

Walking with the Unicorn

Social Organization and Material Culture
in Ancient South Asia

Jonathan Mark Kenoyer
Felicitation Volume

Edited by

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Front cover: SEM microphotograph of Indus unicorn seal H95-2491 from Harappa (photograph by J. Mark Kenoyer © Harappa Archaeological Research Project).

Back cover, background: Pot from the Cemetery H Culture levels of Harappa with a hoard of beads and decorative objects (photograph by Toshihiko Kakima © Prof. Hideo Kondo and NHK promotions).

Back cover, box: Jonathan Mark Kenoyer excavating a unicorn seal found at Harappa (© Harappa Archaeological Research Project).



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The Harappan ‘Veneer’ and the Forging of Urban Identity

Mary A. Davis

The widespread similarity and standardization heralded by early scholars of Indus Studies has been aptly termed the ‘Harappan Veneer’ by J. M. Kenoyer and R. H. Meadow (1997). This uniformity of material culture spread across a relatively large region and overlaid a diverse population, which both produced and consumed it. This paper examines the possible mechanisms that could have resulted in the notable similarities in material culture across the Indus and examines models of Indus identity and urban immigration. I propose that as urbanism developed in South Asia a shared use of material culture and symbolic representations were forged through the integration of different regions linked by trade and craft traditions. This new material culture was instrumental in creating a common identity for residents of urban centers who, like in all preindustrial cities were constantly immigrating to the emerging urban centers. The emerging ‘Harappan style’ was an ethnically neutral style that was a signal of being cosmopolitan and well connected, and was broadly adapted in a way that has historic and modern parallels in urban studies rather than being a material manifestation of ethnic identity. Individuals that used these ‘Harappan’ items did not seem themselves as ‘Harappans’ but as ambitious persons with identities that would have been more locally rooted.

Keywords: Indus Civilization, Ethnicity, Identity, Material Culture, Urbanism, Branding, Ethnogenesis.

This paper seeks to address the processes that lie behind similarities in material culture during the Urbanized, or Integration, Era of the Indus Civilization. In the past, there were few questions as to why such extensive common suites of material culture existed. As regional and temporal variations in material culture begin to be more thoughtfully explored, questions remain regarding the similarity that exists across the urbanized landscape of the Greater Indus region. Mechanisms for the maintenance of these similarities through networks of craftspeople and extensive trade have been extensively discussed by Kenoyer (Kenoyer 1984, 1989, 1995, 1997, 2000; Meadow and Kenoyer 1997). Kenoyer and others argue that Indus or ‘Harappan’ materials and symbols functioned to unite people of different classes and occupations (Kenoyer 2000; Vidale and Miller 2001). What remains to be better understood is why there was a need for maintaining these similarities over such a vast area, what the effects were, and what this similarity in material culture actually represented.¹ This chapter sets out to address if the archaeological culture designated as Harappan represent an ethnicity or identity, or as it may alternatively be phrased, as ‘Did the Harappans recognize themselves as Harappan?’

Emic understandings of identity are problematic within archaeology, particularly when dealing with long-lasting traditions that extend over an incredibly vast and diverse geographic area such as the greater

Indus region. Individual and group identities, including ethnicity, would have shifted over time, space, and situationally, with some facets of identity being variously activated or latent in different contexts and conceived of differently for each individual and group (Brubaker 2004; Casella and Folwer 2005; Hu 2013; Jones 1997; Meskell 2001: 201; Shennan 1989; Tilly 2005: 144). Although an emic understanding of ‘Harappan’ identity is beyond our reach, here I explore the possibility of testing if the homogenization of styles is a reflection of ethnogenesis, that is, the formation of a new ‘Harappan’ people, or other processes that were used to unite diverse peoples. Four models of the intersection of urbanization, material culture, and identity are presented and evaluated based on published data.

Background

The Indus Tradition, particularly during the urban phases, integrated many regions, ecological zones, subsistence practices, material cultures, and persons over a geographic range much larger than any other contemporary civilization (Petrie *et al.* 2017; Weber *et al.* 2010; Madella and Fuller 2006; Weber and Kashyap 2016; Weber *et al.* 2011; Possehl 1992).

A suite of material culture that includes utilitarian products, prestige goods, and items showing imitation or affiliations with prestige goods is shared by the Indus Tradition (Kenoyer 2000). Hallmark artifacts include classic black on red pottery with distinctive motifs and a series of forms (Dales and Kenoyer 1986), baked and raw bricks with a ratio of 1:2:4 (Kenoyer 1998a; Khan and Lemmen 2014), a shared script, stylistically similar seals, highly standardized system(s) of weights (Kenoyer 2010; Miller 2013), Rohri-like chert blade technology (Allchin 1979; Cleland 1977; Davis 2016;

¹ There is no general model for why material culture suites with stylistic similarities were used to unite different and even competing political polities. Those developed in the Maya region, for example, focus on ‘high culture’ being utilized by the elites to achieve and maintain access to exotic goods used to legitimize their political power claims locally. Such models do not fit the Indus region as these political power strategies do not seem to be extensively employed by Indus elites comparatively and they do not account for the stylistic similarity in utilitarian or non-elite goods.

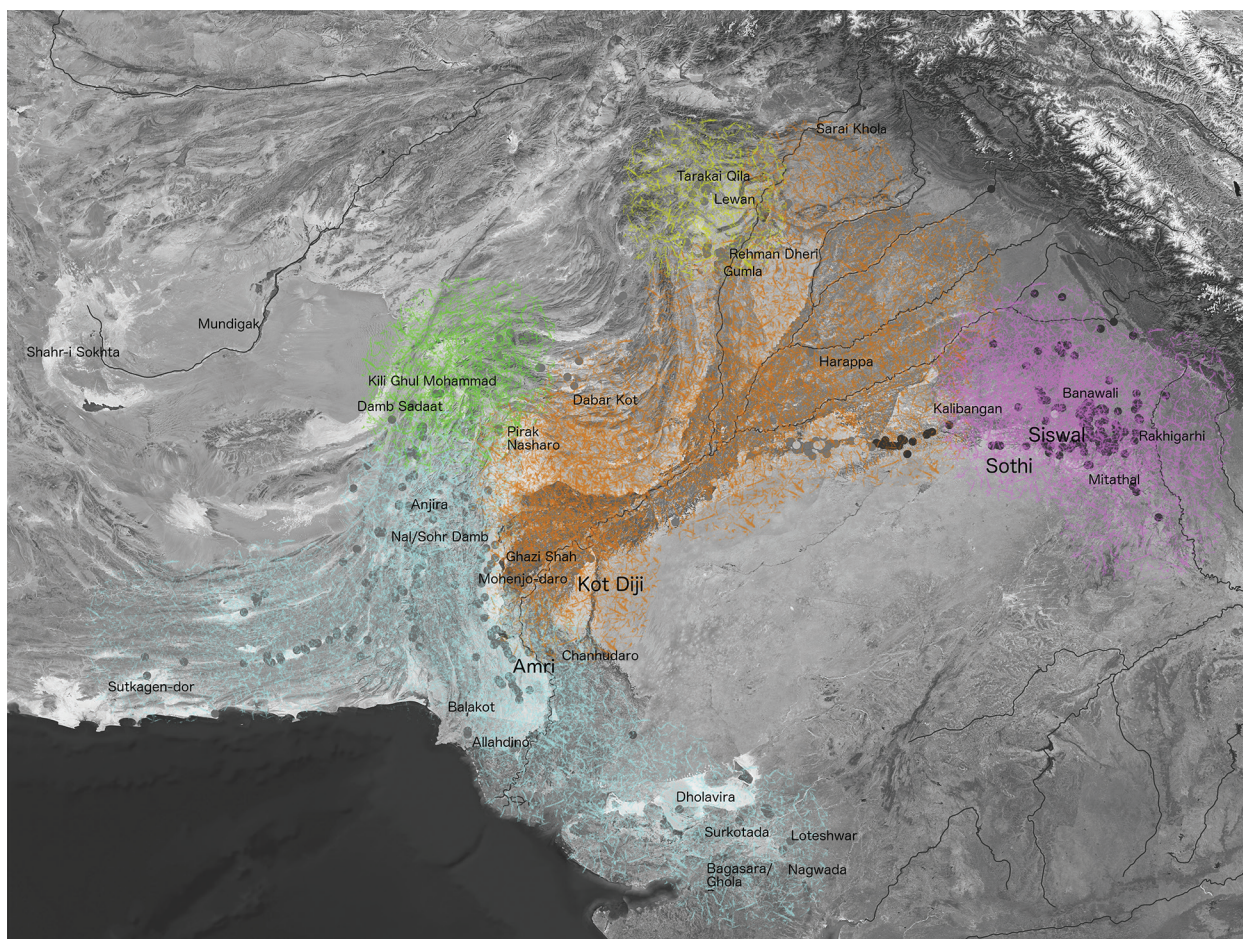


Figure 1. Map of the Indus Civilization (map by the author).

Gaddekar *et al.* 2014; Hoffman and Cleland 1977; Inizan and Lechevallier 1997; Kenoyer 1984a; Pelegrin 1993), terracotta figurines (Clark 2003, 2007, 2009), terracotta 'cakes', and similar ornamentation including steatite and carnelian beads, and shell bangles (Kenoyer 1984a, 1984b, 1991a, 1994, 2003, 2005a, 2013).

Chronology

The Harappan period of the Indus Tradition is perhaps better understood as the 'Integration Era' (Kenoyer 1991b; Shaffer 1992). This urbanized period of the Indus tradition is meaningfully named, and mechanisms of how this integration was accomplished and maintained have been explained through investigation of trade networks (Kenoyer 1997; Law 2011) and interregional networks of craftspeople (Kenoyer 1989).

The Regionalization Era directly preceded this urban and integrated period. During the Regionalization Era, trade networks, symbols, and technology associated with the Integration Era were developed (Kenoyer 1991c). As in the Integration Era, trade and networks are craftspeople are believed to have been instrumental in developing these regional styles. These pre-urban

phases of the Regionalization Era are also variously labeled as pre-Harappan (Hasan 1985; Mughal 1970: 5) or Early Harappan (Possehl 1999). The major phases include Amri that is sometimes grouped with Nal Tradition, Kot Diji, Dab Sadaat, Sothi-Siswal, Tochi-Gomal. See Figure 1 for a map of the approximate location of the major sites of greater Indus region with a particular emphasis of sites relating to this Regionalization Era, or Early Harappan sites, and other relevant sites to this paper. This map also approximates the groupings of material culture phases of this Era. The boundaries are not hard and fast, but are often permeable, fluid, subjective, and are likely undergo future revisions and revaluations.

The Harappan 'veneer' and the monotonous uniformity of sameness

Regional and chronological variation has increasingly become an important focus for better understanding the Indus Tradition or Civilization (Ameri 2013; Gaddekar *et al.* 2013; Jamison 2016; Jenkins 1994; Kenoyer 2005b; Kumar *et al.* 2011; Possehl 1992, 2002c; Quivron 2000; Shinde *et al.* 2008; Uesugi 2013; Weber 1999), and is a direction of study that needs much more detailed work. The relatively recent focus on regional variation during

the Integration era is both a product of the history of Indus archaeology and of general homogeneity.

The material culture of the Indus Civilization was traditionally described as being extremely homogeneous, even monotonous and lacking imagination (Mackay 1948: 120; Marshall 1931: 91; Piggott 1950: 136; Wheeler 1953). Early 20th century scholars emphasized the ‘monotonous regularity’ and high levels of community organization partly to fulfill expectations and preconceptions of an expansive empire and ‘Civilization’ (Piggott 1950: 136).

Kenoyer and Meadow (Kenoyer and Meadow 1997) aptly described the prominent continuity throughout the region as the ‘Harappan Veneer’ of similar material culture that overlays the diverse people that consumed and produced it. This veneer, thin as it may be, is relatively homogeneous and includes not only prestige items embedded with active symbolism, ideologies, and identities, but also utilitarian items and those associated with domestic practice, such as terracotta cakes in various forms.

Harappans as an ethnic group

The concept of ‘the Harappans’ as an ethnic or linguistic group persists in interpretations of the Indus archaeological record, particularly in discussions of migrations in the border regions. The linkage of material culture with ethnic and linguistic groups was fundamental to culture historical and diffusionist approaches to the archaeology of the early 20th century with its roots in nationalism. However, the boundaries and expressions of material culture may or may not align well with those of social groups such as ethnicities (Barth 1969; Croucher and Wynne-Jones 2006; Hill 1996; Hodder 1978; Moore 1994; Ortman 2012; Renfrew 1993; Terrell 2001).

The more explicit concept of ‘paleoethnicities,’ which was largely equated with material culture traditions, were applied to regional stylistic traditions of the Regionalization phase (Shaffer and Lichtenstein 1994). Shaffer and Lichtenstein saw the (Mature) Harappan Culture as a result of the fusion of Bagor, Hakra, and Kot Diji ethnic groups (Shaffer and Lichtenstein 1989: 123), in a process akin to ethnogenesis within a few generations using binary concepts of ethnic group segmentation or fusion (Keesing 1958). Ethnic groups were also fundamental to portrayals of the greater Indus region as a Cultural Mosaic, where different ecological zones had distinct ceramics and subsistence systems (Mughal 1992; Possehl 1992, 1997, 1999, 2002b; Possehl and Herman 1990). In these cases, ethnicity is employed as an organizational construct, assumed to exist, rather than being a process that can inform us about the dynamic nature of how groups of people

negotiated their identities in a pluralistic and diverse urban society.

The effect of urbanization on the material culture

I believe that the phenomena of urbanization in the Indus region and the increased homogenization and development of the suite of Harappan material culture are inherently linked. Urbanization, like other significant shifts in socio-political organization, would have had an impact on the dynamic processes of identities and ethnicities (Barth 1956; Díaz-Andreu 2005; Jones 1997; Insoll 2006; Lucy 2005). Likewise significant changes in material culture, architecture, and culinary practices reflect of shifts in perceptions of selves and nature (Deetz 1977).

During urbanization and integration regional identities may have become more important as the landscape became more interconnected and networks expanded (Bourdieu 1991; Canuto and Bell 2017). In other cases, communities and identities are constructed through manipulation and creation of a common system of symbols, values, and practices (Schortman *et al.* 2001; Yaeger and Canuto 2000).

Urbanism, particularly the relatively dense urbanism presumed in the Indus, places diverse populations within close quarters and necessitates the frequent interactions of unknown persons with potentially competing interests. The formation of social groups and group identities is a coping strategy that positions individuals and households into larger collectives with common interests and relatively more power. Individuals would have been a part of more than one social community and group. These group identities could include ethnicity, but also include class, occupation, and possibly religion, linguistic groups, political factions, and other social groups. Material culture is a tool that could be used to signal membership or aspiration of membership of these various communities. Kenoyer and others have established the expression of group identity and personal identity in the Indus using visual cues such as ornamentation (Kenoyer 1991a, 1994, 2000, 2007, 2005b, 2013; Clark 2003, 2009).

The process of urbanization does not only include the initial founding of cities on the landscape but also includes the constant in-migration and integration of outside populations into urban centers. This is a general process that is common for all urban centers. In-migration may have been necessary to sustain populations in pre-modern cities, though this principle is not without controversy (Kreger 2010; Paine 2000; Paine and Storey 2006; Storey 1992, 1997, 2006; Storey *et al.* 2012). In the Indus, we now have direct evidence for such migration from isotopic evidence where nearly all the individuals subjected to isotopic analysis were

immigrants at Farmana and Harappa (Valentine 2013; Valentine *et al.* 2015). These individuals comprised only a small segment of the population that was buried, and it may be possible that the individual's first-generation immigration status itself is biasing the burial sampling (Valentine 2016).

Models for ethnic processes during urbanization

The urbanization processes would enact changes and pressures upon existing ethnicities as individuals, society, and culture negotiated and innovated arrangements and patterns to adjust to new settlement scales and densities, landscape use, and social networks. Here I outline four basic models that describe the ways in that ethnicity can be affected through urbanization processes, or other processes of high-level multi-cultural co-habitation and/or interaction. These models are modified and refitted from the hypotheses that Attarian developed for coastal Peru (Attarian 2003). Attarian's predictions regarding urban interaction of groups created four patterns in which: 1) new communities and networks would emerge in the urban environment with new stylistic material cultures that maintain spatial segregation within urban centers. 2) new communities emerged divided by wealth, indicated by new styles but differences in wealth emphasized through exotic and high labor materials and wealth clustering. 3) old communities and ethnic divides of pre-urban and rural communities were maintained within urban centers, exhibiting clusters of pre-urban styles and continued use of those styles in rural areas. 4) new social identities seen through homogeneity and decrease in stylistic variation without spatial clustering. Building on this and other's work I have modeled the correlates of four separate ethnic processes in the face of urbanization: Ethnogenesis, Emphasis, Dominance, and Dormancy. A highly simplified model of the effects of material culture resulting from urbanization and these potential ethnic processes can be found in the schematic Figure 2.

Ethnogenesis

Ethnogenesis is a result of the formation of a new ethnic identity. This has been widely discussed in archaeological literature (Canuto and Bell 2017; Cordell and Yannie 1991; Kurien 1994; Hill 1996; Hu 2013; Voss 2008). Both the term and conceptions of ethnogenesis are laden with colonial baggage (Card 2013), as models of ethnogenesis are almost invariably based on migration events or colonial encounters (see Maceachern, 1998: 112). Here I partially divest myself from this scholarship and consider the material correlates of a new community identity with new, shared values and culture. The networks of individuals sharing this community identity, i.e. ethnicity, would demonstrate membership and inclusion of those groups

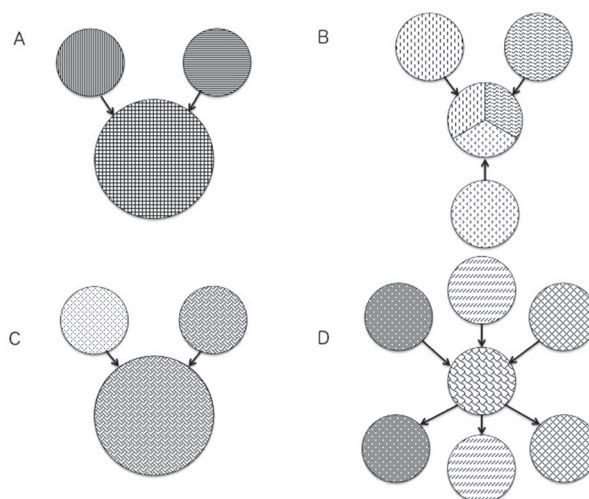


Figure 2. Model of the effects on material culture resulting from urbanization (image by the author).

dynamically and locally, drawing on extant expressions and inventing new ones. It may be that ethnicity as it is analogous to historic examples only comes into being during the urbanization of landscapes (for summary of other positions, see Emberling 1997).

Most discussions of ethnogenesis processes relate to power structures and unequal distribution of resources. However, in remote periods when inequity was emergent and urbanization was nascent, these historic colonial models may not cover the entire range of possibilities. Therefore, models of processes linked to cultural, economic, or political dominance have been segregated from ethnogenesis and specifically dealt with in the Dominance process and correlates outlined below. The remaining ethnogenesis process is simply the emergence of new styles, symbols and practices among regional interaction network foraging a new common identity.

It is challenging to confidently identify new expressions of identity, shifts in old expressions, and hybridizations and positively correlate them with any ethnic processes, including ethnogenesis, in remote history. One needs a multi-scalar approach over an extended timescale utilizing multiple lines of evidence including symbolic, technological, and isochrestic styles with similar distributions in ritual, domestic, dietary, or other forms of practice (Stovel 2013). At a most basic level, an ethnic group should share a distribution of multiple material indicators reflecting similar symbolism and practices that is continuously spread over a regional landscape. These practices, *chaîne opératoires*, material cultures should not demonstrate spatial segregation within urban centers (except for special foreign enclaves, or *sarais*), and bridge economic or other social divides. In practice, such distributions of symbolism, styles, and practices would roughly align with culture, including archaeological cultures or traditions.

How does one then differentiate culture from ethnicity? The ethnomorphic processes (Kohl 1998), or history of the local processes, can elucidate how ethnicity and identity function dynamically within a tradition and additionally if the shared material culture represents something akin to ethnic identity. We should not assume archaeological cultures are linked to ethnicity. A local temporally deep and detailed understanding of social, political, and economic networks, communities, and expressions of identity are required before such linkages can be made. Ethnicity, and, in particular, this process of ethnogenesis, should be hypothesized when no other explanations of the data are compatible with other models of ethnic processes.

In this model of these particular ethnogenesis processes, as the landscape is urbanized new communities of practice, isochrestic, emblematic, and technological styles should emerge possibly as hybridization of two or more pre-existing separate local traditions. What should be apparent is that in addition to the identification of the communities that are compatible with our understandings of ethnic processes that they are signaling membership of this new ethnicity through material culture in emblematic style (Wiessner 1983: 257) as a way to make it socially, politically, or economically salient. This should be evident not only in the way these styles are used at a local level but also that they are operating at scales larger than distribution (Emberling 1997).

Emphasis

In this scenario of social arrangement there should be pronounced emphasis on ethnicity as an important social construct and identity, and this emphasis of ethnic identity correlates of active displays of identity through material culture and styles, publicly and privately signaling your affiliations to others (Garraty 2013; Hayden 1998; Mills 2004; Peeples 2011). Both ethnoarchaeology and art history have provided examples of this effect i.e. (Hodder 1979; O'Donoghue 2011), where increased interaction leads to increased conflict and emphasis of these identities. In such cases ethnic grouping can be both primordial, based on deep shared history or descent, and concurrently instrumentalist in that it is strategically invoked to meet political or economic goals (Barth 1994; Cipolla 2010; Hu 2013; Jones 1997; Roosens 1994; Vermeulen and Govers 1994; Voss 2008).

The material culture styles should be spatially concentrated in the urbanized landscape, including within urban centers, and would re-occur in multiple, variously valued object classes and materials. Here I do not differentiate between the employments of emergent or existing material cultural styles, however, such patterns would be useful in understanding local

historical trajectories. Such patterns in material culture would require further support through the identification of distinct, and co-occurring, communities of practice demonstrated through technological styles, *chaîne opératoires*, ritual activities, or domestic practices and architectures.

Dominance

Dominance would include legitimization of social and economic power inequities, at a local scale and regionally through migration, imperialism, conquest, and the subversion of all other ethnicities under one ethnicity. Dominance does not imply that former identities are effectively erased. In cases of historic colonialism, local identities persist in a myriad of ways (for a summary, see Voss 2015). Even in cases of supposed complete domination and incorporation, such as the assimilation of the Ainu into a mythological homogenous Japanese ethnicity, local identities persist (Cheung 2005; Howell 2004; Siddle 2003). While emulation and diffusion at the boundaries of social groups have been traditionally employed in archaeology to account for hybrid forms, it traditionally ignored the possibility of new groups emerging from that interaction (Lightfoot and Martinez 1995). This type of ethnomorphosis should be particularly visible on the borderlands where processes of acculturation, accommodation, bricolage, or other related processes should be evidenced through local interpretations of the dominant ethnicities material culture. However, it would be expected that similar looking processes would occur on the borderlands between two different subsistence, economic, and social systems and networks even if those entities were not conceived of as ethnicities, the power relations and interactions between the cultures were not unequal, and borders were not analogous to colonial frontiers. The nature and selective use of hybrids and exotic and local symbols, objects, and technologies should be reflective of the differential power structures and relationships between two or more social groups (Card 2013; Fennell 2007; Weik 2014). Important aspects to consider when examining local processes would be the pace of hybridization and if the all genders, occupations, and classes within the culture actuated the elements adopted. Along with the types of elements utilized, including domestic and culinary practices, technological styles, and emblematic styles.

A different kind of possible ethnogenesis tied to inequity and dominance would be fission of earlier ethnicities (Hu 2013a: 382). In an urban environment, a fission event could occur when two social groups with close interactions develop social inequalities (Hu 2013; Voss 2005). Evidence of this would result in the social and spatial coincidence of economic or political inequality and the development of multiple new forms of personal, private, public expressions of identity

sometime after the initial urbanization or founding of centers.

Dormancy

The final possible effect of urbanization on ethnicity is Dormancy. During Dormancy, ethnic identities remain intact, however, other identities such as class and occupation become more active and salient. Ethnicity becomes less salient (Tilly 2015), de-emphasized, or latent. In the 'Dormancy' scenario, ethnicity would not necessarily work to cohere a 'group' (Brubaker 2004). This effect corresponds to Barth's prediction that ethnic groups would become less distinct as they interacted more and became more economically interdependent (Barth 1969) Ethnic groups may lie dormant for extended periods of time until activated under certain circumstances such as threat, stress, or through the efforts of a charismatic leader drawing on location, social memory or activities (Janusek 2004: 18).

In the case of initial urbanization, I predict that stylistic elements would build off previous pre-urban motifs drawing particularly from transcultural symbolism and elements to create a new neutral style, rather than seeing a true hybridization of forms. The homogenization of material culture can be a conscious or unconscious strategy to strengthened intercommunity relations (Voss 2008). New ideology, values, or polity affiliation and an individual's adherence to them can be demonstrated through this new material culture and practices. Shared material culture also can act as a way to promote collective action and has been a marker of commercialization where neutrality was more beneficial than signaling ethnic identities (Blanton 2015).

Macro-scale patterns of practice and material culture in the Indus

A true evaluation of the ethnomorphic processes and dynamics of identity within the greater Indus Tradition, and in specific regions, will required more directed and detailed archaeological inquiries. Well-recorded and published attributes of artifacts from secure context are not available from all corners of the Indus Tradition or for all periods. The urbanization process during the Regionalization Phase is amongst the most impoverished datasets and the most important for understanding how the Harappan Style emerged. Future work aimed at outlining changes temporally and regionally is imperative for further testing of these models of ethnomorphic processes.

I argue below there is not evidence, at this time, for one regional style spreading and replacing others as would be expected following the dominance model of migration, colonialism, or conquest. Neither is there

evidence that geographically based regional styles remaining distinct though dynamic urban processes as the emphasis model predicts. The relationships between Regional and Integration phase material culture could fit with either the ethnogenesis or dormancy models as it is a new style that draws upon pre-existing elements and forms. I believe those elements that continued on were those that were the broadest and conveyed the most fundamental concepts and stories that become increasingly abstract through time as they become firmly established within the cultural landscape. The continued use of generic, common, and basic elements rather than selective use and manipulation of elements, the development of extensive use of hybridized or new elements and forms bolsters the ethnic dormancy model over ethnogenesis. The greatest support of the dormancy model is the re-emergence of regional style elements during the deurbanizing Localization Era, demonstrating a cultural memory and persistence of local style and possibly identity that lie dormant during the urban Harappan phase.

Below I will briefly outline the extant evidence for the most relevant indicators proposed for my different models of the ethnomorphic processes of urbanization and how they favor the dormancy model. I will first outline the relationship of regional pre-urban styles to Harappan style. I will then argue for cultural plurality, and the lack of spatial segregation between groups within the Indus urban centers, and briefly examine some examples of hybridity and inequity in Indus urbanism. Finally, I will introduce the phenomena of cultural memory of regional elements.

Origins of Harappan style and its relationship to earlier regional traditions

The transition from the Regionalization era to the Integration Era, or from the Early Harappan to the Mature Harappan across the region is not well understood. A refined analysis and reporting of artifact attributes and re-assessments of chronological and spatial relationships, and regional variations is still required. Kot Dijian style has been largely framed as a core repertoire from which the Harappan style emerged. In addition to our greater understandings of the nature of other pre-urban regional traditions (Garge 2010) (Ajitprasad 2002; Rajesh 2011; Rajesh *et al.* 2013), the regional variations in the Kot Diji style are beginning to be clarified (Uesugi 2017a). It may be that the emphasis placed on 'Kot Dijian style' as an antecedent to the Harappan style is accident of archaeological typological conventions rather a cultural reality. Instead elements of technology, form, and décor may exist on a more fluid spatial gradient during the Regionalization Era. The roughly central location of the Indus Valley associated with classic Kot Diji would allow for the greatest amount of overlapping regional

traditions, and the greatest distance from the various traditions that can be viewed as ‘non-Harappan’.

This gradient notwithstanding, many aspects of the Harappan style appears are not exclusively found in at sites labeled Kot Diji but draw upon larger and deep transcultural symbolism and knowledge. Antecedents of Harappan styles and forms appear in other regional traditions and even outside the geographic core of the Indus Tradition. There are examples of early versions of iconic motifs such as pipal leaves, intersecting circles, and fish scales (also triangles and sun/disk motifs) and distinctive forms such as dish on stands that span in all corners of the greater Indus sphere from Northern and Southern Baluchistan, Sindh, Punjab, Rajasthan, Haryana, and to a more limited extent Northern Gujarat (Ajitprasad 2002; Besenval 1997; Bisht 2015; Casal 1964; Durrani 1984; Franke-Vogt and Ibrahim 2001; Jenkins 1994; Khan 1965; Khan *et al.* 1991; Kenoyer 2011; Kenoyer and Meadow 2000; Lal *et al.* 2003; Majumdar 1999; Mughal 1990; Possehl 1999; Pracchia 1985; Quivron 2000; Uesugi 2013, 2017b) and beyond at sites such as Mundigak in Afghanistan (Casal 1961) and Shahr-i Sokhta in Iran (Cortesi *et al.* 2008; Jarrige *et al.* 2017; Sajjadi *et al.* 2003). I believe the early forms and motifs drawn upon to create the corpus of Harappan Style were transcultural and transregional, and as argued elsewhere the regional traditions were ‘distilled’ to form the urbanized Harappan style (Kenoyer 2011). Quivron has argued that the Harappan style may have emerged somewhere near Chanhudaro based upon the quality of craftsmanship (Quivron 2000). However, the earliest examples of motifs thus far are from Harappa (Kenoyer and Meadow 2000) and Quivron’s first stage of ‘Mature Harappan style’ pottery can contemporaneously be outside the Indus Valley proper in the Ghaggar Hakra plains (Dangi and Uesugi 2013). These patterns of the emergence of the Harappan style are the most consistent with the dormancy or ethnogenesis model where a new style draws upon extant, transcultural and possible neutral forms and motifs. It is not consistent with the dominance model where one core area replaces local styles, or with the emphasis model where the distinctive aspects of local styles become more apparent.

Evidence of ethnic diversity and the relationships between Harappan and Non-Harappan material culture

The existence of pluralism within the Indus during the Integration Era is one way of distinguishing between the dormancy and ethnogenesis models of urbanization ethnoprocesses. In the case of ethnogenesis we would not see any substantial levels of plurality. However, subtle ethnic plurality would be expected in the dormancy model. Ethnic plurality would be remarkable and spatially distinct in urban centers in the emphasis

model and would be viewed through extensive hybridization in ‘borderland’ regions such as Gujarat, Haryana and Baluchistan signaling processes such as acculturation, accommodation, bricolage.

There are several lines of evidence that suggest ethnic pluralism in the Harappan world and that this ethnic pluralism is not spatially segregated as the emphasis model predicts. The first is the existence of difference of several types of cooking pots co-occurring at sites, such as at Mohenjo-daro where five different cooking pot types could be found in one relatively small area (Dales and Kenoyer 1986: 132). Such cooking pots, and associated foods maybe linked to both tacit and performative expressions of identity e.g. (Ferguson 2012). Analysis of human figurines has also been used to address issues of Indus identity and forms of self-representation with multiple ethnicities suggested, but without spatial segregation at sites such as Harappa (Clark 2003; Clark 2017; Clark 2009). Other emblematic and explicit displays of ethnicity or social distinctiveness maybe viewed through the highly diversified styles of beads and bangles after the urbanization of Indus cities (Kenoyer 1991a). Different communities of practice can be seen through technological studies of drilling techniques (Kenoyer 1997) and in material evidence of distinct domestic practices (Chase *et al.* 2014). These distinct domestic practices are may be the best indicators we have for distinct ethnic groups, perhaps even more than material symbols (McGuire 1983) than the technological and production communities, which may better align with social networks (Gosselain 1998) see also (Kenoyer 1989).

There is co-occurrence of Harappan and local non-Harappan ceramic traditions sites at many sites throughout Haryana, Rajasthan, and Gujarat. Even in the cases where distinct patterns of spatial clustering could be expected, such as within the enclosed areas associated with Harappan style craft production at Bagasara, no clearly demarcated patterns have emerged (Lindstrom 2013). At small regional extraction centers, villages and cities various local Gujarati Chalcolithic ceramics traditions are found alongside classic or Sindhi Harappan tradition ceramics (Bhan and Ajithprasad 2013; Bisht 2015; Chase 2010; Hegde *et al.* 1988; Lindstrom 2013; Mukherjee 2013; Shinde *et al.* 2008; Sonawane 2004), these relative proportions are not always quantified but the local signature is never insignificant. This pattern of co-occurring ceramic traditions at sites in Gujarat is found with the first examples of Early Harappan Ceramics (Ajithprasad 2002; Dhavalikar and Possehl 1992; Majumdar 1999). In the Ghaggar Plain the ceramics indicate that the regional Sothi-Siswal tradition, or the relate ‘fabrics’ of Kalibangan (Garge 2010), continued on alongside Harappan tradition ceramics from the Regionalization Phase onward with no discernable patterns of variation

based upon the size of the community or spatial segregation (Dangi 2011; Kumar *et al.* 2011; Shinde *et al.* 2008; Uesugi 2011a, 2011b, 2017).

These different ceramic traditions may or may not encode emblematic style or meaningful symbolism (Wiessner 1983). If they did, we must investigate if these symbols functioned to express identity or other aspects of culture, and how it varied in time and space. We do know that these different traditions co-occur in burials of single individuals, in fact at the Farmana cemetery burials are roughly three times as likely to contain both traditions rather than ceramics belonging exclusively to either Harappan or Sothi-Siswal traditions (Uesugi 2011a, 2011b, 2017).

Our current evidence neither supports a scenario where these regional ethnic identities were emphasized and spatially segregated, nor does it align well with pure ethnogenesis of an entirely new ethnic group as the traditions continue alongside each other during urbanization. One way to differentiate between the dominance and dormancy models is to examine the role and nature of hybridity and synergy between the traditions, an area of study where significantly more research is required. The grey wares of the Ghaggar plains draw on both Sothi-Siswal and Harappan elements, and Sothi-Siswal pottery of the Farmana cemetery imitates Harappan forms, and during the late 3rd millennium BC a greater amount of fusion is displayed on the Ghaggar plain as Harappan forms adopted Sothi-Siswal motifs and the Sothi-Siswal cooking pots adopted Harappan ledges (Uesugi 2017a). If Bara pottery style of the Localization Phase is an example of widespread fusion of these traditions (Jalal *et al.* 2011; Uesugi 2017), this maybe an example of ethnogenesis. In Gujarat, examples of hybrid wares can be found between Harappan, the so-called Sorath Harappan, and other Chalcolithic traditions such as Ahar Black and Red Ware stud-handled bowls, Micaceous Red Ware forms in the Harappan tradition, Anarta wares made in Harappan forms and technique, and Harappan perforated jars in Gritty Red ware (Ajithprasad and Sonawane 1993; Harris 2011; Rao 1985; Sonawane *et al.* 2003). A systematic study of these various types of ceramic hybrids, other fusions of material culture, and their relationships is needed to understand the complexities of identity in these borderland regions. However, based upon gross patterns, there is not just a single direction of adoption in form, technique, or motif, which may be expected in the unequal power relationships of the dominance model.

Cultural Memory

The final support for the dormancy model of ethnomorphic processes during urbanization in the Indus is the relative absence or suppression of some

Regionalization styles during the Integration Era only to have them re-emerge during the Localization Era (Jarrige 1997). This pattern persistence of cultural memory in regions despite adoption of Harappan forms during the urban period provides little support that the Harappan material culture was a marker of ethnicity. If processes of ethnogenesis had taken place as a result of urbanization, the processes of creation of the new and active ethnic identity and the dynamic processes of ethnicity maintenance would have effectually 'erased' earlier regional identity. Instead over many generations, the roughly seven hundred years between the Regionalization and Integration Eras, in a complex and pluralistic urban environment conceptions of those identities remained preserved though not in highly visible manner. Cultural memory can be used to forge ethnic identities but cultures can also choose to forget (Cipolla 2008; Connerton 2006; Forty and Küchler 1999; Mills 2008), which they evidently did not.

Alternatively, if the dormancy model is applied, such re-emergence suggests that those regional identities were maintained but not activated during the Integration Era. At the end of the urban Integration Era, when localized traditions re-appear, some of the symbols of the Integration Era seem to have been actively rejected and replaced with regional variations that recalled those of the Regionalization Era in a way consistent with the re-activation of ethnic identities. The regional styles certainly would have been used in different ways and embedded with various meanings in each Era, and indeed in each region and community, however, this does suggest that some sort of continuity existed in the memories of those communities throughout the Integration Era.

An alternative approach to interpreting Harappan material culture

If the dormancy model is the best-supported ethnomorphic process and Harappan styled material culture did not represent a people or ethnicity as per culture history models or the Paleo-ethnicity model, what in fact did the material culture symbolize? I suggest that rather than an ethnic group, the urban Integration era material culture often referred to as Harappan is more akin to a brand (Hamilton and Lai 1989; Wengrow 2008, 2010). This description of the Harappan Veneer has recently been independently suggested by Sharri Clark (2017: 310), however, with little elaboration.

Here I suggest that the Harappan Veneer as the Harappan Brand symbolized the trade networks and interconnections of the Integration Era. A super-ethnic, super-regional, urbanized symbol system that conveyed something akin to cosmopolitanism. While the individual motifs would have been embedded

with much deeper ideological meaning that was culturally understood, the consumption objects of the Integration Era material culture suite would have had a panache, whether it be Rohri chert blades, steatite beads, or Harappan black and red painted pottery. Cosmopolitanism would have been an abstract concept that people of all social classes and ethnicities could have drawn upon to emphasize their real or imagined connections to the greater system as citizens of the Harappan world. These goods had been transformed to commodities during the Indus period, material cultural elements that were enmeshed in social symbolism and codes and the consumption of which is telling (Kopytoff 1986).

Questions about the applicability and strength of the idea of branding to the remote past need to be addressed explicitly. Branding in the modern capitalist sense has limited value in the Pre-Industrial Era. However, branding as a wider concept is associated with urbanized societies, high standardization, and highly developed systems of regional exchange, where producers and consumers are separated, operating without personal knowledge of each other (Bevan 2010: 39–41). It is also associated with an emphasis on provenience of materials and goods, the appearance of highly standardized weight systems (Bevan 2010: 39–41), and use of seals and sealings (Bevan 2010: 47; Wengrow 2008: 16–23, 2010). All of these features fit well in with what we know of the Indus Civilization (Kenoyer 1998b; Law 2011).

If the Harappan Veneer functioned as a brand, what may that imply about the consumed goods and social-economic behaviors? Based upon brands in late 20th century studies of Kalakkadu and elsewhere (Fanselow 1990; Geertz 1978, 1963) brand economies are contrasted with bazaar economies. In a ‘brand economy’ the quality of goods is relatively known, the price is set, the competition is focused between sellers, traders minimize risk and increase efficiency by using techniques such as sealing (Fanselow 1990). In contrast, a ‘bazaar economy’ has more uncertainty for the consumer (Geertz 1963), competition plays out between buyers and sellers, and is deeply tied to kinship and networks (Fanselow 1990). If a brand economy were indeed the basis behind some of the standardization and other good distribution and use systems in the Indus, e.g. rare and standardized vessels like Black Slipped Jars, which are theorized to contain particular goods, were widely traded, retained, and reused (particularly in non-Indus regions) (Blackman and Mery 1999; Méry and Blackman 1996), then it would be a reflection of changes in social relations particular to urbanization. Small-scale village situations have no need for branding, the producers and consumers would have been on intimate terms and had relationships structured by known social networks (Yaeger 2010:

168). Instead the heterogeneous populations of the Indus used branding as a way of negotiating risk and reducing conflict in economic exchanges between those with non-local weak ties or local individuals with limited trust or knowledge of each other.

Conclusion

The thin overlay of the Harappan Veneer does not reflect ethnicity and Harappan pottery does not equate with Harappan People. This re-evaluation of the Harappan Veneer explains why Harappan material culture appears in large and small sites, amongst the elites and non-elites, and in many different environmental and subsistence regions, partially obscuring regional variations. Rather than envisioning Harappans as single cultural or linguistic swath, we can use this framework to map different communities of practices, and the various ways in which identity was expressed actively and passively on the Indus landscape.

I suggest instead that ethnicity as an identity became of secondary or tertiary importance during the urban Indus period. The best current evidence supports a model where regional and other ethnic identities were partially dormant during the 1000-700 years of the integration and urbanism and other identities and communities became more salient. As would be predicted by the dormancy model, occupation and class are emphasized during the Harappan period, like many other urbanized societies where social roles and competencies are displayed rather than ethnicity (Fair 2001: 83). This pattern also aligning with Barth’s (1969) prediction of ethnic distinctions subsiding in situations of increased economic interdependence.

Whether or not we want to explicitly extend the concept of brand to the Indus, a shared material culture would have been an important in a pluralistic and urbanized landscape with extensive trade networks in reducing identity conflicts. The consumption and display of these goods could signal a sameness; that they were all urbanite and part of a greater social and economic network. Lines of social division could be drawn between those living in both small and large settlements in contrast to the pastoralists, traders, hunter and gatherers and other non-urbanites living in the urbanized landscape of Northwest South Asia (Kenoyer 1998a; Possehl 2002a). Similar concepts of social units and ‘othering’ was applied to non-urbanite pastoral peoples in Mesopotamia, where ethnicity and language were not significant aspects of identity (Bahrani 2006).

There is a range of questions remaining and much work to be done concerning the arc of identity in the processes of urbanization and de-urbanization, and how it regionally varied in the Greater Indus and Ghaggar-

Hakra Region. Greater attention to the attributes of artifacts of different material classes between and within sites, refined chronologies using AMS dates from sealed contexts, and systematic study of hybrid or fusion forms can be used to gain a more nuanced understanding and evaluation of these ethnomorphic processes.

Bibliography

- Ajithprasad, P. 2002. The Pre-Harappan Cultures of Gujarat. In S. Settar and R. Korisettar (eds), *Indian Archaeology in Retrospect, Volume 2*: 129–158. New Delhi, Indian Council of Historical Research.
- Ajithprasad, P. and Sonawane, V. H. 1993 (Unpublished). *The Harappa culture in North Gujarat: A regional paradigm*. Department of Archaeology and Ancient History, Maharaja Sayajirao University of Baroda.
- Allchin, B. 1979. Stone Blade Industries of Early Settlements in Sind as Indicators of Geographical and Socio-economic Change. In M. Taddei (ed.), *South Asian Archaeology 1977*: 173–212. Naples, Istituto Universitario Orientale.
- Ameri, M. 2013. Regional Diversity in the Indus: The Evidence of the Seals. In S. Abraham, P. Gullapalli, T. Raczek, and U. Rizvi (eds), *Connections and Complexity. New Approaches to the Archaeology of South Asia*: 355–374. Walnut Creek, CA, Left Coast Press.
- Attarian, C. J. 2003. Cities as a place of ethnogenesis: urban growth and centralization in the Chicama Valley, Peru. In Smith, M. L. (ed.), *The social construction of ancient cities*: 184–211. Washington DC. Smithsonian Institution.
- Bahrani, Z. 2006. Race and ethnicity in Mesopotamian antiquity. *World Archaeology* 38(1): 48–59.
- Barth, F. 1956. Ecologic Relationships of Ethnic Groups in Swat, North Pakistan. *American Anthropologist* 58: 1079–1089.
- Barth, F. 1969. Ethnic Groups and Boundaries. In Barth, F. (ed), *Ethnic Groups and Boundaries. The Social Organization of Culture Difference*: 9–38. Boston, Little, Brown and Co.
- Barth, F. 1994. Enduring and emerging issues in the analysis of ethnicity. In H. Vermeulen and C. Govers (eds), *The Anthropology of Ethnicity: Beyond 'Ethnic Groups and Boundaries*: 11–32. Amsterdam, Het Spinhuis.
- Besenal, R. 1997. Entre le Sud-Est iranien et la plaine de l'Indus le Kech-Makran: Recherches archéologiques sur le peuplement ancien d'une marche des confins indo-iraniens. *Arts Asiatiques* 52: 5–36.
- Bevan, A. 2010. Making and Marking Relationships Bronze Age Brandings and Mediterranean. In A. Bevan and D. Wengrow (eds), *Cultures of Commodity Branding*: 35. Walnut Creek, CA, Left Coast Press.
- Bhan, K. K. and Ajithprasad, P. 2013. Excavations at Shikarpur 2007–2008: A Coastal Port and Craft Production Center of the Indus Civilization in Kutch, India. URL: <http://a.harappa.com/content/excavations-shikarpur-gujarat-2008-2009>
- Bisht, R. S. 2015. *The Excavations at Dholavira (1989–90 to 2004–2005)*. New Delhi, Archaeological Survey of India.
- Blackman, M. J. and Mery, S. 1999. Harappa et Mohenjodaro: deux zones de production de jarres à engobe noir au Pakistan à la Période Indus. *Paléorient* 25(2): 167–177.
- Blanton, R. E. 2015. Theories of ethnicity and the dynamics of ethnic change in multiethnic societies. *Proceedings of the National Academy of Sciences* 112(30): 9176–9181.
- Bourdieu, P. 1991. *Language and symbolic power*. Cambridge, Massachusetts, Harvard University Press.
- Brubaker, R. 2004. *Ethnicity without groups*. Cambridge, Massachusetts, Harvard University Press.
- Canuto, M. A. and Bell, E. E. 2017. Considering the Edge Effect: Ethnogenesis and Classic Period Society in the Southeastern Maya Area. In B. J. Beyyette and L. J. LeCount (eds), *The Only True People: Linking Maya Identities Past and Present*: 219–241. Boulder, University Press of Colorado.
- Card, J. J. 2013. Introduction. In J. Card (ed.), *The Archaeology of Hybrid Material Culture*: 1–21. Carbondale and Edwardsville, Southern Illinois University Press.
- Casal, J. M. 1964. *Fouilles D'Amri*. Paris, Commission des Fouilles Archéologiques.
- Casal, J. M. 1961. *Fouilles de Mundigak*. Paris, Librairie C. Klincksieck.
- Chase, B., Ajithprasad, P., Rajesh, S. V., Patel, A. and Sharma, B. 2014. Materializing Harappan identities, Unity and diversity in the borderlands of the Indus Civilization. *Journal of Anthropological Archaeology* 35(1): 63–78.
- Chase, B. 2010. Social change at the Harappan settlement of Gola Dhoro: a reading from animal bones. *Antiquity*, 84(324): 528–543.
- Cheung, S. C. H. 2005. Rethinking Ainu Heritage: A Case Study of an Ainu Settlement in Hokkaido, Japan. *International Journal of Heritage Studies* 11(3): 197–210.
- Cipolla, C. N. 2008. Signs of Identity, Signs of Memory. *Archaeological Dialogues* 15(2): 196–215.
- Cipolla, C. N. 2010. *The Dualities of Endurance: A Collaborative Historical Archaeology of Ethnogenesis At Brothertown, 1780–1910*. Unpublished PhD thesis, University of Pennsylvania.
- Clark, S.R. 2007. *The social lives of figurines: recontextualizing the third millennium BC terracotta figurines from Harappa, Pakistan*. Unpublished PhD thesis, Harvard University.
- Clark, S.R. 2003. Representing the Indus Body: Sex, Gender, Sexuality, and the Anthropomorphic Terracotta Figurines from Harappa. *Asian Perspectives* 42(2): 304–328.

- Clark, S.R. 2009. Material matters: Representation and materiality of the Harappan body. *Journal of Archaeological Method and Theory* 16(3): 231–261.
- Clark, S. R. 2017. *The Social Lives of Figurines: Recontextualizing the Third-millennium-BC Terracotta Figurines from Harappa*. Cambridge, MA, Peabody Museum Press.
- Cleland, J. H. 1977. *Chalcolithic and Bronze Age Chipped Stone Industries of the Indus Region: An analysis of Variability and Change*. Unpublished PhD thesis, University of Virginia.
- Connerton, P. 2006. Cultural memory. C. Tilley, W. Keane, S. Küchler, M. Rowlands and P. Spyer (eds), *Handbook of Material Culture*: 315–324. Thousand Oaks, CA, Sage.
- Cordell, L. S. and Yannie, V. J. 1991. Ethnicity, ethnogenesis, and the individual: A processual approach toward dialogue. In R. W. Preucel (ed.), *Processual and Postprocessual Archaeologies*: 96–107. Carbondale, Center for Archaeological Investigations, Southern Illinois University at Carbondale
- Cortesi, E., Tosi, M., Lazzari, A. and Vidale, M. 2008. Cultural Relationships beyond the Iranian Plateau: The Helmand Civilization, Baluchistan and the Indus Valley in the 3rd Millennium BCE. *Paléorient* 34(2): 5–35.
- Croucher, S. and Wynne-Jones, S. 2006. People, not pots: Locally produced ceramics and identity on the nineteenth-century East African coast. *The International journal of African historical studies* 39(1): 107–124.
- Dales, G.F. and Kenoyer, J. M. 1986. Excavations at Mohenjo Daro, Pakistan: The Pottery. Philadelphia, University Museum Press.
- Dangi, V. 2011. Explorations along the Ghaggar River and Sarhind Nalla in Haryana and Punjab. *Man and Environment* 36(2): 66–87.
- Dangi, V. and Uesugi, A. 2013. A Study on the Harappan Painted Pottery from the Ghaggar Plains. *Journal of the Indian Archaeological Society* 43(43): 95–215.
- Davis, M. A. 2016. Stone Tools as Indicators of Socio-Economic Variability at Harappa, Pakistan. In V. Widorn, U. Franke and P. Latschenber (eds.), *Contextualizing Material Culture in South and Central Asia in Pre-Modern Times*: 51–65. Brepols, Turnhout.
- Deetz, J. 1977. In *Small Things Forgotten*. New York, Anchor Books.
- Dhavalikar, M. K. and Possehl, G. L. 1992. The pre-Harappan period at Prabhas Patan and the pre-Harappan phase in Gujarat. *Man and Environment* 17(1): 72–78.
- Díaz-Andreu, M. and Lucy, S. 2005. Introduction. In M. Díaz-Andreu, S. L. ucy, S. Babić and D. N. Edwards (eds), *The Archaeology of Identity: Approaches to gender, age, status, ethnicity, and religion*: 1–12. Routledge, London
- Durrani, F. A. 1984. Some Early Harappan Sites in Gomal and Bannu Villages. In B. B. Lal and S. P. Gupta (eds), *Frontiers of the Indus Civilization: Sir Mortimer Wheeler Commemoration Volume*: 505–510. New Delhi, Books and Books.
- Emberling, G. 1997. Ethnicity in complex societies: Archaeological perspectives. *Journal of Archaeological Research* 5(4): 295–344.
- Fair, L. 2001. *Pastimes and Politics: culture, community, and identity in post-abolition urban Zanzibar, 1890–1945*. Athens, Ohio University Press.
- Fanselow, F. S. 1990. The bazaar economy or how bizarre is the bazaar really? *Man, New Series* 25(2): 50–265.
- Fennell, C. C. 2007. Crossroads and cosmologies: Diasporas and ethnogenesis in the new world. *African Diaspora Archaeology Newsletter* 10(3): 16.
- Ferguson, L. 2012. *Uncommon ground: archaeology and early African America, 1650-1800*. Washington DC, Smithsonian Institution.
- Forty, A. and Küchler, S. 1999. *The Art of Forgetting*. Oxford, Berg Publishers.
- Franke-Vogt, U. and Ibrahim, A. 2001. A new perspective of an old site: reopening excavations at Sohr Damb/Nal (Balochistan). In C. Jarrige and O. Lecomte (eds), *South Asian Archaeology 2001*: 105–15. Paris, Éditions Recherche sur les Civilisations.
- Gadekar, C. Ajitprasad, P. and Madella, M. 2013. Crested Ridge Technique and Lithic Assemblage from Datrana, Gujarat. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 1: 16–28.
- Gadekar, C. Rajesh, S. V. and Ajithprasad, P. 2014. Shikarpur lithic assemblage: New questions regarding Rohri chert blade production. *Journal of Lithic Studies* 1(1): 137–149.
- García-Granero, J. J., Lancelotti, C. and Madella, M. 2015. A tale of multi-proxies: integrating macro-and microbotanical remains to understand subsistence strategies. *Vegetation History and Archaeobotany* 24 (1): 121–133.
- Garge, T. 2010. Sothi-Siswal Ceramic Assemblage: A Reappraisal. *Ancient Asia* 2: 15–40.
- Garraty, C. P. 2013. Social Identity and Political Competition in a Culturally Diverse Landscape: Decorated Pottery from the Mescal Wash Site, Southeastern Arizona. *Journal of Arizona Archaeology* (2): 163–177.
- Geertz, C. 1963. Peddlers and princes: Social development and economic change in two Indonesian towns. Chicago, University of Chicago Press.
- Geertz, C. 1978. The Bazaar Economy: Information and Search in Peasant Marketing. *American Economic Review* 68(2): 28–32.
- Gosselain, O. P. 1998. Social and Technical Identity in a Clay Crystal Ball. In M. T. Stark (ed.), *The Archeology of Social Boundaries*: 78–106. Washington DC, Smithsonian Institution Press.
- Hamilton, G. G. and Lai, C. 1989. Consumerism Without Capitalism: Consumption and Brandnames in Late

- Imperial China. In H. J. Rutz and B. S. Orlove (eds), *The social economy of consumption: 253–279*. Lanham, MD, University Press of America.
- Harris, S. 2011. *Mobility and variation in Chalcolithic North Gujarat, India (ca 3600-1800 BC)*. Unpublished PhD thesis, University of Pennsylvania.
- Hasan, M. 1985. *Babur. Founder of the Mughal Empire in India*. New Delhi Manohar.
- Hayden, B. 1998. Practical and Prestige Technologies: The Evolution of Material Systems. *Journal of Archaeological Method and Theory* 5(1): 1–55.
- Hegde, K. T. M., Sonawane, V. H., Shah, D. R., Bhan, K. K., Ajithprasad, P., Krishnan, K. and Chandran, S. P. 1988. Excavation at Nagwada 1986 and 1987: A Preliminary Report. *Man and Environment* 12: 55–65.
- Hill, J. D. 1996. *History, Power, and Identity: ethnogenesis in the Americas, 1492-1992*. Iowa City, University of Iowa Press.
- Hodder, I. 1979. Economic and Social Stress and Material Culture Patterning. *American Antiquity* 44(3): 446–454.
- Hodder, I. 1978. *The Spatial Organisation of Culture*. Pittsburgh, University of Pittsburgh Press.
- Hoffman, M. A. and Cleland, J. 1977. *Excavations at the Harappan Site of Allahdino: The Lithic Industry: A metric and quantitative analysis of an Harappan activity system*. New York, Papers of the Allahdino Expedition: The American Museum of Natural History
- Howell, D. L. 2004. Making 'Useful Citizens' of Ainu Subjects in Early Twentieth-Century Japan. *Journal of Asian Studies* 63(1): 5–29.
- Hu, D. 2013. Approaches to the archaeology of ethnogenesis: Past and emergent perspectives. *Journal of Archaeological Research* 21(4): 371–402.
- Inizan, M. L. and Lechevallier, M. 1997. A Transcultural Phenomenon in the Chalcolithic and Bronze Age Lithics of the Old World: Raw Material Circulation and Production of Standardized Long Blades. The Example of the Indus Civilization. In B. Allchin and R. Allchin (eds), *South Asian Archaeology 1995: 77–85*. New Delhi, Oxford and IBH.
- Insoll, T. 2006. (ed.) *The Archaeology of Identities: A Reader*. Routledge, New York.
- Jamison, G. M. 2016. Seal Production in the Indus Civilization. A Comparative Analysis of Regional Carving Traditions. In V. Widorn, U. Franke, and P. Latschenberger (eds), *Contextualizing Material Culture in South and Central Asia in Pre-Modern Times: 79–90*. Turnhout, Brepols.
- Janusek, J. W. 2004. *Identity and power in the ancient Andes. Tiwanaku cities through time*. New York, Routledge
- Jarrige, J. F. 1997. From Nausharo to Pirak: Continuity and change in the Kachi/Bolan region from the 3rd to the 2nd millennium B. C. In B. Allchin and R. Allchin (eds), *South Asian Archaeology 1995: 77–85*. New Delhi, Oxford and IBH
- Jarrige, J., Didier, A. and Quivron, G. 2017. Shahr-i Sokhta and the chronology of the Indo-Iranian regions. *Paléorient* 37 (2): 7–34.
- Jenkins, P. C. 1994. Cemetery R 37: New Perspectives on Style and Chronology. In J. M. Kenoyer (ed.), *Sumer to Meluhha: Contributions to the Archaeology of Sarch and West Asia in Memory of George F. Dales Jr.: 105–112*. Madison, Department of Anthropology.
- Jenkins, P. C. 1994. Continuity and change in the ceramic sequence at Harappa. In A. Parpola and P. Koskikallio (eds), *South Asian Archaeology 1993: 315–328*. Helsinki, Suomalainen Tiedeakatemia.
- Jones, S. 1997. *The Archaeology of Ethnicity*. London, Routledge.
- Keessing, F. M. 1958. *Cultural Anthropology. The Science of Custom*. New York. Rinehart and Company.
- Kenoyer, J. M. 1984a. Chipped Stone Tools from Mohenjodaro. In B. B. Lal and S. P. Gupta (eds), *Frontiers of the Indus Civilization: Sir Mortimer Wheeler Commemoration Volume: 118–131*. New Delhi, Books and Books.
- Kenoyer, J. M. 1984b. Shell Industries at Moenjo Daro, Pakistan. In M. Jansen and G. Urban (eds), *Interim Reports Vol. 1, Pakistan 1982-83: 99–116*. Aachen, RWTH.
- Kenoyer, J. M. 1984c. Shell working Industries of the Indus Civilization: A summary. *Paléorient* 10(1): 49–63.
- Kenoyer, J. M. 1989. Socio-Economic Structures of the Indus Civilization as reflected in Specialized Crafts and the Question of Ritual Segregation. In J. M. Kenoyer (ed.), *Old Problems-New Perspectives in the Archaeology of South Asia (Wisconsin Archaeology Reports, Vol. 2): 183–92*. Madison, Wisconsin Prehistory Press.
- Kenoyer, J. M. 1991a. Ornament Styles of the Indus Valley Tradition: Evidence from Recent Excavations at Harappa, Pakistan. *Paléorient* 17(2): 79–98.
- Kenoyer, J. M. 1991b. The Indus Valley Tradition of Pakistan and western India. *Journal of World Prehistory* 5(4): 331–385.
- Kenoyer, J. M. 1994. Faience Ornaments of Harappa and the Indus Civilization. *Ornament*, 17(3): 35–39, 95.
- Kenoyer, J. M. 1995. Interaction Systems, specialized crafts and culture change: The Indus Valley Tradition and the Indo-Gangetic Tradition in South Asia. In G. Erdosy (ed.), *The Indo-Aryans of Ancient South Asia: Language, Material Culture and Ethnicity: 213–257*. Berlin, W. DeGruyter.
- Kenoyer, J. M. 1997. Trade and technology of the Indus Valley: New insights from Harappa, Pakistan. *World Archaeology* 29(2): 262–280.
- Kenoyer, J. M. 1998a. *Ancient Cities of the Indus Valley Civilization*. Karachi, Oxford University Press.
- Kenoyer, J. M. 2000. Wealth and Socio-Economic Hierarchies of the Indus Valley Civilization. In J. Richards and M. Van Buren (eds), *Order, Legitimacy, and Wealth in Early States: 90–112*. Cambridge, Cambridge University Press,

- Kenoyer, J. M. 2003. Bangles. In M. A. Mills, P. J. Claus and S. Diamond (eds), *South Asian Folklore: An Encyclopedia - Afghanistan, Bangladesh, India, Nepal, Pakistan, Sri Lanka*: 51–52. Routledge, New York.
- Kenoyer, J. M. 2005a. Bead Technologies at Harappa, 3300–1900 BC: A comparative summary. In C. Jarrige and V. Lefevre (eds), *South Asian Archaeology 2001*: 157–170. Paris, Editions Recherche sur les Civilisations.
- Kenoyer, J. M. 2005b. Indus Urbanism: New Perspectives on its Origin and Character. In J. Marcus and J. A. Sabloff (eds), *Ancient City: New Perspectives on Urbanism in the Old and New World*: 183–208. Santa Fe, NM, School for Advanced Research Press.
- Kenoyer, J. M. 2007. Stone beads in Ancient South Asia 7000–600 BC: A comparative approach to technology, style, and ideology. In J. Allen and V. Hector (eds), *The Global Perspective of Beads and Beadwork: History, Manufacture, Trade, and Adornment*: 1–12. Istanbul, Kadir Has University.
- Kenoyer, J. M. 2010. Measuring the Harappan world: insights into the Indus order and cosmology. In I. Morley and C. Renfrew (eds), *The archaeology of measurement: comprehending heaven, earth and time in ancient societies*: 106–22. Cambridge, Cambridge University Press.
- Kenoyer, J. M. 2011. Regional Cultures of the Greater Indus Valley: The Ravi and Kot Diji Phase Assemblages at Harappa, Pakistan. In T. Osada and M. Witzel (eds), *Cultural Relations between the Indus and the Iranian Plateau during the Third Millennium BCE*: 165–217. Cambridge, Cambridge University Press.
- Kenoyer, J. M. 2013. Eye Beads from the Indus Tradition: Technology, Style and Chronology. *Journal of Asian Civilizations* 36(2): 1–23
- Kenoyer, J. M. and Meadow, R. H. 1997. Excavations at Harappa 1986–97: A brief overview. *Punjab Journal of Archaeology and History* 1: 61–73.
- Kenoyer, J. M. and Meadow, R. H. 2000. The Ravi Phase: A New Cultural Manifestation at Harappa. In M. Taddei and G. De Marco (eds), *South Asian archaeology 1997*: 55–76. Rome, Istituto Italiano per l’Africa e l’Oriente.
- Khan, A. and Lemmen, C. 2014. Bricks and urbanism in the Indus Civilization rise and decline. *History and Philosophy of Physics*. URL: <https://arxiv.org/abs/1303.1426v2>
- Khan, F. A. 1965. Excavations at Kot Diji. *Pakistan Archaeology* 2: 13–85.
- Khan, F. A., Knox, J. R. and Thomas, K. D. 1991. *Explorations and Excavations in Bannu District, North-West Frontier Province, Pakistan, 1985–1988*. London, British Museum.
- Kohl, P. L. 1998. Nationalism and Archaeology: On the Constructions of Nations and the Reconstructions of the Remote Past. *Annual Review of Anthropology* 27(1): 223–246.
- Kopytoff, I. 1986. The cultural biography of things: commoditization as process. In A. Appaduri (ed.), *The Social Life of Things: Commodities in Cultural Perspective*: 64–94. Cambridge, Cambridge University Press.
- Kreger, M. M. B. 2010. Urban population dynamics in a preindustrial New World city: morbidity, mortality, and immigration in Postclassic Cholula. Unpublished PhD thesis, Pennsylvania State University.
- Kumar, M., Uesugi, A., Shinde, V., Dangi, V., Kumar, V., Kumar, S., Singh, A. K., Mann, R. and Kumar, R. 2011. Excavations at Mitathal, District Bhiwani (Haryana) 2010–11: A Preliminary Report, *Puratattva* 41: 68–178.
- Kurien, P. 1994. Colonialism and ethnogenesis: A study of Kerala, India. *Theory and Society* 23(3): 385–417.
- Lal, B. B., Thapar, B. K., Joshi, J. P. and Bala, M. 2003. *Excavations at Kalibangan: The Early Harappans (1960–1969)* (Memoirs of the Archaeological Survey of India, No. 98). New Delhi, Archaeological Survey of India.
- Law, R. W. 2011. *Inter-regional interaction and urbanism in the ancient Indus valley: a geologic provenience study of Harappa’s rock and mineral assemblage*. New Delhi, Manohar.
- Lightfoot, K. G. and Martinez, A. 1995. Frontiers and Boundaries in Archaeological Perspective. *Annual Review of Anthropology* 24 (1): 471–492.
- Lindstrom, K. 2013. *Pottery Preferences and Community Dynamics in the Indus Pottery Preferences and Community Dynamics in the Indus Civilization Borderlands*. Unpublished PhD thesis, University of Wisconsin–Madison.
- Lucy, S. 2005. Ethnic and Cultural Identities. In M. Diaz-Andreu, S. Lucy, S. Babić, and D. N Edwards (eds), *The archaeology of identity: Approaches to gender, age, status, ethnicity, and religion*: 86–109. London, Routledge.
- Maceachern, S. 1998. Scale, Style, and Cultural Variation: Technological Traditions in the Northern Mandara Mountains. In M. T. Stark (ed.), *The Archeology of Social Boundaries*: 107–131. Washington DC, Smithsonian Institution Press.
- Mackay, E. 1948. *Early Indus Valley Civilization*. London, Luzac and Co.
- Madella, M. and Fuller, D. Q. 2006. Palaeoecology and the Harappan Civilisation of South Asia: A Reconsideration. *Quaternary Science Reviews* 25(11–12): 1283–1301.
- Majumdar, A. 1999. Early Harappan Settlements in North Gujarat. *Pragdhara* 9: 15–25.
- Marshall, J. 1931. *Mohenjo-Daro and the Indus Civilization. Being an official account of archaeological excavations at Mohenjo-Daro carried out by the government of India between the years 1922 and 1927*. New Delhi, Asian Educational Services.
- McGuire, R. H. 1983. Breaking Down Cultural Complexity: Inequality and Heterogeneity. In M. B. Schiffer (ed.), *Advances in Archaeological Method and Theory*: 91–142. New York, Academic Press.

- Meadow, R. H. and Kenoyer, J. M. 1997. Excavations at Harappa 1994-1995: New perspectives on the Indus script, craft activities and city organization. In B. Allchin and R. Allchin (eds) *South Asian Archaeology 1995*: 139-172. New Delhi, Oxford and IBH.
- Méry, S. and Blackman, M. J. 1996. Black-Jars of Meluhha: Production and Diffusion of Indus Pottery Ware During the Second Half of the 3rd Millennium B.C. *Harappan Studies* 3: 2-18.
- Miller, H. M.-L.-. L. 2013. Weighty Matters: Evidence for Unity and Regional Diversity from the Indus Civilization Weights. In S. Abraham, P. Gullapalli, T. Raczek and U. Rizvi (eds), *Connections and Complexity. New Approaches to the Archaeology of South Asia*: 161-176. Walnut Creek, CA, Left Coast Press.
- Mills, B. J. 2008. Remembering while forgetting: Depositional practices and social memory at Chaco. In B. J. Mills and W. H. Walker (eds), *Memory work: Archaeologies of material practices*: 81-108. Santa Fe, School for Advanced Research Press.
- Mills, B. J. 2004. The establishment and defeat of hierarchy: Inalienable possessions and the history of collective prestige structures in the Pueblo Southwest. *American Anthropologist* 106(2): 238-251.
- Moore, J. H. 1994. Putting anthropology back together again: the ethnogenetic critique of cladistic theory. *American Anthropologist* 96 (4): 925-948.
- Mughal, M. R. 1970. *The Early Harappan Period in the Greater Indus Valley and Northern Baluchistan (c. 3000-2400 BC)*. Unpublished PhD thesis, University of Pennsylvania.
- Mughal, M. R. 1990. Further Evidence of the Early Harappan Culture in the Greater Indus Valley: 1971-90. *South Asian Studies* 6: 175-200.
- Mughal, M. R. 1992. Jhukar and the Late Harappan Cultural Mosaic of the Greater Indus Valley. In C. Jarrige (ed.), *South Asian Archaeology 1989*: 213-222. Madison, WI, Prehistory Press.
- Mukherjee, D. 2013. The study of Sorath Harappan ceramics: A case study from the site of Padri, Gujarat. In A. Manatunga and C. D. S. Wettewe (eds), *Asian Art, Culture and Heritage*: 211-228. Colombo, University of Kelaniya International Association for Asian Heritage.
- O'Donoghue, E. M. 2011. The Costume of Crisis Reinforcing Local Identity in Later Etruscan Art. In L. Amundsen-Meyer, N. Engel and S. Pickering (eds), *Identity Crisis: Archaeological Perspectives on Social Identity*: 96-105. Calgary, Alberta, Chacmool Archaeological Association, University of Calgary.
- Ortman, S. G. 2012. *Winds from the North: Tewa Origins and Historical Anthropology*. Salt Lake City, University of Utah Press.
- Paine, R. R. 2000. If a population crashes in prehistory, and there is no paleodemographer there to hear it, does it make a sound? *American Journal of Physical Anthropology* 112(2): 181-190.
- Paine, R. R. and Storey, G. R. 2006. *Epidemics, age at death, and mortality in ancient Rome*. In G. R. Storey (ed.), *Urbanism in the preindustrial world: Cross-cultural approaches*: 69-85. Tuscaloosa, The University of Alabama Press.
- Peoples, M. A. 2011. *Identity and social transformation in the Prehispanic Cibola world: AD 1150-1325*. Unpublished PhD Thesis, Arizona State University.
- Pelegrin, J., 1994. Lithic Technology in Harappan times. In A. Parpola and P. Koskikallio (eds), *South Asian Archaeology 1993*: 587-598. Helsinki, Suomalainen Tiedekatemia.
- Petrie, C. A., Singh, R. N., Bates, J., Dixit, Y., French, C. A., Hodell, D. A., Jones, P. J., Lancelotti, C., Lynam, F., Neogi, S. and Pandey, A. K. 2017. Adaptation to Variable Environments, Resilience to Climate Change: Investigating Land, Water and Settlement in Indus Northwest India. *Current Anthropology* 58(1): 1-30.
- Piggott, S. 1950. *Prehistoric India to 1000 BC*. Harmondsworth, Middlesex, Penguin Books.
- Possehl, G. L. 2002a. Harappans and hunters: economic interaction and specialization in prehistoric India. In K. D. Morrison and L. L. Junker (eds), *Forager-Traders in South and Southeast Asia, Long Term Histories*: 62-76. Cambridge, Cambridge University Press.
- Possehl, G. L. 1999. *Indus Age: The Beginnings*. Philadelphia, University of Pennsylvania Press.
- Possehl, G. L. 1992. The Harappan Cultural Mosaic: Ecology Revisited. In C. Jarrige (ed.), *South Asian Archaeology 1989*: 237-244. Madison, WI, Prehistory Press.
- Possehl, G. L. 2002a. The Indus Civilization: An introduction to Environment, Subsistence, and Cultural History. In S. A. Weber and W. R. Belcher (eds), *Indus Ethnobiology. New Perspectives from the Field*. Lanham, MA, Lexington Books.
- Possehl, G. L. 2002b. *The Indus Civilization. A Contemporary Perspective*. New York: Altamira.
- Possehl, G. L. 1997. The transformation of the Indus Civilization. *Journal of World Prehistory* 11(4): 425-472.
- Possehl, G. L. and Herman, C. F. 1990. The Sorath Harappan: A new regional manifestation of the Indus Urban phase. In M. Taddei (ed.), *South Asian Archaeology 1987*: 295-320. Rome, IsMEO.
- Pracchia, S. 1985. Excavations of a Bronze-Age Ceramic Manufacturing Area at Lal Shah, Mehrgarh. *East and West* 35(4): 458-468.
- Quivron, G. 2000. The Evolution of the Mature Indus Pottery Style in the Light of the Excavations at Nasharo, Pakistan. *East and West* 50(1-4): 157-190.
- Rajesh, S. V. 2011. *A Comprehensive study of the regional Chalcolithic cultures of Gujarat*. Unpublished PhD Thesis, The Maharaja Sayajirao University of Baroda.
- Rajesh, S. V., Krishnan, K., Ajithprasad, P. and H. Sonawane, V. 2013. Evaluating the Anarta tradition in the light of Material culture from Loteshwar and other sites in Gujarat. *Man and Environment* 38: 10-45.

- Rao, S.R. 1985. *Lothal: A Harappan Port Town (1955-62), Vol.1*. New Delhi, Archaeological Survey of India.
- Renfrew, C. 1993. *The Roots of Ethnicity: Archaeology, Genetics and the Origins of Europe*. Rome. Unione internazionale degli istituti di archeologia, storia e storia dell'arte in Roma.
- Roosens, E. 1994. The Primordial Nature of Origins in Migrant Ethnicity. In H. Vermeulen and C. Govers (eds), *The Anthropology of Ethnicity: Beyond Ethnic Groups and Boundaries*: 81–104. Amsterdam, Het Spinhuis.
- Sajjadi, S. M., Foruzanfar, S. F., Shirazi, R. and Baghestani, S. 2003. Excavations at Shahr-i-Sokhta First Preliminary Report on the Excavations of the Graveyard, 1997–2000. *Iran* 41(1): 21–97.
- Schortman, E. M., Urban, P. A. and Ausec, M. 2001. Politics with Style: Identity Formation in Prehispanic Southeastern Mesoamerica. *American Anthropologist* 103(2): 312–330.
- Shaffer, J. G. 1992. Indus Valley, Baluchistan, and the Helmand Drainage (Afghanistan). In R. W. Ehrich (ed.), *Chronologies in Old World Archaeology*: 441–464. Chicago, University of Chicago Press.
- Shaffer, J. G. and Lichtenstein, D. A. 1989. Ethnicity and Change in the Indus Valley Cultural Tradition. In J. M. Kenoyer (ed.), *Old Problems-New Perspectives in the Archaeology of South Asia* (Wisconsin Archaeology Reports, Vol. 2): 117–126. Madison, WI, Wisconsin Prehistory Press.
- Shaffer, J. G. and Lichtenstein, D. A. 1995. The Cultural Tradition and Palaeoethnicity in South Asian Archaeology. In G. Erdosy (ed.), *The Indo-Aryans of Ancient South Asia: Language, Material Culture and Ethnicity*: 126–154. Berlin, Walter de Gruyter.
- Shinde, V., Osada, T., Sharma, M. M., Uesugi, A., Uno, T., Maemoku, H., Shirvalkar, P., Deshpande, S. S., Kulkarni, A., Sarkar, A. and Reddy, A. 2008. *Exploration in the Ghaggar Basin and excavations at Girawad, Farmana (Rohtak District) and Mitathal (Bhiwa District)* (Occasional Paper 3: Linguistics, Archaeology and the Human Past): 77–158. Kyoto, Research Institute for Humanity and Nature.
- Siddle, R. 2003. The limits to citizenship in Japan: multiculturalism, indigenous rights and the Ainu. *Citizenship Studies* 7: 447–462.
- Sonawane, V. H., Ajithprasad, P., Bhan, K. K., Krishnan, K., Prathapachandran, S., Majumdar, A., Patel, A. K. and Menon, J. 2003. Excavations at Bagasra 1996–2003: A Preliminary Report. *Man and Environment* 28(2): 21–50.
- Sonawane, V. H. 2004. Nageshwar. A Center of Harappan Shell Craft in Saurashtra. *Marg* 55(3): 15–23.
- Storey, G. 2006. *Urbanism in the preindustrial world: cross-cultural approaches*. Tuscaloosa, University of Alabama Press.
- Storey, G. R. 1997. The population of ancient Rome. *Antiquity* 71(274): 966–978.
- Storey, R. 1992. Mortality Models and the Demographic Significance of Tlajinga 33. In R. Storey (ed.), *Life and death in the ancient city of Teotihuacan: a modern paleodemographic synthesis*: 238–266. Tuscaloosa, University of Alabama Press.
- Storey, R., Márquez-Morffín, L. and Núñez, L. F. 2012. Teotihuacan Neighborhoods and the health of residents. In M. C. Arnauld, L. R. Manzanilla and M. E. Smith (eds), *The Neighborhood as a Social and Spatial Unit in Mesoamerican Cities*. Tucson, University of Arizona Press.
- Stovel, E. 2013. Concepts of ethnicity and culture in Andean archaeology. *Latin American Antiquity* 24(1): 3–20.
- Terrell, J. E. (ed.) 2001. *Archaeology, language, and history: Essays on Culture and Ethnicity*. Westport, CT, Bergin and Garvey.
- Tilly, C. 2015. *Identities, Boundaries and Social Ties*. New York, Routledge.
- Uesugi, A. 2011a. Pottery from the Cemetery Area. In V. Shinde, T. Osada and M. Kumar (eds), *Excavations at Farmana: District Rohtak, Haryana, India 2006-2008*: 674–800. Kyoto, Indus Project, Research Institute for Humanity and Nature.
- Uesugi, A. 2011b. Pottery from the Settlement Area. In V. Shinde, T. Osada, and M. Kumar (eds), *Excavations at Farmana: District Rohtak, Haryana, India 2006-2008*: 168–328. Kyoto, Indus Project, Research Institute for Humanity and Nature.
- Uesugi, A. 2013. A Note of the Diachronic Changes of the Harappan Pottery - A Preliminary Analysis. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 1: 356–371.
- Uesugi, A. 2017. Ceramic Sequence in the Ghaggar plains from Pre-Indus to Post-urban Indus periods. In V. Lefevre, C. G. Diedrich and B. Mutin (eds), *Man and Environment in Prehistoric and Protohistoric South Asia: New Perspectives*. Turnhout, Brepols.
- Valentine, B., Kamenov, G. D., Kenoyer, J. M., Shinde, V., Mushrif-Tripathy, V., Otarola-Castillo, E. and Krigbaum, J. 2015. Evidence for Patterns of Selective Urban Migration in the Greater Indus Valley (2600–1900 BC): A Lead and Strontium Isotope Mortuary Analysis. *PLoS ONE* 10(4): 1–20. DOI: <https://doi.org/10.1371/journal.pone.0123103>
- Valentine, B. 2016. More than Origins: Refining Migration. In G. R. Schug and S. R. Walimbe (eds), *A Companion to South Asia in the Past*: 187. Hoboken, NJ, John Wiley and Sons.
- Valentine, B. 2013. *Immigrant Identity in the Indus Civilization: A multi-site isotopic mortuary analysis*. Unpublished PhD thesis, University of Florida.
- Vermeulen, H. and Govers, C. (eds) 1994. *The Anthropology of Ethnicity: Beyond Ethnic Groups and Boundaries*. Amsterdam, Het Spinhuis.
- Vidale, M. and Miller, H. M.-L. 2001. On the Development of Indus Technical Virtuosity and its Relation to

- Social Structure. In M. Taddei and G. De Marco (eds), *South Asian archaeology, 1997*: 115–132. Rome, Istituto Italiano per l'Africa e l'Oriente.
- Voss, B. L. 2005. From Casta to Californio: Social Identity and the Archaeology of Culture Contact. *American Anthropologist* 107(3): 461–474.
- Voss, B. L. 2008. *The Archaeology of Ethnogenesis: Race and Sexuality in Colonial San Francisco*. Berkeley and Los Angeles, University of California Press.
- Voss, B. L. 2015. What's new? Rethinking ethnogenesis in the archaeology of colonialism. *American Antiquity* 80(4): 655–670.
- Weber, S. 1999. Seeds of urbanism: Palaeoethnobotany and the Indus civilization. *Antiquity* 73(282): 813–826.
- Weber, S.A., Barela, T. and Lehman, H. 2010. Ecological Continuity: an Explanation for Agricultural Diversity in the Indus Civilization and Beyond. *Man and Environment* 35(1): 25–62.
- Weber, S. and Kashyap, A. 2016. The vanishing millets of the Indus civilization. *Archaeological and Anthropological Sciences* 8(1): 9–15.
- Weber, S., Kashyap, A. and Mounce, L. 2011. Archaeobotany at Farmana: New Insights into Harappan Plant Use Strategies. In V. Shinde, T. Osada and M. Kumar (eds), *Excavations at Farmana: District Rohtak, Haryana, India 2006-2008*: 808–823. Kyoto, Indus Project, Research Institute for Humanity and Nature.
- Weik, T. M. 2014. The Archaeology of Ethnogenesis. *Annual Review of Anthropology* 43: 291–305.
- Wengrow, D. 2010. Introduction: Commodity Branding in Archaeological and Anthropological Perspectives. In A. Bevan and D. Wengrow (eds), *Cultures of Commodity Branding*: 11–33. Walnut Creek, CA, Left Coast Press, Inc.
- Wengrow, D. 2008. *Prehistories of commodity branding*. *Current Anthropology* 49(1): 7–35.
- Wheeler, R. E. M. 1953. *The Indus Civilization*. Cambridge, Cambridge University Press.
- Wiessner, P. 1983. Style and Social Information in Kalahari San Projectile Points. *American Antiquity* 48(2): 253–276.
- Yaeger, J. 2010. Commodities, Brands, and Village Economies in the Classic Maya Lowlands. In A. Bevan and D. Wengrow (eds), *Cultures of Commodity Branding*: 167–195. Walnut Creek, CA, Left Coast Press Inc.
- Yaeger, J. and Canuto, M. A. 2000. Introducing an Archaeology of Communities. In M. A. Canuto and J. Yaeger (eds), *An Archaeology of Communities. A New World Perspective*: 1–15. London, Routledge.