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Of Highland-Lowland Borderlands: Local Societies and Foreign Power in the Zagros-Mesopotamian Interface

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Abstract

Narratives of civilization are spun from the juxtaposition of a civilized self with that of a barbarous other. Such an opposition is never more easily constructed than from the distinctiveness of lowland and mountain topographies, environments, and life-ways. Studies of highland-lowland relationships across different periods, places and disciplines also place the two realms in conceptual opposition and only rarely engage in depth with the interaction that must underwrite all negotiations of identity. We can trace the first attested construction of such a dichotomy in the texts and iconography that detail Mesopotamia's interaction with the Zagros highlands in the later third and second millennia BC. The recent opening of the Kurdish Region of north-east Iraq to international archaeological research now provides us with the opportunity to investigate Bronze Age communities located in transitional and highland landscapes and their relationships with the lowlands.

In this paper we take a critical approach to the conceptualization of highland-lowland interaction in the past and in modern scholarship and formulate a bottom-up, archaeological approach for the investigation of highland-lowland encounters. Drawing on our recent work in the Upper Diyala/Sirwan river valley, we present crucial new settlement and material evidence, which challenges traditional interpretations of the region as a homeland of mountain tribes and begin to write a more balanced, local account of socio-cultural development and external interaction between this borderland region and a series of Bronze Age imperial powers.

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Keywords

Narratives of civilization; Highland-lowland interaction; Kassite; Late Bronze Age; Sirwan Regional Project; Khani Masi

Introduction

Transitional landscapes that bind together distinctive geological, topographic and environmental zones are places of connectivity in economic, cultural and socio-political terms. The encounters of such borderlands fluctuate over time and range widely in scale and nature from short-distance movement, supra-regional trade and imperial conquest. Yet they also result in, perpetuate, and deliberately or subconsciously become part of particular modes of life, informing both local identity and external perception.

Some of these themes have long been concerns, for instance, in research on maritime networks of contact and interaction in the Mediterranean (Braudel, 1972; Horden and Purcelle, 2000; van Dommelen and Knapp, 2010; Broodbank, 2013), feature in borderland and frontier studies (Lightfoot and Martinez, 1995; Anzaldúa, 1987), related post-colonial discourses and ethnographies of encounter (Faier and Rofel, 2014) as well as longstanding debates surrounding identity, its negotiation and material expression (Barth, 1969). Landscapes connecting uplands and lowlands, the communities of such transitional and highland regions, and the form and nature of their external relationships, by contrast, have received comparatively limited scholarly interest beyond the ethnographic present or the very recent past (Ives, 2001; Mathieu, 2011).

The Middle East presents a region which is topographically dominated by imposing mountain chains and a documented history of highland-lowland interaction reaching back to the Epipalaeolithic, when wide-ranging exchange networks began to distribute obsidian originating from highland Anatolian sources across the Levant and Mesopotamia (Chauvin and Chataigner, 1998). Narratives of civilization, the stories of how social hierarchies, urban centers and states first developed and expanded, however, place the locus of these

developments firmly in the region's most prominent lowland plains. This is because our understanding of ancient Mesopotamia as the proverbial 'cradle of civilizations' derives predominantly from lowland-centric, text-informed self-representations that perceive of, and represent its hilly flanks through the tinted glasses of elite political economy and imperial ideology. Mesopotamian texts and iconography habitually caricature transitional and highland communities as unruly mountain dwellers on the one hand, or portray them as the losers of military encounters and subordinates on the other. A dearth of archaeological work in many mountain regions of the Middle East and in the strategic landscapes that connect highlands and lowlands and formed the loci of their encounter, means that ancient stereotypes have translated almost seamlessly into modern scholarship. Their dichotomous rhetoric has as yet to be tempered with more direct evidence of the societies in question and a bottom-up and materially informed perspective of the range of relationships that ultimately produced lowland and highland identities.

The western Zagros region of modern-day Kurdish north-east Iraq and western Iran, and in particular the upper reaches of the river valley known in Arabic as the Diyala and in Kurdish as the Sirwan,³ presents a particular case in point. The Diyala river flows from its headwaters in north-west Iran through the western-most outliers of the Zagros range before it forms a wide floodplain and joins the Tigris south of modern Baghdad (Figure 1). The river valley, thus, channels movement between the fertile Sharezor high-plateau around the modern city of Suleymaniyah and the lowland plains of southern Mesopotamia. The Diyala plains just north of the Jebel Hamrin, the western-most outlier of the Zagros range, served as the artery of major historic route systems, including the Achaemenid Period (550-330 BC) Royal Road and the medieval Silk Road known as the Khorasan Highway. A more northerly route, via the Abbassan and Zohab valleys, connects to another branch of this long-distance route network.

[Figure 1]

³ The river is best known in archaeological circles as the Diyala and we shall henceforth refer to it in this manner.

Unsurprisingly, expansive Mesopotamian polities from at least the third millennium BC as well as those of Elam in highland Iran sought to exert influence and control over this strategic thoroughfare. Yet, despite the evident historic significance of the Middle and Upper Diyala valley, the area is almost entirely unexplored in archaeological terms. A cultural and socio-political *tabula rasa*, the region has had to accommodate the hypothetical ‘homelands’ of a series of little-known Zagros groups, which Mesopotamian texts refer to as Gutians, Lullubi, and Kassites. At the same time, the region is habitually bypassed in more detailed discussions of Bronze Age political geography (e.g. Frayne, 2008).

The opening of the Kurdish Region of Iraq to international archaeological research in the past five years following a decades-long hiatus due to the political situation during the Saddam-regime provides us with the opportunity to explore these and many other long-standing questions of ancient Near Eastern history anew and from a different regional and thematic angle. Equipped with matured and more nuanced conceptual frameworks for inter-cultural encounters, alongside a host of new or dramatically improved field and analytical methods, this return of archaeological research also allows us to engage with broader, cross-cultural issues in highland-lowland research.

Some of the earliest encounters between emergent Mesopotamian states and contemporary highland societies took place in the Zagros-Mesopotamian interface. We can trace from the late third millennium BC through text and image the construction of a civilized Mesopotamian self that is pitched against a Zagros, highland antithesis. Our archaeological work in the Upper Diyala valley,⁴ which connects the lowlands with the highlands and throughout much of its history takes on the character of a political and cultural borderland, allows us to begin to explore in more depth and from the bottom-up the development of local social organization and cultural tradition as well as the practices and modes of

⁴ The Sirwan Regional Project is directed by the authors in cooperation with T.E. Şerifoğlu (Bitlis Eren University, Turkey) and the Garmian Directorate of Antiquities and Heritage at Kalar.

interaction that, at least in modern academic discourse, Mesopotamia's rhetoric of alterity has tended to obscure.

In this paper we examine the Zagros-Mesopotamian interface during the later part of the Bronze Age, with a particular focus on the second half of the second millennium BC in the Upper Diyala valley, for which we present new archaeological evidence. We begin with a critical discussion of key themes in the conceptualization of highland-lowland encounters and argue for a bottom-up, archaeological approach to their investigation. We then review the culturally specific ideological construction of highland-lowland alterity in Mesopotamia, which shaped ancient perception and representation, as well as more recent scholarly engagement with questions of 'civilization' and 'the state'. Moving into our study area of the Upper Diyala valley, we present new data illustrating distinctive patterns in regional settlement, urban form, and ceramic technologies of the mid- to late second millennium BC. This multi-scalar approach to the reconstruction of local social organization and cultural identity enables us to explore the nature and intensity of the region's external relationships, in particular with the powerful states of Bronze Age Mesopotamia. It also permits us to draw broader conclusions regarding the encounter of highland-lowland borderlands and their range and admixture of potentially subtle cultural expressions of connectivity and distinctiveness.

Approaching Highland-Lowland Encounters

Mountains, their ecologies, and their life-ways were declared a 'global concern' at the Rio de Janeiro Earth Summit (UNCED, 1992), the result of a growing alarm over mountain resource over-exploitation and climate change, their detrimental impact on highland biological and cultural diversity, and the recognition of the inevitable knock-on effects on surrounding lowland regions. Before then, mountains were often regarded as a peripheral issue of national importance to a handful of mostly poor countries (Mathieu, 2011). When considered in a highland-lowland interaction context, however, about half of the world's population is affected in one way or another by what happens to and in the

mountains (Mathieu, 2011; Ives, 2001). Since 1992, there has been a surge of research on mountain issues, including the foundation of several research centers and academic journals. Much of this work, however, focuses on the present and the very recent past and, with the exception of a handful of seminal ethnographies and political histories, mountain research rarely tackles head-on the social and cultural questions of highland-lowland encounter. Among those most influential are Edmund Leach's (1970) work in the Burmese highlands, James Scott's (2001; 2009) historical syntheses and political sciences perspective on the same region and Ernest Gellner's (1969) work in the Moroccan Atlas.

The deep-time and long-term perspective of highland and transitional societies and their external relationships as well as the dramatic chronological expansion of highland and transitional landscape histories that archaeology can contribute to this growing inter-disciplinary field remains largely untapped both conceptually and in terms of field practice. In part this is due to archaeology's traditional lack of interest in the investigation of highland regions.

Archaeological research in the mountains brings with it a whole host of methodological and physical challenges (Glatz et al., 2015), but it is the fundamental social and cultural distinctions that are being drawn between highlands and lowlands in ancient as well as more recent philosophical and scholarly discourse that are responsible for this vertical disparity in our knowledge. Fernand Braudel, the father of Mediterranean studies of interaction, for instance thought that "the mountains are as a rule a world apart from civilizations which are an urban and lowland achievement. Their history is to have none, to remain always on the fringe of the great waves of civilization, even the longest and most persistent, ... are powerless to move vertically..." (Braudel, 1972: 34).

This is, however, not the case at all times and places. The most notable and well-explored exception to this widespread perception are of course the Andes, presenting an inversion of the usual narrative of civilization, its locus and the directionality of its cultural flows. Andean civilization is synonymous with the highlands, while the lowlands are portrayed as the home of savages, cannibals

and barbarians (Lau, 2013). Such notions were still vividly expressed, for instance, in 19th and 20th century political discourse (Lucero, 2008: 100-101). Although the roles are reversed, here too and in ways comparable to ancient Mesopotamia (see below) or ethnographic Burma and Vietnam (Pelley, 2002: 89 cf. Scott 2009: 100), identity, 'lo andino' in this case, is constructed through vertical geographical difference, and has been readily espoused by archaeological and ethnohistorical interpretation.

The most influential of these models has been the so-called 'vertical archipelago'. First developed by John Murra (1980), the model posits that in order to overcome the extreme verticality, variability, and unpredictability of high-altitude environments, Andean societies tended to established colonial settlements in different altitudinal/ecological zones so as to create a diversified resource base without the need to engage in trade. The result of this practice are territorially non-contiguous forms of community organization and the spatial co-existence, but limited interaction, of local lowland groups and colonist communities of different ethno-linguistic affiliations. Murra's original observations were based on ethnohistorical records of the 16th century Lupaqa kingdom, which from its capital at Chucuito, located in the altiplano on the western shore of Lake Titikaka at 3800m above sea level, established a series of lowland agricultural colonies. The model has since been the focus of much archeological research and has been applied to earlier, pre-state as well as imperial highland societies, such as, for instance, Tiwanaku (Goldstein, 2000). Criticism of the model include its structural functionalist assumptions that equate subsistence with political economy and its environmentally deterministic focus on adaptation (van Buren, 1996).

Altitude is also seen as a major structuring principle of economic and socio-cultural organization in the highlands of south-east Asia. Agricultural specialization along different altitudes and ecological niches is thought to lead to a diverse spatial patchwork of otherwise distinct communities. Here, however, this dispersed pattern of subsistence and settlement alongside other social and cultural traits, which we will come back to below, are seen as deliberate signs of

opposition to the state rather than one of its effective colonial mechanisms (Leach, 1960; Scott, 2009: 18).

Verticality and the ecological constraints and opportunities that it provides were, no doubt, among the structuring principles that shaped subsistence strategies and social organization in the highlands of the ancient Near East. With the exception of a very small number of chronologically and regionally specific cultural phenomena, such as, for instance, Early Bronze Age Transcaucasia (Greenberg and Palumbi, 2014; Wilkinson, 2014a), we know as yet too little about the early histories of mountain settlement to draw definitive conclusions about period-specific and more general trends in highland life-ways. Inspired by the region's historically (Kasaba, 2009) and ethnographically (Thevenin, 2011; Barth, 1961; Beck, 1991; Tapper, 1997) well-documented traditions of nomadism and transhumance, similar lifestyles have also been suggested for early highland communities (Levy, 1992; McIntosh, 2007; Alizadeh, 2010: 126-127; Frangipane, 2015). The archaeological and historical foundations of this backward projection of more recent organizational and subsistence models, however, requires critical re-examination (Potts, 2014: see also discussion below).

Better attested in the archaeological and historical records of the ancient Near East are episodes of lowland colonialism (in the broader sense of Stein, 2005a) in surrounding mountain regions. The Late Uruk expansion from southern Mesopotamia into Susiana (Johnson, 1987) or Assur's Anatolian colonies (Dercksen, 2001) are comparable to the Andean archipelago in that resource imbalance served as a catalyst for highland-lowland interaction and the colonial nature of its encounter (e.g. Stein, 2005b: 145-147), but neither compares well to it in terms of its underlying socio-economic premise or its resulting ethno-political spatiality.

A more positive take on the traditional narrative that characterizes most highlands as beyond the reach of civilization is the notion that mountain regions act as refugia for those escaping or opposing the state. This applies to individuals

and groups at odds with the socio-cultural constraints or the economic demands of hierarchically organized societies, such as the 'primitive rebels' of a pre-socialist Europe (Hobsbawm, 1965), and to entire societies, who reject rigid hierarchies as organizational principles internally and successfully fend off external state and imperial imposition (Scott, 2009). Thus, rather than haplessly barbarous, incapable of evolving more complex social and cultural organization, Scott (2009: 8) suggests that small-scale and less hierarchical social organization, shifting but usually short-term political alliances, greater mobility, and certain cultural practices such as a focus on oral traditions and even prideful illiteracy, are successful – if reactionary - highland strategies to void state control, and thus to remain 'barbarians by design'. Despite its upbeat take, however, this model too builds on and draws its broad inter-disciplinary appeal from the very same rhetoric of difference upon which scholars base more traditional, lowland-centric interpretive models of interaction.

With highlands and lowlands in such conceptual opposition, the landscapes that connect them and in which took place the majority of encounters between highlanders and lowlanders – labels no doubt as fluid and contextually dependent as any other form of identity (Jones, 1997) – quickly become political and cultural frontiers (Lattimore, 1962: 475; Yao, 2016: 12-14). The 'friction' of mountain terrain (Scott, 2009: 43-44) may indeed act as a deterrent for military expansion, especially in pre-modern contexts, and would have posed significant logistical challenges to the enforcement of sovereignty. The combination of diminishing returns for political economies and the distinctly different, barbarous nature of its inhabitants, however, may also be argued to provide convenient and self-imposed conceptual boundaries for early states (e.g. Zimansky, 2007).

Early state sovereignty, which may or may not involve spatially contiguous notions of territoriality (Casana, 2013), had fuzzy and highly dynamic edges, across which took place a range of complex and complicated social encounters - from armed raiding, trade and intermarriage, creating what may be referred to as borderland interaction zones (Lightfoot and Martinez, 1995; Glatz and

Matthews, 2005; Parker and Rodseth, 2005 ; Feuer, 2016; Cusick, 1998). It is here that cultural difference is negotiated and new, hybrid, practices and material culture may emerge together with new social spaces and identities (van Dommelen, 2006). Ethnographic observations of highland-lowland interaction echo the call of postcolonial approaches to distinguish between imperial discourse and borderland practice: '*The maintenance and insistence upon cultural difference*', Leach writes about the relationship between the highland Kahin and lowland Shan of northern Burma, '*can itself become a ritual action expressive of social relations*' (Leach, 1970: 17). The aim of an archaeology of highland-lowland encounters, thus, must be to look beyond the discourse of alterity and to examine the social relationships and cultural practices which it structured.

Archaeology, in the broadest sense of a material-focused approach to the past, is – in principle - well suited to identify interaction between different geographical regions and cultural spheres. Materials and things and their relative distance from a source, serve as coarse proxies for interaction, the geographical extent of such networks, and the intensity of exchange (Dudgeon and Freiwald, 2017). Materials that can be successfully sourced through stylistic or archaeometric means such as pottery or specific types of stones, however, form only a portion of the raw materials and finished goods that flowed through inter-regional exchange networks and that crucially underpinned early political economies. Metals and textiles in particular present archaeologically largely 'invisible flows' (Wilkinson, 2014b). Much of what Mesopotamian lowlanders sought from the mountains - timber, metals, nuts, wine, oils, animals and also people – are equally difficult to identify in the archaeological record. A complementary approach, thus, must be the reconstruction of the social networks through which these goods passed or were produced.

Things, people, and ways of doing permeate socio-cultural networks with varying ease. Raw materials seem to have the least cultural friction; goods finished to a particular cultural taste and function tend to move less easily (Wilkinson, 2014b: 57). When such specific things are imported or locally emulated to a significant degree, however, they point to intensive interaction.

Just how deep such connections run in social terms can be gauged through the analysis of technological style (Gosselain, 1992; Roux, 2015).

Potters, metal smiths, and other craft specialists learn their technical skills through a lengthy process of apprenticeship in which instruction involves first and foremost observation, imitation and repetition. The result of this intensive, embodied learning experience are 'communities of practice' (Lave and Wenger, 1991; Wenger, 1998) with strong social identities and specific technological styles, such as vessel forming techniques, that can be difficult or impossible to change. The same can be said for the communities and networks of scribal and archival practice that form through scribal training (Houston et al., 2003). Similarities and differences in the technical traditions through which stylistically similar items are produced, thus, can be linked to different degrees of connectivity among networks of craft practitioners. Scaled up to the level of settlements and landscapes, cumulative similarities and differences in the daily practices that produce community organization and subsistence strategies are similarly indicative of relative cultural connectivity and distance (Casana, 2016). At the other end of the spectrum, cultural tastes and modes of consumption index networks of more deliberately or strategically shared or aligned cultural practice.

Mesopotamian Geographies of Alterity

Poised to change with the results of a multitude of new archaeological research projects in the Kurdish Region of Iraq (Kopaniias et al., 2015), the western and west-central Zagros region remains as yet an archaeological *terra incognita* for most episodes of human occupation. Historical and archival sources from the mid-third millennium BC permit a very rough sketch of the region's historical geography (for a recent summary see Radner in Altaweel et al., 2012: 9-12). Among the most prominent local polities known from the historic record are Simurrum, (Eidem and Laessøe, 2001: nos. 1 and 2; Ziegler, 2011), Lullubum (Maidman, 1987: 163; Zaccagnini, 1977: 23) and Gutium (Eidem, 1985: 98; Bryce, 2009: 266). During the second half of the second millennium BC, the

prominence of these polities appears to have waned, as the Diyala valley and adjacent regions became contested among three major imperial powers: Kassite Babylonia in central Mesopotamia, the Middle Assyrian polity in northern Mesopotamia, and Elam in southwestern Iran (Figure 2).

[Figure 2]

Although locating specific polities geographically is wrought with a number of problems, not least due to the mutability of both the political and socio-cultural units that underlie these terms and their varying application to political entities, ethnic groups and individuals (Eidem and Laessøe, 2001), several later second millennium BC settlements can nonetheless be confidently located in the Upper Diyala region. Among these are the city of Padan, which was situated in a relative lowland position along the eastern bank of the river, and that of Alman, probably Zar-i-Pol-i Zohab, where one branch of the later Silk Route to and from the Iranian plateau exits the Zagros (Borger, 1970: 1). According to one source, the two settlements were separated by a two-day journey and a mountain pass (Lambert, 2007: 65). In the 15th century BC royal inscription of Agum-Kakrime, both the Lower and Upper Diyala region as well as the mountains beyond are mentioned as under Kassite control: the “Land of Eshnunna, the Land of Padan and Alman, and the Land of the Gutians”. The Sharezor too is thought to have been controlled by the Kassites in the Late Bronze Age (Postgate, 1984). However, between Padan and Alman lay Dur-Šulgi, the location of a battle according to the Kurigalzu Epic between Elamite king Hurbatila and Kurigalzu (Fuchs, 2011: 232-236). In the later 13th century BC, at the height of Kassite-Assyrian hostilities, the Elamite ruler Kidin-Hutran led two military campaigns through this region and appears to have established lasting Elamite control over Padan and Alman (Liverani, 2011: 377).

Textual sources convey overwhelmingly the perspectives of outsiders of both the people and places of the Zagros piedmont region: a history woven from snippets of information strung from lowland royal monuments, inscriptions and literary

texts.⁵ The purpose of these texts is of course neither accurate historiography nor anthropological observation, but the reproduction of cosmic order and royal power (also Michalowski, 1986). This is in part predicated on the knowledge of distant peoples and places (Said, 1978: 32; Foucault, 1980) which the royal hero acquires in the process of expeditions - military or otherwise, real or invented - into the distant corners of the known world, where real and imagined geographies blend easily. The well-known Sumerian stories surrounding the mythical mountain kingdom of Aratta rationalize and represent Mesopotamia's complicated relationship with the highlands as both economically symbiotic and culturally competitive. In the story of Enmerkar and Aratta, the Mesopotamian city of Uruk requests precious stones and building materials from the mountains, while Aratta requires grain from Mesopotamia during a period of drought. At the same time, the polities compete for the affection of the goddess of Inanna through a series of seemingly impossible tasks that the king of Aratta sets for Enmerkar, the king of Uruk. The latter of course prevails in each of the tasks and outcompetes his highland rival with the invention of writing (for a translation see Herman and Vanstiphout, 2003).

It is no coincidence, therefore, that the western Zagros comes into repeated historical focus with peaks in Mesopotamian imperial interest in the region. Cultural difference in an alien landscape provides a highland 'other' against which the lowland Mesopotamian self can be sharply accentuated. The threat of the uncivilized and dangerous other in turn furthers lowland socio-political cohesion (for the ancient Near East see e.g. Michalowski, 1986: 145; for wider perspectives see Corbey and Leerssen, 1991; Poo, 2005).

Take for instance the depiction of the highland Lullubi in the famous Naram-Sin Victory Stele (c. 2200 BC), where they are portrayed with distinctive hairstyles, dress and of inferior disposition (Winter, 1999; Bahrani, 2008: 101-114). A literary text, the Legend of Naram-Sin, describes Lullubi warriors as only half human with "bodies of cave-birds, a race with raven faces" (Michalowski, 2011:

⁵ With the exception of occasional archival sources including those from Tell Shemshara (Eidem and Laessøe, 2001) and a few relevant texts from Nuzi (Klengel, 1965: 251-252).

435). This echoes with a later Ur III description of the Gutians, another Zagros group, as a “a people who know no inhibitions, with human instincts, but canine intelligence, and monkeys’ features” (Cooper, 1983: II. 142-163). The Late Bronze Age inscription of Kassite king Agum-Kakrime talks of “the Gutians, a stupid people” (Longman, 1991: 221).

Viewed through the prism of much more recent highland-lowland dichotomies in narratives of the state (Hegel, 1956; Braudel, 1972; Khaldûn, 2005; for critical perspectives see e.g. Hobsbawm, 1965; Clastres, 1989; Scott, 2009), modern scholarship has been only too ready to accept, perpetuate and in some instance even to embellish ancient accounts. The western Zagros ‘mountain dwellers’ of early texts, for instance, were quickly assumed to be socio-politically less complex than their lowland observers, with a tribal organization and even nomadic lifestyles imagined as a result (Potts, 2014: 35-40).

Moreover, the short descriptions of important events in year names and royal inscriptions that make up the bulk of our textual sources not only focus attention on macro-historical themes of conquest, destruction and empire, but their patchy chronological coverage also invites anachronistic interpretations of local societies which mask change and development. At the same time, historical geographies remain largely afloat and blank archaeological maps make for attractive ‘homelands’ and migration routes for groups which seemingly burst onto the historical stage as their interest and territorial claims collide with those societies on whose written sources we base our histories of the ancient Near East. In the case of the Upper Diyala and western Zagros this includes a rather wide range of polities, peoples and homelands, such as Simurru, Lullubum, the Gutians and even Aramean groups (Michalowski, 2011: 105; de Boer, 2014).

Of particular interest to us in this study are groups and individuals described as Kassites in Old Babylonian sources. They too are cast as enemies of Mesopotamian civilized life. Year names of Samsuiluna of Babylon and Rim-Sin II of Larsa, for instance, describe them as “the enemy, the evildoer, the Kassites from the mountains, who cannot be driven back to the mountains” (cf. Paulus,

2011: 2). We are told of hostilities with Kassite troops but also incipient diplomatic relations and Kassite settlements around Sippar and in the northern Euphrates region. At the same time, individual Kassites appear to have integrated well into the Babylonian social fabric, where Kassite work-troops are also attested. The sack of Babylon in 1499 BC⁶ by Hittite forces brought an end to Hammurabi's Old Babylonian dynasty. In its aftermath, a Kassite dynasty took to power and re-established Babylonia as an important political force in the international arena of the Late Bronze Age. In doing so, the Kassites of Babylon became themselves an imperialist power, albeit of more limited dimensions than other contemporary polities. *Realpolitik* in the face of its increasingly powerful Assyrian and Elamite neighbors as well as the demands of an international political economy motivated Kassite involvement - this time as external overlords - in the Zagros-Mesopotamian interface and the Diyala valley more particularly.

Much about the Kassite dynasty of Babylon is as yet shrouded in mystery, including their cultural traditions and social organization leading up to and following their installation at Babylon.⁷ The conventional narrative envisages a rapid shedding of Kassite native culture in favor of Babylon's more advanced civilization (initially Lloyd, 1943; Zadoc, 1978; Sassmannhausen, 1999; Paulus, 2011). An artifact of outdated interpretive models for culture contact and change (for a general critique see e.g. Dietler, 2010) as well as lack of archaeological evidence, this version of Kassite integration together with Kassite imperial strategies and their material consequences, will undoubtedly require revision in the light of future discoveries and material analyses in the western Zagros.

⁶ Following the short chronology of (modified after Hill et al., 1988: Figure 2), for Akkad see Gasche et al. (1998).

⁷ Indeed, even the basic chronology of the Kassite period remains a contested question. Advocates of the so-called "ultra-short chronology" (Hallo, 1957-71) that is used in this paper envision a very short period of no more than a decade or two between the collapse of the Old Babylonian dynasty and the emergence of Kassite political power in southern Mesopotamia. Alternative chronologies posit a gap of up to 150 years between the two.

Archaeologies of Contact and Interaction in the Upper Diyala Valley

The lower Diyala river valley has a long history of archaeological investigations. Important third and early second millennium BC sites have been the subject of extensive excavations from the 1930s (e.g. Frankfort et al., 1932; Delougaz, 1940; Delougaz and Lloyd, 1942; Delougaz et al., 1967). The southern Diyala plains also present one of the birthplaces of regional-scale survey and landscape archaeology in the Middle East (Adams, 1965). Further upstream, the basin to the north-east of the Jebel Hamrin saw a brief but intensive burst of archaeological activity in advance of a dam construction project in the 1970s (e.g. Roaf, 1982; Postgate, 1979; Postgate and Roaf, 1982; Yaseen, 2005; Killik, 1988). By contrast, the upper reaches of the river valley between Khanaqin and Darbandikhan are almost completely unknown in archaeological terms. Along the Upper Diyala, only the most conspicuous sites were included in the Iraqi Archaeological Atlas (Iraqi General Directorate of Antiquities, 1970), while excavations of the Iraqi Department of Antiquities were carried out on the multi-period mound of Qala Shirwana and the Neolithic site of Tepe Rahim.

Since 2013, the Sirwan Regional Project (SRP) has been exploring this strategic transitional zone through a nested methodology that involves satellite-based remote sensing, extensive archaeological survey, palaeo-environmental investigations, and targeted geophysical surveys and test excavations throughout the study area (for a detailed discussion see Casana and Glatz, 2017). Of the 600 or so probable archaeological sites identified on satellite imagery, SRP has visited and recorded 148 sites to date, ranging in date from the Pre-Pottery Neolithic to the 1960s. The second millennium BC has emerged as one of the most recognized phases of early occupation, in part due to the presence of ceramic parallels with the better known central and southern Mesopotamian material culture sequence. Iconic shapes, such as the solid-footed ('Kassite') goblet (Figure 3) and distinctive yellowish buff-fired and chaff-tempered pastes make especially the Late Bronze Age readily identifiable (Adams, 1965: 49-51). Distinguishing between other sub-phases of the second millennium is less straight forward, however, due to the long-term continuity of south Mesopotamian types (Armstrong and Gasche, 2014: 1-2), which is a

characteristic shared by a large number of Bronze and Iron Age ceramic traditions across the Middle East and East Mediterranean (Glatz, 2015). Despite these difficulties, three seasons of survey, geophysical work and test excavations allow us to paint a preliminary picture of the second millennium BC, and in particular, the Late Bronze Age, in the Upper Diyala region. In the following sections, we present findings regarding regional settlement trends during the second millennium BC, the spatial characteristics and cultural dimensions of the period's most prominent sites, as well as comparative analyses of key ceramic types. These data enable us to address questions of local socio-political organization and development on the one hand and the regions cultural traditions and external relationships on the other.

[Figure 3]

Places in a Transitional Landscape

The SRP's regional investigations to date have been mainly focused on two geographically and environmentally distinct parts of the research area. The first comprises a series of small plains flanking the Diyala to the south of the modern town of Kalar, which is home to an extraordinarily dense scatter of archaeological sites of all periods. The second region encompasses the Abbasan river valley, a tributary of the Diyala/Sirwan that provides access to the Zohab valley of western Iran, and which lies at the base of the steep Kuh-i-Bamu Mountains, the frontier range of the western Zagros. Here the early-to-mid second millennium BC landscape monument of Darband-i-Belula (Figure 4) hints at the local and - in concert with the reliefs at Zar-i-Poli-i Zohab - the supra-regional significance of this communication corridor in the Bronze Age (for a recent discussion see Glatz, 2014).

[Figure 4]

Our results suggest a difference in Bronze Age settlement strategies in the two main areas of investigation, which can be partly explained by the differing topography, water resources, and agricultural potential of the two regions, but

also points to the presence of competing traditions in settlement practices among communities in the region.

[Figure 5]

In the southern plains, we find a very dense record of Bronze Age occupation, including many of the largest and most prominent sites yet recorded by our project (Figure 5). The best-known Bronze Age site in the southern plains, and indeed in our study area, is the massive mound at Qala Shirwana, located on the outskirts of modern Kalar, on the west bank of the Diyala (Figure 6). Strategically situated at the northernmost natural ford on this part of the river, the site, while measuring only 5.5ha in area, rises more than 40m above the floodplain. In the late eighteenth century, a small castle was built on top of the mound and today it serves as a city park, but Iraqi excavations in the 1970s show a long history of settlement on the mound. It is likely that the mound at Qala Shirwana was once the citadel of a much larger lower town, as is often the case at similarly-sized mounds in northern Mesopotamia. While most of the area surrounding Qala Shirwana is today covered by modern buildings, CORONA imagery from 1968 reveals a mounded feature that appears much like a lower town, measuring nearly 100ha. Construction projects within this area frequently encounter second millennium BC pottery, including a large collection of solid-footed goblets from the bazaar, suggesting that this expansive lower town may date to the Late Bronze Age and earlier. If our reconstruction is correct, Qala Shirwana would easily be the largest Bronze Age site in the Upper Diyala region, and thus a good candidate for a political capital.

[Figure 6]

To the south of Kalar in the Middle Diyala basins just above the Jebel Nasaz, satellite imagery reveals a very high density of archaeological sites, including several large settlements. In recent years, the security situation in this region has made it difficult to conduct archaeological fieldwork here, but we were able to record three sites just to the south of the Jebel Shakal. The most abundant

evidence for the second millennium BC, and more especially for Late Bronze Age occupation comes from Tepe Kalan (SRP 18), which is located in a small plain between the Jebel Shakal and the Jebel Kumar (Figure 7). The site's total settlement area amounts to ca. 20ha and includes a 4.5ha and 25m high rectangular mound. While the top of the mound, now home to a military base, contains abundant medieval ceramics, most of the mound, which may be a constructed feature, appears to date to the second millennium BC. The surface of the lower city is littered with solid-footed goblets characteristic of the Late Bronze Age as well as other, less precisely datable, second millennium materials. A second site, SRP 19, is located only a few hundred meters to the south of Tepe Kalan and also yielded large quantities of Late Bronze Age vessels. SRP 19 extends over 14ha and includes a subtle but distinct 3ha upper town, whose main occupation phase, however, seems to fall into the Iron Age.

[Figure 7]

The majority of our work in the southern part of the survey area has focused on the Khani Masi plain, which extends south of Kalar on the eastern side of the Diyala. In this area, second millennium BC ceramics are often found at tall multi-period mounds such as Imam Mohammed (SRP 17, 2.5ha), Tepe Bor (SRP 25), and SRP 71 (1.5 ha, 11m height), all of which have several small low mounds in their immediate surroundings.

However, our best evidence for the Late Bronze Age comes from a site whose morphology is rather different from these mounded sites. The Khani Masi site cluster comprises about a dozen mounded features over a total area of ca. 120ha (Figure 8). It is located at the southern tip of the Khani Masi plain and atop a relict Diyala levee, sufficiently above the active floodplain to the west as to avoid flooding and close to a series of perennial springs. The site is protected to the south by the Jebel (or Kurdish Shakh) Mirwari, a low mountain range into which the Diyala cuts a narrow passage. The most prominent, multi-period component of the site, Tell Majid (SRP 39, ca. 3ha), is located at the western end of the cluster near the modern village. This part of the site has been badly damaged by

the construction of a military garrison. Each of the other smaller mounds represents one or more different occupation phases, including several locales with prehistoric settlement. The Khani Masi cluster also includes a large 10ha mound (SRP 46) measuring only 3-4m above the plain level whose surface collection suggests occupation exclusively in the later second millennium BC. The distinctive morphology of the Khani Masi cluster, which is composed of a series of spatially connected but not fully stratigraphically overlapping phases of occupation, offers the rare opportunity to explore the long-term development and nature of settlement in the Upper Diyala region on the one hand, and allows unprecedented insights into the region's Late Bronze Age past on the other. The relatively easy access that Khani Masi offers to extensive Late Bronze Age occupation led us to select this site for more intensive investigations (see below).

[Figure 8]

In contrast to the rich and varied record of second millennium BC occupation in the southern basins, evidence for Bronze Age settlement in the northern Abbassan valley is concentrated exclusively on tall mounded sites located near perennial spring-fed streams and amidst arable land. With slightly higher rainfall and gently rolling hills, the irrigation works that were undoubtedly the basis for agriculture in the southern plains are more difficult to construct in the Abbassan valley. However, higher rainfall, driven by the orographic effect of the Zagros highlands to the east, makes dry-farming possible.

The strongest evidence for second millennium BC settlement in the Abbassan valley comes from the site of Tepe Ama Hosen (SRP 113), a site measuring less than 1ha in area but rising more than 25m above the plain. This prominent multi-period mound is located in the central portion of the river valley with clear views of both the main river and the gorge of Darband-i-Belula. An exposed stretch of wall surrounding the tell at mid-height suggests the site was probably fortified during the second millennium BC. Two other similar sites in the same valley, Tepe Qalandari (SRP 143) and Tepe Shaho (SRP 106), are similarly less than 2ha but measure 25m or more in height. All three of these sites produce a

long history of occupation spanning early prehistory through the Sasanian period, and as in other parts of the northern Fertile Crescent, seem to have constituted the primary locus for Bronze Age settlement (Wilkinson, 2003). These settlements were likely densely nucleated, and most probably fortified sites, helping to explain both their small area and deep stratification. The stark contrasts in the morphology of second millennium BC archaeological sites in the Middle Diyala basins versus the Abassan Valley and other northern tributary valleys points to a significant cultural differences between these regions and to the likely complex intersection of differing communities during this period.

Khani Masi - A Late Bronze Age Monumental Complex

Because the Khani Masi site cluster offers the possibility for broad, horizontal geophysical survey and excavation across a range of chronological periods, including the Late Bronze Age component at SRP 46, the site was selected for more intensive investigations. To date we have undertaken intensive surface collection, aerial photogrammetric mapping, aerial thermography, and magnetic gradiometry over most of the second millennium settlement at SRP 46. Guided by the results of these surveys, we then carried out two test excavations to collect stratified samples for relative and absolute dating.

Surface survey yielded large numbers of standardized square (ca. 36 x 36 x 8cm) burned mud bricks along with copious amounts of pottery diagnostic of the mid-later second millennium BC, often associated with fine ashy soils. Second millennium BC pottery was also found on other components of the Khani Masi cluster, suggesting that the settlement extended beyond the flat area where investigations have thus far concentrated. Significantly, almost no later materials were found in surface collection, save for a few stray Sasanian sherds best interpreted as scatter from the nearby mound of SRP 44, a primarily Sasanian component of the Khani Masi cluster.

In spring 2014, we carried out a magnetic gradiometry survey using a Bartington GRAD-601 Dual gradiometer over ca. 8ha of SRP 46 (Figure 9). Transects within

20x20m grids were spaced at 0.25m and sampled at eight readings per meter. The high concentration of burned mudbrick architecture against the underlying alluvial soils results in very good architectural visibility in magnetic data. In order to help interpret magnetometry and rule out the influence of surface features, we also collected high-resolution aerial kite photography of the site. These images were then processed to produce very high-resolution (ca. 2cm) orthoimagery as well as a detailed digital surface model for the site, both registered to the same site grid for easy comparison.

[Figure 9]

Magnetic data reveal extensive remains of monumental public architecture across SRP 46, much of it apparently well preserved due to its destruction by fire and lack of substantial subsequent resettlement. The largest building complex revealed in the data is at the southeastern end of the site, where an intensively burned mudbrick wall, or perhaps a wall built of baked brick, stretches at least 130m in length. The linear feature is nearly 20m thick, suggesting it may be a perimeter or temenos wall with a series of rooms along the inside. The southern corner of the site, enclosed by the temenos-like feature, is occupied by a rectangular building complex measuring approximately 80x90m. It is difficult to discern in the magnetic data whether this feature is best interpreted as a single building complex with a series of interior walls, rooms, and courtyards, or as a series of 30-40m, orthogonally planned structures. A grid plan for 4-6 individual buildings, each of which would be considerably larger than contemporary Late Bronze Age ('Kassite') houses measuring about 10x15m (Woolley, 1965: Plate 63A) (Figure 10), would be very unusual and quite unexpected within the realm of Bronze Age Mesopotamian urban planning. On the other hand, individual monumental building complexes of a similar scale to the 80x90m feature at Khani Masi are found frequently at major Mesopotamian sites. In addition, numerous elements of the building complex show parallels to Bronze Age monumental buildings in the region.

[Figure 10]

Compared to earlier and later periods, excavated 'Kassite-period' monumental architecture is relatively rare, but a potential parallel to the building at Khani Masi may be found at the somewhat earlier Inanna Kititum temple complex at Ischali, one of several major sites excavated by the University of Chicago in the Lower Diyala region during the 1930s (Hill et al., 1988: Figure 2). While it was originally dated to the early second millennium, more recent analysis suggests the Kititum complex dates as late as the 17th to the 16th centuries BC (Armstrong and Gasche, 2014: 95), placing it within two centuries or so of the likely construction of the Khani Masi complex. As in the Kititum complex, there are several seemingly vacant rectangular areas inside the building at Khani Masi, measuring 20-30m on a side, suggestive of large courtyards—a common feature in monumental palatial and temple architecture. Such monumental buildings are also typically surrounded by a temenos wall, as appears to be the case at Khani Masi. One intensively burned rectangular feature at the northwestern side of the complex measuring 20x15m could be a later rebuilding, or a feature built of baked bricks, such as a paved courtyard, or even a small structure. The smaller buildings inside the complex at Khani Masi also appear similar to buildings at Ischali called 'Serai' in the excavation report (Hill et al., 1988: 83-87, Figures 24). A series of cuneiform tablets recovered from the two structures at Ischali suggest they were the private residence of priests.

North of the large building complex, there are numerous other sizable buildings visible in the magnetic data. One of the clearest and potentially most significant is a trapezoidal building measuring approximately 30x40m, located just north of the monumental complex. The building appears to possess a large central courtyard on the east, flanked by a series of smaller rooms aligned on the west. There are numerous strong dipolar anomalies in the magnetic data, which could be modern metal objects, but given their concentration inside the Bronze Age building, may be better interpreted as ancient metal or highly magnetic objects. The size and plan of this building, with its irregular suite of outer rooms, resembles the layout of the so-called 'outhouse', possibly a stable or caravanserai located just inside the Shamash Gate at Ischali (Hill et al., 1988: 82, Figures 23).

At the northern end of SRP46, magnetic survey was complicated by a series of steep topographic features, forming broadly rectilinear mounds measuring 20-40m in length and rising 5-6m in height. These features could be the remains of an ancient fortification system, as they front directly onto the Diyala as well as the modern road—likely the same course as the ancient road which would have followed the higher topography along the Diyala levee. Just to the southeast is another small mounded feature, measuring 20x20m in area but rising to about 10m above the floodplain, making it the highest point on the site. Magnetic gradiometry surrounding the mound shows it is the high point of a rectangular building measuring 23x17m, with a 20x25m open courtyard or entrance vestibule to the southeast, and thus is fairly confidently interpreted as a small temple. Later third and second millennium BC south Mesopotamian temples, in contrast to the Assyrian tradition (Novák, 2001), tend to conform to an axial architectural scheme, whose main features include a symmetric building layout centered on a large courtyard surrounded by rooms, a broad-room cella and an entrance vestibule (Heinrich, 1982: 18-21). The building at Khani Masi is broadly similar in scale to smaller Late Bronze Age temples such as the NIN-GIZ-ZID-DA temple of Kurigalzu at Ur, measuring ca. 20x45m (Woolley, 1965: Plate 54), and a later version of the same temple (Woolley, 1965: Plate 55).

In order to test our interpretation that SRP46 was destroyed by fire and recover more secure dating evidence for this unique site, two 1x4m test excavations were undertaken in 2014. These test trenches, placed within the rectangular feature inside the monumental building complex, revealed a thick layer of destruction collapse containing dark burnt soil and large numbers of burnt mudbrick fragments. A later partial rebuilding was found in the form of a poorly preserved plaster floor, but the loose destruction debris continued to the bottom of the test trench at 1.5m below the surface, suggestive of very good architectural preservation. A charcoal sample from within this destruction horizon provides a *terminus post quem* to between 1258-1233 cal. BC (Figure 11). This date is in line with a Late Bronze Age periodization suggested by both surface and stratified pottery from the site. Following the destruction event, SRP 46 appears to have

remained mostly unoccupied, save for a partial and brief phase of rebuilding. The abandonment of what must have been a key administrative and religious center suggests a significant rupture in regional socio-political structure. Future excavations will determine whether this abandonment took place in the final decades of the 13th century BC or somewhat later at the end of the Kassite Period in the 11th century BC.

[Figure 11]

Whether or not the monumental buildings at Khani Masi may be identified as temples or served more directly purposes of political administration and representation are questions we also hope to answer in the coming years. The size and overall architectural layout of the structures at SRP 46, however, leave little doubt about the public nature of the complex and its regional, if not wider significance, which becomes even more apparent when contrasted with the rather modest dimensions (ca. 40x30m) of, for instance, the so-called governor's place at Tell Yelkhi, a 14th century BC site in the Hamrin basin (Invernizzi, 1980: 32, figure D). Indeed, evidence for Late Bronze Age palatial architecture in southern Mesopotamia is limited to the partially excavated palace at Dur-Kurigalzu, the Kassite royal residence (Baqir, 1944; 1945; 1946). Several Kassite rulers, however, vigorously engaged in the construction, and more frequently the restoration, of temples with Ur III or Old Babylonian predecessors at sites such as Isin, Larsa, Nippur, Ur, and Uruk (for a summary and full bibliography see Clayden, 1989). During the Late Bronze Age, southern Mesopotamia became politically focused on Babylon, while other Babylonian cities' role was reduced to cult centers, whose temples formed part of the Kassite state administration and functioned as redistributive and production centers, blurring our modern functional distinction between temple and palace (Liverani, 2011: 367). The relationship of Khani Masi, as well as Qala Shirwana and Tepe Kalan with external political powers is similarly a question for future research, since although architecture and pottery point towards a south Mesopotamian cultural connection, this need not also imply a firm or enduring political link.

It is also in this light that we probably ought to interpret the final and devastating destructing of SRP 46 in the later 13th century BC, which falls into a period of increased tensions between Kassite Babylon and the rising Middle Assyrian power (Brinkman, 1976: 31). Tukulti-Ninurta I (r. 1233-1197 BC) sacked Babylon in 1220 BC and installed a governor in Dur-Kurigalzu for seven years. Before then he appears to have been active in the eastern Tigris and Middle Diyala region for several years. A contemporary text shows that Assyria had imposed taxes on the Land of Zamban located on the Middle Diyala (Llop-Raduà, 2011: Fig. 1). The destructions of Tell Imlihiye and Tell Zubeidi in the Hamrin, basin, for instance, have in the past been linked to Tukulti-Ninurta I's campaigns in the region (Boehmer and Dämmer, 1985: 60; Kessler, 1982). It is perfectly plausible that a military assault caused the destruction of Khani Masi, Assyrians but also Elamites, local or even Kassites contingents may be responsible. Other, less heroic causes are of course equally possible, as attested by the Great Fire of London which laid waste to a large portion of the city in AD 1666 and was caused by a spark from a baker's oven. There is as yet no evidence to support or challenge any of these possibilities at SRP 46. What is clear, however, is that the site's monumental structures were not rebuilt and that it apparently lost its socio-political or cultic significance during the following period.

Diverse Practice, Hybrid Goblets?

The ceramic assemblage found in the Upper Diyala region is dominated in many periods by local cultural traditions and displays many idiosyncrasies when compared to better-known assemblages from southern Mesopotamia, southwestern Iran, or the Jazireh of northern Mesopotamia. There is, for example, a distinctively local Proto-Hassuna (late 7th-early 6th millennia BC) assemblage (Casana and Glatz, 2017) and a surprising absence so far of Samarran (5500-4800 BC) pottery, found only a short distance away at Chogha Mami (Oates, 1969). The region also appears to have formed the south-eastern limit of the Halaf (ca. 5500-4500 BC) cultural sphere, generally associated with northern Mesopotamia, and the north-eastern perimeter of early Ubaid (ca.

5000-4000 BC) traditions better known in the south (Adams, 1965: 36). The later fourth and early third millennium BC too is characterized by local traditions, and by a markedly low density of south-Mesopotamian Uruk period materials. This is mirrored also in the Hamrin basin, which has only one site with south-Mesopotamian cultural characteristics at Tell Rubeidheh (Killik, 1988), and a distinctive third millennium BC architectural tradition, sealing practice and ceramic preferences (Carter, 1987; Renette, 2013). Also distinctive are the Shrarezor's third and second millennium BC connections with Iran (Renette, 2016) and the presence of a localized ceramic tradition with incised decorative patterns, the so-called Shamlu ware in the early second millennium BC (Altaweel et al., 2012: 26, Fig. 14).

The ceramic data of the Middle Diyala basins, by contrast, appears to show a familiarity of local potters with Babylonian vessel types throughout the second millennium BC, although the intensity of this connection varied. Evidence from the 14th century BC suggest a more limited Babylonian repertoire, while the 13th and 12th century production in the Hamrin points to increasingly intensive relationships with the south (Armstrong and Gasche, 2014: 102), against a background of continuity in local tradition (Orselini pers. com. 27 April 2016).

A pilot investigation into the production *chaîne opératoire* of footed - 'Kassite' - goblets from Khani Masi and Tepe Kalan, provides a first glimpse of the complexity of inter-regional relationships in this transitional region in the context of ceramic production. Footed goblets in the Babylonian tradition are wheel-made, probably from a cone and require significant potting skill, acquired through years of apprenticeship, especially in cases where the vessel mouth was too restricted to allow the potter to insert their hand to thin out the vessel bottom (Franken and Kalsbeek, 1984). All vessels examined from the Upper Diyala thus far show the distinctive macroscopic signs of wheel-production, especially evident in the ridging on the vessel interiors (Figure 12).

A common problem in the production of footed goblets, alongside other Babylonian vessel types, are cracks developing on the base during drying. Such

cracks could be patched up using additional clay (Armstrong and Gasche, 2014: 14, 79 e.g. Pl. 62.9, Pl. 101:3), but there is also evidence for preventative measures to stop cracks from occurring. One method, first attested in the early 18th century BC, is the 'plugged base' (Armstrong and Gasche, 2014: e.g. Pl. 100: 7). Here a hole was left in the base when it was removed from the wheel and subsequently filled with coarsely chaff-tempered clay. Plugged bases are particularly prominent in the 17th and 16th centuries BC, but are attested up until the 13th century. From 1400 onwards, a second type of 'filled-in bases' becomes more frequent. This method uses higher tempered clay to fill in the entire interior of the base, potentially increasing the speed of production by comparison with plugged bases (Armstrong and Gasche, 2014: e.g. Pl. 99: 4; van As and Jacobs, 1988).

[Figure 12]

The Late Bronze Age goblets from Kahni Masi and Tepe Kalan show a wide variety of approaches to prevent cracking. This includes (a) a possible case of a 'plugged base', (b) the use of higher tempered clay on the inside only, (c) no apparent attempt to prevent or deal with cracking, (d) the use of higher tempered clay on the outside of the vessel bottom only and (e) a classic case of a 'filled-in base'. Thus far 'filled-in bases' have been identified only at Tepe Kalan and not at Khani Masi, which boasts the greatest variety in solutions against cracking.

There is also a marked difference in vessel color between the two sites. The examples from Tepe Kalan have a thin pale buff exterior layer but are otherwise pinkish-red in color, all of the Khani Masi vessels are fired pale buff throughout. This suggests a difference in firing and possibly clay composition in the pottery from the two sites and, thus, most likely two distinct production workshops. More vessels will have to be examined to establish the degree to which the two workshops may have differed in technological detail to each other and production centers in Babylonia. Interesting to note is that both Tepe Kalan and

Khani Masi goblets on the outside, and thus to the consumer, had the same characteristic pale buff appearance.

In sum, it would seem that we are looking at the highly localized production of pottery types that are stylistically associated with the Babylonian tradition. In terms of the technological characteristics, there are definitive similarities in practice, and thus also training, such as wheel-production and in some instances also problem solving strategies. At Khani Masi, however, several different approaches to vessel production are attested, which may suggest that potters trained in different, and presumably local potting communities and not entirely familiar with, or willing to employ, Babylonian methods may have been involved in their production. By way of a comparison, Babylonian-style goblets at Susa, which were first introduced in the 15th century BC, but continued to be produced locally until the end of the 2nd millennium evolved morphologically on a separate trajectory from Babylonia. These so-called 'Elamite goblets' also show differences in manufacturing method though a continued use of plugged bases (Armstrong and Gasche, 2014: 99).

Sketches of a Borderland

The wide arching piedmont zone that connects the Mesopotamian plains with the Zagros highlands can be characterised as cultural borderlands, and often also political frontier zones, for much of its past. The degree and direction of the region's cultural connectivity with neighbouring highland and lowland regions as well as the prominence of localized traditions waxed and waned through time. There is, however, a recognizable pattern, which places the region at the edges of numerous large-scale material culture phenomena and political entities, attesting to its strategic geopolitical location and its role as a mediator among distinct topographic, and varyingly also cultural and political realms. The challenge now lies in the formulation of a local and bottom-up interpretation of what historically specific patterns of cultural connectivity and local idiosyncrasy and their relative balance imply about the nature and range of these external relationships.

Archaeological data presented herein offer new perspectives on the communities who inhabited the Upper Diyala region during the second millennium BC, and their varied relationships and connections to surrounding areas. Regional survey data, for example, show the flourishing of urban centers throughout much of the second millennium BC, in contrast to much of the Mesopotamian region, which underwent a dramatic rupture in settlement and in particular urban life. Textual data suggest that beginning from the mid 17th and lasting until the mid-to-late 15th century BC, all major urban centers ceased to function (Stone, 1977; Armstrong and Gasche, 2014: 2), with evidence for renewed settlement at, for instance, Nippur dating to the early Kassite period around 1400 BC. A similar trend is also evident in the settlement record of Upper Mesopotamia (Riel et al., 2008) and the plains east of the Tigris (Mühl, 2012). The Lower Diyala region too experienced a sharp decline in the overall density of settlement, the degree of urbanization as well as the average size of individual communities from the Old Babylonian period onwards. During the Late Bronze Age, two of the most important sites in the region, both of which were still important centers during the Old Babylonian period – Kafajeh (ca. 100ha) and Ishchali (24ha) - are no longer occupied in the Late Bronze Age. A large proportion of Late Bronze Age settlements appear to be new foundations and only a limited number continue into the subsequent phase, with the overall pattern suggesting a clustering of small sites around one or two regional centers, which were, however, of a much reduced size from the preceding periods (Adams, 1965: 49-51). Settlement in the Hamrin basin just to the south of our survey area also appears to show a decline in settlement from the Middle to the Late Bronze Age (e.g. Killik, 1988: Figures 6-7) as the Tell Haddad/Tell el-Sib site complex (ca. 120ha), which yielded Old Babylonian textual materials and may be the important city of Me-Turan (Al-Rawi, 1994), and the secondary sites of Tell es-Suleimah (Ghassan, 1995) and Tell Abga (both ca. 5ha), were abandoned.

One of the only sites in the Hamrin basin with definitive occupation during the Late Bronze Age is the small site of Tell Yelkhi, where excavations unearthed a ca. 40x30m architectural complex. Built on top of an earlier Old Babylonian

temple structure, the excavators interpreted this Kassite-period building as a governor's residence (Invernizzi, 1980; Bergamini et al., 2002-3) and Clayden (1989: 105) proposed a function similar to the Middle Assyrian *dimtu/dunnu* system. This interpretation, however presupposes an external imperial power, but the site could simply be a local agricultural estate. A re-assessment of the ceramic evidence from Tell Yelkhi identified a largely local pottery assemblage with few typical Kassite-Babylonian shapes that place it into the 14th century BC (Armstrong and Gasche, 2014: 11-12). The strong local material culture component at the site hints either at a local character of the structure and its occupants or provides testament to the complex cultural dynamics of early imperial encounters.

Several smaller Late Bronze Age sites dot the surroundings of Tell Yelkhi and include the pottery manufacturing site of Tell Kesaran (Fiorina, 1984) and Tell Zubeidi (Boehmer and Dämmer, 1985), which date to the 13th-12th centuries BC and show a much broader range of south Mesopotamian ceramic features together with the smaller sites of Tell Ajamat and Tell Mughir (Armstrong and Gasche, 2014: 11-12). A vessel containing elements of a Kassite-period 'family' archive of primarily economic texts was found by local farmers at Tell Imlihiye (ca. 4.7ha) (Kessler, 1982). These provide some insights into the economic activities of what may have been an agricultural estate, but the Late Bronze Age levels at the site were too damaged by erosion to yield any further information.

In contrast to the Mesopotamian and Lower Diyala plains, no dramatic ruptures are attested in the second millennium BC settlement landscapes of the Sharezor high-plateau to the north of our survey area, which may have even experienced a slight increase in the number of sites in the Late Bronze Age. Four of these sites are reported to have typical south Mesopotamian pottery, while seven are characterized by local traditions (Altaweel et al., 2012: 25). Our preliminary results from the Upper Diyala suggest that like the Sharezor, the region did not experience a dramatic decline in settlement numbers or the ruralization recorded elsewhere. Quite to the contrary, the region to the south of Kalar

included at least two but more likely three sizeable urban centers at Tepe Kalan, Khani Masi and Qala Shirwana.

In terms of size and site morphology, Tepe Kalan compares well with sites such as Tell Bakr Awa in the Sharezor, which is ca. 15ha in size, with a central mound of 40m height surrounded by a lower city with a strong second millennium BC component (Miglus et al., 2013: 68, Fig. 62). The Late Bronze Age site of Tell Bazmusian in the Raniya plain, also measured about 17ha and had a 23m high-mound prior to its flooding by Lake Dokan. The site was excavated in the late 1960s by an Iraqi team and Level III yielded a substantial structure identified as a temple on the high-mound as well as a series of fragmentary Middle Assyrian cuneiform tablets from a pit nearby (as-Soof, 1970; Laessøe, 1959).

Although of a different magnitude in terms of settlement extent with the likely exception of Qala Shirwana, the 105ha site of Kurd Qaburstan in the Erbil plain and likely capital of the Middle Bronze Age kingdom of Qabra, features a central high-mound, rising to up to 17m, and surrounding lower city which is in this case ringed by a fortification wall (Ur et al., 2013: 99-100, Fig. 107.). The morphology of the region's Late Bronze Age center, Qasr Shemamok, capital of the Assyrian province of Kilizu (Radner, 2006: 46-47), is rather different, showing a central high mound and a 60ha walled lower city extending to the south, and with signs of low-density extra-mural settlement and industrial activities (Ur et al., 2013: 99-100, Fig. 108.).

In terms of morphology and settlement history, second millennium sites in the Upper Diyala region more closely parallel those found in these piedmont regions of the Zagros, rather than the plains of Mesopotamia. Most sites saw continuous occupation during the second millennium BC, urban centers grew and flourished, and some of the largest sites mirror the high-citadel/lower fortified town urban plan common in dry-farmed zones to the north. At the same time, sites like Khani Masi that existed within this same settled landscape show much closer ties to southern Mesopotamian traditions. The site's morphology, as an expansive, undulating, low mound is much more like those in the lower Diyala, such as Tell

Asmar (240ha), Kafajeh (100ha) and Ishchali (24ha). The architectural layout revealed by geophysics shows many close parallels to plans from these same sites, particularly at Ishchali, as discussed above.

Ceramics from both Khani Masi and Tepe Kalan on the opposite bank of the Diyala are also undeniably linked to south Mesopotamian traditions. We have also seen, however, from our ceramic analysis that this link, while strong, is not straight forward and, thus, easily explained through generic notions of imperial imposition or acculturation. Instead it demonstrates the need to be cautious of external cultural perspectives that inevitably encourage conclusions of cultural derivitism and invite interpretive leaps from cultural connectivity to political dependence, both encouraged and justified by the rhetoric of alterity and the narratives of imperialism we have discussed above.

The third and early second millennium BC landscape monuments at Darband-i-Gawr, Zar-i-Pol-i Zohab, and especially that of Darband-i-Belula, their use of Akkadian and the cuneiform script as well as their depictive styles and themes of victorious royal heroes, for instance, have been interpreted in the past as cultural derivations and deviations from a Mesopotamian aesthetic ideal (for a summary see Glatz, 2014: 128). Ceramic evidence from Tell Yelkhi in the Hamrin basin and surrounding sites and production areas, have led to its interpretation as a Kassite administrative outpost in the second half of the second millennium BC. Both perspectives limit unduly and unnecessarily what we can tease from material culture, be that potsherds or rock reliefs, with regards to local cultural traditions, borderland identities and modes of engagement and interaction with neighboring regions.

The landscape monuments of the western Zagros index a rather intimate familiarity with Mesopotamian cultural traditions. Yet, they also evidence an intensity of interaction that includes the training or borrowing of highly specialized professionals which goes far beyond the short-term, if recursive, military encounters emphasized in written sources. At the same time none of these monuments simply copy lowland culture, but deliberately translate both

the concept of royal representation and the use of cuneiform writing onto an entirely new medium: the living rock in highland/transitional landscapes, and thus, create new, hybrid traditions - as one would expect in such loci of cultural encounter.

Conclusions

In a recent study Potts (2014) challenged us to re-examine archaeological evidence for the antiquity of nomadism in Iran and the wider Near East and to critically review inherited stereotypes of the alterity and primitivism of the Bronze Age inhabitants of the western Zagros. Eidem (1985: 106); see also Radner's discussion in Altaweel et al. (2012) already pointed out that both external and local textual sources demonstrate the existence not primarily of a tribal or nomadic population in the western Zagros from at least the mid-to-late third millennium BC, but of a series of territorial political entities. Textual sources indicate that these polities, Simurrum and Gutium most prominent among them, stood in variable degrees of opposition, collaboration, and power asymmetries with each other as well as the outside world. Yet archaeological evidence that would enable us to interrogate the historical record and offer a local perspective on the peoples and places of the western Zagros during the Bronze Age has until now been largely lacking. Results of the Sirwan Regional Project reported herein have begun to yield archaeological data that allows us to engage with questions of local socio-political development and organization and to re-examine text-derived perceptions of transitional and highland communities and the nature of their external relationships.

So far we have been able to document evidence for a complex multi-tier socio-political organization based around intensive agricultural production during the second millennium BC. Their centers, Khani Masi, Tepe Kalan, and Qala Shirwana, may well one day yield textual sources of their own, but their strategic location, size and the presence of public buildings suggest a regional, if not supra-regional, significance for these sites. This also makes them likely

candidates for settlements mentioned in existing Bronze Age texts, with Khani Masi in particular a candidate for Late Bronze Age Padan.

To what extent the regional developments we have charted within the Upper Diyala region occurred in response to external pressures (Stolper, 1982) and were subsequently nested within wider imperial frameworks of control and interaction, remains to be established. The traditional approach to the entirety of the western Zagros during the Bronze Age and other periods has been to see its development as steered by external forces and their competition over this strategically connected landscape. We as yet lack sufficient archaeological data to nuance the imperialist discourse of Kassite, Assyrian as well as Elamite royal inscriptions and campaign reports, but the sites recorded thus far on the Upper Diyala would certainly have been strategically placed to resist or play, at times at least, such external competition over the region to their own advantage.

In specific historical terms, then, our results, put into question the role of this highland-lowland borderland as the powerless and passive bone of contention traditionally assigned to it. More broadly relevant to the study of highland-lowland relationships, is the emerging evidence from the wider Upper Diyala region for intensive cultural connectivity and the varied forms of interaction and processes of exchange and transformation they point to. These confirm ethnographically-based expectations that the rhetoric of vertical difference, so explicit in Mesopotamian sources, underwrites and structures intensive social and cultural contact. The military campaigns or occasional exchange of goods mentioned in the texts are only a small subset of these interactions, which included, for instance, a variety of craft specialists and their wider networks of practitioners. A place of encounter between highlands and lowlands, the material culture of the Upper Diyala region is beginning to show a varied and complex mix of stylistic similarities, by which we mean visually or formally similar types of artifacts, particularly with central Mesopotamia, more deep-reaching commonalities of practice but also a range of hybridized or local ways of doing. The latter are attested in the development of landscape monuments as a genre of depictive expression, their seemingly idiosyncratic iconography and unorthodox

use of Akkadian cuneiform in the early part of the second millennium BC and in the different solutions adopted by local potters in the production of Mesopotamian-style pottery during the Late Bronze Age. Our multi-scalar and bottom-up archaeological approach also has begun to produce data that defy overly simple notions of the directions of civilizational flows, which - with the Andean exception - is traditionally thought to emanate from lowland centers, and the receptive passivity of groups located in its topographical borderlands.

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Figure Captions

Figure 1 Map of the Sirwan/Diyala region.

Figure 2 Map of the wider study region with key sites mentioned in the text.

Figure 3 Surface collection of solid-footed ('Kassite') goblets from Tepe Kalan (SRP 18).

Figure 4 Photograph and 3D photogrammetric model of the landscape monument at Darband-i-Belula (photography: Claudia Glatz; image processing: Elise Jakoby Laugier).

Figure 5 Second millennium BC settlements identified by SRP along the Sirwan/Upper Diyala.

Figure 6 1968 CORONA satellite image of Qala Shirwana (SRP 1) illustrating possible extent of Bronze Age lower town, compared to a 2011 satellite image revealing urban sprawl of modern Kalar (2011 imagery © DigitalGlobe 2015).

Figure 7 Tepe Kalan (SRP 18) a major second millennium BC site at the southern end of the SPR survey area. Photograph (top) shows the high mound at the site, currently occupied by a military base (photo credit Jesse Casana). 1968 CORONA satellite image (lower left) and 2011 image (lower right © DigitalGlobe 2015) reveal the extent of the lower town and the rectangular upper mound.

Figure 8 The Khani Masi site cluster, appearing on a 2011 satellite image (© DigitalGlobe 2015). Mounds on the site date to many periods from late Neolithic through medieval, but a large area of Late Bronze Age settlement is preserved at SRP46.

Figure 9 Top: Results of magnetic gradiometry survey on the southern half of SRP46, one of the mounds at Khani Masi (top). Bottom: Interpretive architectural plan, showing several monumental buildings.

Figure 10 Late Bronze Age Mesopotamian architectural comparisons: (1) Kassite house from Ur (modified after Woolley, 1965: Plate 63A), (2) 'governor's palace', Tell Yelkhi (modified after Invernizzi, 1980: 32, figure D), (3) NIN-GIZ-ZID-DA Temple of Kuri-Galzu, Ur (modified after Woolley, 1965: Plate 54), (4) later Kassite-period NIN-GIZ-ZID-DA Temple, Ur (modified after Woolley, 1965: Plate 55), (5) Kititum-Complex, Ischali (modified after Hill et al., 1988: Figure 2).

Figure 11 Radiocarbon date for Trench 2 at SRP 46 (at 95.4% probability; SUREC-53433).

Figure 12 Late Bronze Age goblets from SRP 46 (a-d) and SRP 18 (e) showing varying manufacturing approaches to prevent the cracking of the base (photography: Claudia Glatz).

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