past, or in a parallel universe. In contrast, Bible atlas maps, produced with the assistance of archaeology's ability to excavate the z-axis, both physically and chronologically, strongly imply – and have been

understood and utilized with this implication – that they reflect a verifiable historical reality supported by solid scholarly knowledge (Long 2003: 195; Franken 1976) without any indication of debate or uncertainty. The maps clearly suggest that the routes laid out through the Sinai (see Figure 3), or territorial borders stretched across the ancient southern Levantine landscape (see Figure 5) do indeed illustrate identifiable population movements and clearly delineated polities, rather than deductions based on interpretations of a heavily redacted historical source, augmented by frequently scanty archaeological evidence, which is subject to its own interpretative narrative (see e.g. Franken 1976; Miller 1984). The visual support provided by atlas maps, and especially those that included accompanying illustrations of artefacts and architecture served to reify the presentation of past time and space as told in the stories. By the time archaeological scholarship and analysis began to question some of these positivistic correlations, atlas maps of the early twentieth century had already served to present to the world a view of history confirmed by detailed cartographic evidence supplemented with hard archaeological data.

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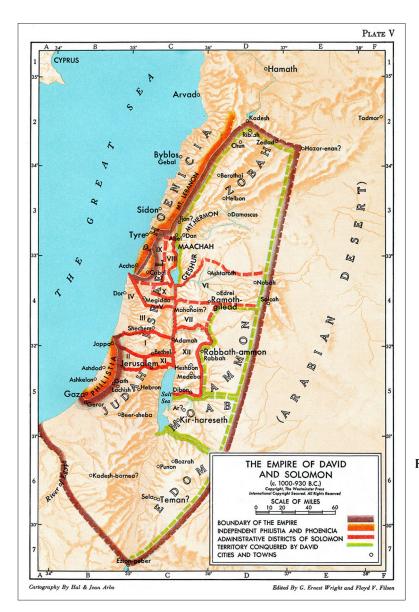


Fig. 5: Map in the 1952 edition of the *Westminster Bible Atlas* showing the territory of the Davidic and Solomonic Empire in the tenth century B.C.E. as described in the biblical text (Wright and Filson 1952: Plate V, reproduced courtesy of Westminster John Knox Press).

Critical archaeological and historical studies that would: examine the futility of locating the patriarchs in time and space; debunk the concept of hundreds of thousands of people leaving Egypt en masse (e.g. Finkelstein and Silberman 2001; Redford 1992); question the viability of these masses wandering around in a relatively small bit of desert for forty years (e.g. Redford 1992); counter the concept of a mass military invasion that swept all before it (e.g. Finkelstein 1988; Gottwald 1979); and suggest the existence of a small and rather inconsequential chiefdom in Palestine in the tenth century B.C.E., instead of a grandiose empire stretching from the Red Sea to the Euphrates (e.g. Finkelstein 1996; Finkelstein and Na'aman 1994; Finkelstein and Silberman 2001), were all analyses written in future decades that followed the production of early to mid-twentieth century biblical atlases. For example, Dame Kathleen Kenyon's excavations at Jericho that demonstrated that the city was not occupied during the crucial period in question, and which consequently cast considerable doubt on the literal veracity of the conquest tradition as presented in the Book of Joshua, were not published

until the mid to late 1960s (see the detailed discussion in North 1979). Similarly, archaeological studies of settlements considered to be the nucleus of any political or social entity that might be defined as ancient Israel, did not begin until well into the 1980s and later (e.g. Finkelstein 1988; Finkelstein and Na'aman 1994). Further, it was not until well into the second half of the twentieth century that some of the archaeological certainties used to visually corroborate these biblical claims received any serious critique in mainstream American, European, and/or Israeli archaeologies. This resulted in a flurry of debate regarding the nature, scope, and extent of many of these events that remains ongoing and has become increasingly complex.

However, by then the damage, so to speak, was done. The atlases of the biblical world had already helped to cement these visual perceptions of the biblical past in public discourse as established historical 'fact' and many of the new finds that countered this reified history of the biblical world frequently do not meet with public approbation (Díaz-Andreu 2007: 164).8 Likewise, the scholarship that strongly contests some of these views of the biblical past

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is found predominantly in academic discussion and, with some important exceptions (e.g. Finkelstein and Silberman 2001; Schmidt 2007) is mostly published in academic literature, and written in highly specific language that often requires an advanced technical knowledge of the field to be able to follow the details of the arguments and the claims made.9 The general public, if it thinks about the issue at all, has no reason to question the routes or boundaries clearly laid out on maps in Bible atlases proliferating in bookstores and libraries or on Amazon.com – especially those produced by reputable publishing houses - or to wonder whether or not these images present an imagined ideal rather than an accurate reflection of specific population movements, or the geo-political reality of the tenth century B.C.E. Nor might the public be aware that current archaeological scholarship frequently challenges the positivistic conclusions that were created by archaeology itself.

Conclusion

While much of the history of Near Eastern archaeology, its participants, and its formative influences and developments presented here, are well known within the field itself, these contributions to the presentation of the biblical past, particularly in cartographic forms, which represent the most widespread dissemination of perceived biblical landscapes to the public, are less commonly understood outside of the rather small, and highly specialized, disciplines of Near Eastern biblical and archaeological studies. The rise of archaeology as an independent field in the late nineteenth century, in addition to the growth of the other physical sciences, allowed for the development of new perspectives regarding both the chronological and physical landscape of the human past, and helped to introduce the concept of temporal geographies. This further enabled the visual presentation of past landscapes, peoples, and events, thereby providing physicality to concepts of history, and, in the case of Near Eastern archaeology, biblical history.

The resulting presentations of the landscape of the past produced images and maps that utilized archaeology's ability to examine physical time and space. While archaeological knowledge has changed, however, resulting in increasingly complex and technical argumentation, new interpretations, revisions of prior conclusions, and a host of new methods for examining and understanding this spatial and temporal past, some aspects of the physical presentation of this past to the public have not kept pace, particularly in atlas cartography geared toward public consumption. With its focus on mapping the z-axis, in both time and space, and in the particularized history of the inception and development of the discipline itself, the archaeology of the ancient Near East both helped to define, and to create, ideas concerning space and time in relation to an idealized historical past that continues to hold significance for perceptions of history in the present.

Notes

- While the approach of higher criticism the study of the composition, history, and formation of the biblical text gained increasing popularity in the nineteenth century, in conjunction with advances in many other disciplines, particularly in the sciences, critical analysis of the Bible, however, was initially viewed with considerable skepticism by many British and American theologians and scholars, both on the basis of the challenges it presented to traditional understanding of the Bible, but also for reasons of nationalism and other political and social rivalries between countries (MacHaffie 1981).
- The analysis of European and American travel to the Middle East in the nineteenth century represents an entire genre of scholarship in its own right. For a recent discussion of this phenomenon, particularly as it relates to early American archaeology, see Hallote 2006. See also Moscrop 2000 and Wasserstein 2002 for discussion of European interactions with the Ottoman Empire during this period.
- A recent study that examines archaeology as a corollary to European political ambitions in the Ottoman Empire (Bahrani, Çelik and Eldem 2011) has highlighted Layard's archaeological role as a cover for his espionage activities, and suggests that the latter role may have been the primary motivation behind his travels. Regardless of which 'hat' was the dominant fit, however, does not detract from the fact that Layard's excavations functioned as pioneering works in early Near Eastern archaeology and helped to set the stage for future developments in the field.
- ⁴ To be precise, Ussher claimed that creation began at noon on 23 October, 4004 B.C.E. (Ehrman 2004: 420).
- This is not to imply that all archaeological work was religious in nature, or that religious concerns dominated all projects and/or interpretations. Certainly great advances were made in all aspects of archaeological science, from historical interpretation to methodology to theoretical approaches. The contention here, however, is that in many cases religious and/or biblical concerns were both important and influential in determining the direction, scope, and interpretations of contemporary research.
- These maps were often for use by European military and government officials in the service of their various countries' national, imperial, and territorial ambitions. This served to further validate the establishment of European sovereignty over the territory in which this vast and glorious and largely mythic history had taken place, which then helped to provide further justification for the actions of the present (Moscrop 2000). One result of this perspective was the dispossession of local populations, predominately Arab and non-Christian, from their own history, geography, and association with their physical environments, as the place names that were chosen by the map-makers inevitably reflected those of the presumed biblical

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past, rather than the realities of the geographical present (Díaz-Andreu 2007: 150; Abu el-Haj 2001).

- The construction of the Sphinx dates to ca. 2500 B.C.E., the Ziggurat at Ur is best dated to ca. 2200 B.C.E., the weaponry is a mixture of multiple forms, types and dates, the ship is drawn from depictions dated to the end of the second millennium B.C.E., and the camel was neither domesticated nor used as a means of transportation and travel until well into the first millennium B.C.E.
- Later editions of many of these atlases left out the images of artefacts and architecture, but the boundaries and routes frequently retain the same positivistic presentation.
- For example, the on-going and acrimonious debate over the 'low chronology' of the tenth century B.C.E. and subsequent interpretations of the existence and extent of the early monarchical period of ancient Israel hinges heavily on extremely specialized knowledge of particular ceramic forms and individual strata excavated at specific sites (e.g. Ben-Tor and Ben-Ami 1998; Finkelstein 1996, 1999; Mazar 1997).

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