Towards a Broader View of Hunter-Gatherer Sharing

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On the cover: Sharing space and selves among Nayaka people in South India.
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# CONTENTS

Contributors ix
Figures xi
Tables xi
Acknowledgements xiii

**Introduction**  
Noa Lavi & David E. Friesem  
Why hunter-gatherers? Why sharing? 1  
About the book 4  
Innovative perspectives of sharing: chapters outline 5  
Concluding remarks 9

## Part I  
**Intimacy, presence and shared-living**

**Chapter 1**  
Where have all the kin gone? On hunter-gatherers’ sharing, kinship and scale 15  
Nurit Bird David  
The unscalability of kinship identities 17  
Enter individuals 18  
Kinship as a root metaphor 19  
Demand-sharing constitutes social relations 20  
Re-enter kinship, talk and presence 21  
Conclusions 22

**Chapter 2**  
Extending and limiting selves: a processual theory of sharing 25  
Thomas Widlok  
What is wrong with evolutionary models of sharing? 25  
The problem of historical diversity 26  
The problem of outcome 27  
Extending the self 28  
Limiting the self 30  
The analytical purchase of the new theories of sharing 32  
The opportunity to request 32  
The opportunity to respond 34  
The opportunity to renounce 34  
Conclusions 36

**Chapter 3**  
Intimate living: sharing space among Aka and other hunter-gatherers 39  
Barry S. Hewlett, Jean Hudson, Adam H. Boyette & Hillary N. Fouts  
Density of households: Sharing space in settlements 40  
Sharing space in a home 42  
Sharing space in a bed 44  
Sharing interpersonal space: touching 45  
Hypothetical implications of intimate living 49  
Summary and conclusion 52

**Chapter 4**  
Sharing and inclusion: generosity, trust and response to vulnerability in the distant past 57  
Penny Spikins  
Sharing in an evolutionary perspective 58  
Sharing and care for injury and illness in the distant past 60  
Sharing, tolerance and diversity 61  
Contrasting emotional schemas – sharing through generosity and calculated collaboration 64  
Conclusions 66
Chapter 5  The demand for closeness: social incentives for sharing among hunter-gatherers and other groups  
Kenneth Sillander  
Open aggregation 72  
Relatedness 77  
Conclusion 81  

Chapter 6  An ethnoarchaeological view on hunter-gatherer sharing and its archaeological implications for the use of social space  
David E. Friesem & Noa Lavi  
Ethnoarchaeology of hunter-gatherer use of space 86  
Social dynamics and their archaeological implications 86  
Archaeological implications 90  
Concluding remarks 93  

Part II  Senses of connectedness beyond the horizons of the local group  

Chapter 7  Sharing pleasures to share rare things: hunter-gatherers’ dual distribution systems in Africa  
Jerome Lewis  
Pygmies today 99  
BaYaka cultural area 100  
BaYaka egalitarianism and demand sharing 101  
What is not shared on demand 102  
Economies of joy 104  
The regional economy and contemporary change 105  
A dual economy 106  
Hunter-gatherers’ dual economic systems 106  
Conclusion 108  

Chapter 8  The archaeology of sharing immaterial things: social gatherings and the making of collective identities amongst Eastern Saharan last hunter-gatherer groups  
Emmanuelle Honoré  
The concept and the practice of sharing in archaeology 113  
Sharing: an ambivalent concept 113  
 Approaching the sharing of immaterial things in archaeology 115  
 Interaction and the making of social existences by sharing performances 115  
 Group cohesion and the different forms of sharing 118  
 Conclusion 119  

Chapter 9  Information sharing in times of scarcity: an ethnographic and archaeological examination of drought strategies in the Kalahari Desert and the central plains of North America  
Alan J. Osborn & Robert K. Hitchcock  
Beads, adornment and information 124  
Behavioural ecology and signalling theory 125  
Beads and ethnology: the Kalahari Desert of Southern Africa 126  
Beads and archaeology in the North American Great Plains 132  
Discussion and conclusions 135  

Chapter 10  Studying sharing from the archaeological record: problems and potential of scale  
Robert L. Kelly, Spencer R. Pelton & Erick Robinson  
Archaeological studies of sharing 144  
Sharing in the prehistory of Wyoming, USA 147  
Conclusions 150
Chapter 11  An elephant to share: rethinking the origins of meat and fat sharing in Palaeolithic societies  
Ran Barkai  
Thoughts about sharing 154  
Becoming an elephant/mammoth 157  
The origins of fat and meat sharing in the Palaeolithic 161  
Endnote 163  

Part III  Learning and sharing of knowledge  
Chapter 12  Identifying variation in cultural models of resource sharing between hunter-gatherers and farmers: a multi-method, cognitive approach  
Adam H. Boyette & Sheina Lew-Levy  
Sharing in forager and farmer thought 172  
Sharing and early life experiences 173  
Evolutionary approaches to resource sharing 173  
Ethnographic setting 174  
Hypotheses and qualitative predictions 175  
Methods 175  
Results 177  
Discussion 180  
Conclusion 182  

Chapter 13  Foragers with limited shared knowledge  
Peter M. Gardner  
Actual learning processes 186  
The challenge of cognitive diversity 189  
Evidentiary criteria for knowledge claims 190  
Closing thoughts 191  

Chapter 14  The sharing of lithic technological knowledge  
Gilbert B. Tostevin  
Framing the question 195  
Why should one share flintknapping knowledge? 197  
But to what extent can one share one’s flintknapping knowledge? 198  
The importance of the tactical vs. strategic knowledge distinction for the experimental investigation of the sharing of flintknapping knowledge 199  
What does it mean to share flintknapping knowledge? 201  
Sharing space 201  
Sharing time 202  
Conclusion: how do we test our assumptions about when a given lithic technology must have been shared? 203  

Part IV  Sharing in times of change  
Chapter 15  Men hunt, women share: gender and contemporary Inuit subsistence relations  
Magalie Quintal-Marineau & George W. Wenzel  
Methods 211  
Ningiqtuq: the traditional sharing system 211  
Women, the mixed economy, sharing and subsistence 213  
Discussion 217  
Postscript 218
Chapter 16  The pure hunter is the poor hunter?  
Olga Yu. Artemova  
Preliminary notes 221  
Twists of fate 223  
‘Absolutely tribal people’ 226  
There is no other way 227  
‘That’s enough for me’ 227  
‘We cannot be like them’ 228  
When generosity is stressed 229  
Retrospect 231  

Chapter 17  Ecological, historical and social explanations for low rates of food sharing among Mikea foragers of southwest Madagascar  
Bram Tucker  
Mikea of Madagascar 239  
Mikea food sharing 239  
Why Mikea rarely share, explanation 1: culture history and property relations 241  
Why Mikea rarely share, explanation 2: competitive self-interest 242  
Why Mikea rarely share, explanation 3: social exchange 244  
Conclusions 245
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Figures

2.1. The waves of sharing. 28
2.2. Screenshots from a field video documenting sharing among *Akhoe Hai/om. 29
2.3. Small foraging camp of a *Akhoe Hai/om person in the north of Namibia. 33
2.4. An Ovambo agro-pastoralist homestead in northern Namibia. 33
2.5. Advertisement for a gated community in Nairobi, Kenya (2015). 33
2.6. *Akhoe Hai/om burial ground. 36
2.7. *Aonin Nama burial ground. 36
3.1. Four people co-sleep on an Aka bed. 45
3.2. Percentage of time forager and farmer infants, children and adolescents are held or touched during the day. 47
3.3. Feedback loops between intimate shared spaces and other forms of sharing. 53
4.1. Significant cognitive-emotional capacities involved in sharing in mobile hunter-gatherer contexts. 58
4.2. Evolutionary pressures, motivations to share and sharing behaviours in early humans. 59
4.3. Example of an embedded figures test. 62
4.4. Example of portable art showing embedded figures (or overlapping forms). 63
4.5. Examples of embedded forms (or overlapping figures) in parietal art. 64
4.6. Contrasting internal working models and social behaviour between sharing through generosity and calculated collaboration. 65
8.1. The sharing of material things (dividing) and the sharing of immaterial things (multiplying). 114
8.2. Location map and general view of Wadi Sūra II, Eastern Sahara. 116
8.3. The central panel of Wadi Sūra II paintings. 116
8.4. A group of human figures depicted with bent legs in the rock art of Wadi Sūra II. 117
8.5. Human figures in a row at Wadi Sūra II. 117
8.6. A row of human figures holding possible musical instruments at Wadi Sūra II. 117
9.1. Interpretive framework for understanding the interrelationships between social recognition and quality signals. 126
9.2. Distribution of San language groups in southern Africa. 128
9.3. Ju/'hoan beadmaker at Nyae Nyae (///Xao///oba). 130
9.4. Tubular bone beads from the Felis Concolor Site (25SM20) in central Nebraska. 132
9.5. Spatial distribution of sites with tubular bone beads in the Central Plains of North America. 133
9.6. Temporal distribution of sites with tubular bone beads in the Central Plains of North America. 134
10.1. The Winterhalder-Kelly model of sharing relations between groups of foragers. 146
10.2. Radiocarbon dates, groundstone, nearest neighbor, and obsidian distance for the study area. 148
11.1. An Acheulean flint biface from Lower Paleolithic Revadim site, Israel. 157
11.2. An experiment in using flint handaxes in butchering operations. 159
11.3. A biface made on an elephant bone from the site of Fontana Ranuccio. 160
12.1. Box plot of cultural competency scores for Aka and Ngandu men and women. 177
14.1. The relationship between equifinality and the likelihood of accurate reverse engineering of core reduction processes. 204
15.1. Country food consumption and financial support to harvesting activities. 216
16.1. Map of Australia. 224
16.2. Phillis Yankaporta throws the cast net. 225
16.3. Lucky family. 225
16.4. The interior of an Aurukun house. 229
16.5. The children of Aurukun. 230
17.1. Map of the forest camp of Belò in 1998, showing households clustered by space and kinship. 240

Tables

3.1. Measures of settlement density in five forager groups. 41
3.2. Average nearest neighbour in forager groups with data. 41
3.3. Average size and space per person in Aka and Efe homes. 43
3.4. Comparison of space per person in a typical household of mobile hunter-gatherers and farmers.

3.5. Average home size and living area per person in developed countries.

3.6. Average space per person in a bed among Aka hunter-gatherers and Ngandu farmers.

3.7. Infant holding and other measures of caregiver sensitivity.

3.8. Percentage of time intervals G/wi adults touched or were within proximity of other males and females in the camp setting during daylight hours.

3.9. Percentage of time G/wi adolescents touched or were within proximity of other males and females in the camp setting during daylight hours.

3.10. Husband-wife co-sleeping in hunter-gatherers versus other modes of production.

3.11. Average frequency of sex per week among married couples in three age groups among Aka foragers, Ngandu farmers and U.S. middle-class market economists.

7.1. Southern Mbendele mokondi massana (spirit plays) organised according to context of use.

9.1. Late Stone Age and recent forager sites in the Kalahari that have evidence of ostrich eggshell beads.

9.2. Iron Age sites in the Kalahari Desert region of Botswana with ostrich eggshell beads.

9.3. Evidence for severe droughts on the plateau of southern Africa during the Iron Age Interpretive framework for understanding the interrelationships between social recognition and quality signals.

10.1. Obsidian Frequencies by Wyoming County and Time Period.

12.1. Interview questions and associated hypothetical domain.

12.2. Percent of forced-choice responses by ethnicity and domain.

12.3. Rankings of responses to the question: who teaches children to share?

12.4. Rankings of responses to the question: Who do children share food with?

12.5. Ranking of responses to the question: Who do children share non-food items with?

15.1. Ningiqtuq/sharing interaction sets in the Inuit social economy.

17.1. Percent of different foods given away to other households among Mikea and Ache foragers.

17.2. Mikea foods and the predictions of the marginal utility model of tolerated theft.
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Noa Lavi & David E. Friesem, Cambridge, October 2019
Chapter 10

Studying sharing from the archaeological record: problems and potential of scale

Robert L. Kelly, Spencer R. Pelton & Erick Robinson

The subject of this monograph – sharing of food, information, tools, land and knowledge – is an important topic to anthropology because routine sharing is unique to the hominin lineage. Accordingly, it has produced such a voluminous literature that Kelly devoted virtually an entire chapter (6) to it in *The Lifeways of Hunter-Gatherers* (Kelly 2013b). The lion’s share of that literature, however, comes from ethnographic observations and data; far fewer studies come from archaeological sources. This does not mean archaeologists are less interested in the subject; in fact, tracing the origins of sharing is of keen interest (Stiner et al. 2009), but the subject is more difficult to study in an archaeological context. While ethnographers can witness food or information transfers in real time, archaeologists must reconstruct sharing based on objects, such as animal bones, stone tools, or pottery, and we do so long after the fact and from a record whose temporal resolution would dismay ethnographers, who must sometimes wonder: Can archaeologists contribute anything to the study of sharing among hunter-gatherers (or anything at all to anthropology beyond a voyeuristic antiquarianism)?

We begin with what some may find a contentious claim: cultural (or social) anthropologists and archaeologists think differently (Kelly 2017). Briefly, cultural anthropologists often take seemingly ‘small’ behaviours and correctly show them to be a portal into a very complex world. This is what Mauss (1966) had in mind when he described ‘total social facts’. Archaeologists, on the other hand, take disparate data (ceramics, faunal remains, settlement patterns, etc.) drawn from chronological sequences covering often vast stretches of time and seek the primary factors lying behind trends in the data. Cultural anthropologists seek complexity; archaeologists seek simplicity. This is why comparative ethnographic studies (e.g. Ember & Ember 1992) often draw archaeologists’ approval and cultural anthropologists’ ire: because comparative studies ignore detail in favour of broad patterns. Archaeologists and cultural anthropologists often talk past one another, or, like members of two different cultures, misunderstand one another. This volume contains, and should contain, both sides of that conversation (compare, for example, this chapter with Bird-David, this volume).

The cultural difference between the fields is partly a product of a difference in scale. Ethnographers observe behaviour moment-by-moment in personal interviews and observations of daily life, and a long-term study might go on for 50 years. Archaeologists record behaviour from material objects in large, compressed and coarse chunks of time – decades if we are lucky, but sometimes centuries, millennia, or for Palaeolithic archaeologists, even longer. This ability to see long-term history is, in fact, the strength of archaeology.

Both approaches are valid paths of anthropological inquiry, and, in fact, need one another. We achieve a more complete understanding of complex human behaviours, such as sharing, when we analyse them at different scales, both spatial and temporal. Human behaviour transpires moment-by-moment and across millennia. The two scales are linked: century or millennial patterns that archaeological data are best at revealing are the cumulative result of many individuals’ quotidian actions (actions that archaeology usually cannot see). Archaeologists need to understand the everyday aspect of human behaviour (with all its potential for individual agency) to make sense of the patterns they reveal. Cultural anthropologists, on the other hand, must understand that coarse-grained archaeological patterns are not simply ‘poor’ data but reveal the effects of factors at play (e.g. climate change, population density) that are not easily visible at the day-to-day scale, where many factors conspire to confound the easy interpretation of individual behaviour. Both fields yield different but complementary
knowledge on the various conditions and contexts of culture; neither field corners the market on understanding human behaviour.

Archaeological studies of sharing

Despite the archaeological record’s limitations, some archaeologists have tried to replicate the ethnographer’s scale in the study of sharing at archaeological sites. Waguespack (2002) refit caribou and Dall sheep remains between two Nunamiut houses at the Palangana site, occupied in the 1880s, in Alaska’s Brooks Range to look for evidence of food sharing. Based on bone refits, Waguespack argued that the distribution of caribou bones reflected a form of sharing known as tolerated theft (now often called ‘tolerate scrounging’) where low utility remains are shared with neighbours not so much to ensure reciprocity in the future but to alleviate the instantaneous potential for conflict that could erupt between the haves and the have-nots.

Waguespack’s analysis was possible because when Lewis Binford excavated the site in the early 1970s he also collected oral accounts about its use from informants. Therefore, Waguespack knew that only four families occupied the site for a short period, that one of the two excavated houses was occupied by a man, Palangana, and his family and the other by another man, Kapkana, and his family. She also knew that the two men were friends and that Palangana was an excellent hunter while Kapkana was an excellent toolmaker. In other words, her work proceeded with far more ethnographic-scale data than most archaeologists have.

Enloe (2003, 2004) also used refitting to show sharing of reindeer among households at the Upper Palaeolithic site of Pincevent, along the Seine in central France. Pincevent is a remarkable site because it has been so extensively and carefully excavated, contains numerous, clearly distinguishable, short-term occupations of nomadic hunters, and because it lies in a geomorphic context that resulted in gentle burial of those houses – with their associated hearths, lithic and faunal scatters – beneath floodplain silts. Because of these conditions, Enloe was able to track the movement of pieces of the same animal between houses, and thus document the sharing of game at this site.

Finally, O’Brien (2013a, 2013b) similarly showed the sharing of antelope at the protohistoric Shoshonean Eden-Farson site in western Wyoming. The antelope assemblage at this site appears to result largely from a communal kill. Unlike Enloe, he could not refit broken bones or find members of bilateral pairs (e.g. femurs whose size and condition suggest they came from the same animal) between houses. Instead, O’Brien focused on the spatial distribution of antelope elements between the households. He found no differences among the households in terms of elements or animal size; although families shared single animals between houses, there appears to have been no bias in the cuts of meat consumed at or moved between houses.

Besides these three, there are really no studies of individual- or family-level sharing based on archaeological data. Why? Archaeologists try to emulate what ethnographers do when they study sharing, and that means, to the extent possible, they look for and tabulate individual instances of food sharing between households. The problem is that such studies require the extensive excavation of sites that are ‘fine-grained’ assemblages, those where multiple occupations and/or natural processes have not distorted the link between behaviour and material remains. This kind of site is rare; most archaeological sites contain multiple, mixed occupations, are disturbed to one extent or another by post-depositional processes (e.g. rodents, rivers), have poor bone preservation, or are deeply buried and thus not amenable to extensive horizontal excavation. Pincevent, Palangana, Eden-Farson: these are exceptions rather than the rule in archaeology. While we applaud the work at them, they provide so few data points that they are of little use analytically. If we had, say, 30 Eden-Farson sites spread across Wyoming’s prehistory we might be able to use a tight analysis of each site to look at relationships between measures of sharing and other variables, say, climate or population density. But we don’t have 30 Eden-Farsons and we probably never will.

If archaeologists cannot witness instances of food sharing across a dimension that helps anthropology understand sharing-like behaviours, what can they contribute? To answer this question we must return to archaeology’s strength: broad patterns in material culture across space and/or time. To employ this strength we must translate the understanding of sharing that we receive from ethnographic accounts into data that archaeologists can witness. This is not easy, perhaps especially for the archaeology of nomadic hunter-gatherers. What archaeologists see are distributions of things across time and space, and for nomadic hunter-gatherers there is always the question as to whether those things moved through exchange, which is a form of permission-granting behaviour (e.g. the sharing of use rights), or through direct acquisition during a move. Fortunately, we can often sort these out. In the US Great Basin, for example, obsidian projectile points in the Carson Desert of western Nevada must have been imported since there are no geologic sources of obsidian in the region. Obsidian appears in
lithic assemblages primarily as projectile points, and the waste flakes show that these artefacts entered as complete tools, and not as raw nodules of material or even partially worked cores (Kelly 2011). The obsidian artefacts must indicate trade of some kind because: (a) the geologic sources lie far outside any reasonable annual territory that would have included the Carson Desert, and (b) if the points were fashioned from sources encountered during long-distance moves then foragers would most likely have discarded them before reaching the Carson Desert because obsidian points generally break on their first use (Cheshier & Kelly 2006).

The obsidian points perhaps indicate ‘sharing’, and provide evidence of a social link between the participants of those relationships. By sourcing points of known ages, we observed a shift, one that occurred about 650 years ago, from a predominant use of southern to a predominant use of northern sources. This may mark a shift in who the foragers of the Carson Desert were sharing with, that is, to whom they were giving permission to use the resources of ‘their’ land (and presumably vice versa; Kelly 2011). Why this shift occurred is unknown.

Working in the Late Woodland and Mississippian archaeology of the Ohio River Valley of the central US, Nolan & Cook (2010) tried to link sharing to external variables. To do so, they had to scale up from ethnographic observations of individuals to groups. Although they were working with the archaeology of maize agriculturalists, their approach is useful to the study of prehistoric hunter-gatherers, and, in fact, employs a model drawn from hunter-gatherers, one they labelled the Winterhalder-Kelly model.

The Winterhalder-Kelly model

We know from copious ethnographic data that hunter-gatherers commonly share meat from large game but not plant food (in fact, this is one of the few universals one can derive from hunter-gatherer ethnology). Winterhalder (1986) constructed a model to account for this difference based on variance in returns from large-game hunting versus gathering, and the degree of correlation in foragers’ returns. Large game hunting is usually risky in the sense that there is a chance, often high, that the hunter will come home empty-handed. Contrast this with plant gathering: the forager generally knows beforehand how much he or she will gather. In addition, if three men go hunting individually, there is a high chance that only one of them will be successful; if three women go tuber-gathering, they will each return with about the same. Thus, and in more general terms, hunters of large game have high variance in their day-to-day returns, and low correlation with other hunters in those returns. Plant collectors have low variance in their day-to-day returns, and high correlation with other collectors.

Winterhalder used these basic facts of large-game hunting and plant gathering to model behaviour of meat versus plants. Winterhalder is not an archaeologist, but he does think like one: he looks for the general pattern rather than the many factors that complicate the ethnographer’s world. Using the framework of human behavioural ecology, which privileges the returns from foraging as a measure of success, he argued that if foragers aim to maximize their daily return rates and to minimize their risk of a serious shortfall, then they should share foods with high variance in returns and a low degree of correlation among foragers’ efforts; but they should not share foods with low variance in their returns and high correlation among foragers’ efforts. As it happens, the former generally describes large-game hunting and the latter describes gathering. To keep one’s daily average intake of meat as high and as even as possible, foragers should share meat; but they should not share plant foods since variance in returns is most likely a result simply of variance in a forager’s effort (leaving aside forager illness or child-care needs – complicating factors the results of which would be dealt with through sharing).

Winterhalder was operating with the idea that sharing builds up debts: I share with you today when you are in need with the expectation that you will share with me tomorrow when I am in need. It turns out that sharing is more complex than that (see Tucker, this volume), but debt-building is certainly part of what sharing is about. Large game hunting is highly variable, but when it’s successful it results in a surfeit of food. Plant gathering is not highly variable; poor returns result from laziness (and there’s no profit in sharing with a lazy person since there’s a low expectation of return at a later date).

Winterhalder’s model used variance over time in forager’s returns and the degree of correlation in their returns as a way to model expectations of individual food sharing. However, we can think of his variables as variance in resource availability over time and correlation between any social entities in the overall returns from food-getting. Doing so, Kelly (1995; 2013b) scaled Winterhalder’s model up from individuals to groups to describe sharing-like behaviours of land and other resources between social entities (be they foraging bands, agricultural villages, or clusters of settlements). In this case, Kelly scaled up the predicted behaviours from individual to group-level actions, and included social-boundary defence,
This leads to social boundary defence, some negotiation of who can share with who, a way of admitting people into one’s social network (and thus putting off the threat of violence) but at the same time keeping them at arm’s length, so to speak. This situation should result in reciprocity and exchange of gifts, trade goods whose purpose is not directly economic but which serve as a reminder of a social connection (see Osborn & Hitchcock, this volume).

Where variance in a group’s returns is low, as in boxes C and D, we expect little need for sharing (similar to plant gathering). In box C, villages still suffer high year-to-year variation in resources, but those villages are not in sync; when one does poorly, another might have a good year. Under these conditions, villages have the potential to share with one another, for one has resources when another does not. This leads to social boundary defence, some negotiation of who can share with who, a way of admitting people into one’s social network (and thus putting off the threat of violence) but at the same time keeping them at arm’s length, so to speak. This situation should result in reciprocity and exchange of gifts, trade goods whose purpose is not directly economic but which serve as a reminder of a social connection (see Osborn & Hitchcock, this volume).

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Sharing in the prehistory of Wyoming, USA

We also take a broad-brush approach in looking at Wyoming’s prehistory, all 13,000 years of it, in terms of sharing. Note that the indigenous people of Wyoming were all foragers; there was no agriculture until Europeans arrived in the later nineteenth century. Figure 10.2 compiles several data sets whose analysis is currently on-going: (a) a summed probability distribution of ~5000 radiocarbon dates from the state, calibrated and taphonomically corrected (See Kelly et al. 2013; Zahid et al. 2016), alongside a measure of the frequency of groundstone artefacts in dated contexts (data on 80 metates compiled by Pelton from Wyoming state site records), (b) a nearest neighbour analysis of site distances (Robinson et al. 2018), and (c) a measure of the distances that obsidian artefacts move from their geologic sources by time period (from Wunderlich 2014; n = 568).

Elsewhere we have argued that a human population appears in Wyoming about 13,000 years ago and grows at a rate of about 0.04 per cent, reaching carrying capacity about 6000 years ago (Zahid et al. 2016; Fig. 10.2). Nearest neighbour analysis (Clark & Evans 1954) provides a simple first-order measure \( r \) enabling us to understand whether this population growth occurred within the context of dispersed or clustered social groups (Robinson et al. 2018; Fig. 10.2b). There is noise in the dataset for sites more than 9000 years old due to small sample size. Nonetheless, the general trend suggests increasingly clustered groups from 11,000–9000 years ago \( r = 1.2 \) to \( r = 0.4 \), more randomly distributed groups from 9000–7500 years ago, then a period with clustered spatial organization from 7000–4500 years ago. As population declines from 4500–2000 years ago, settlements become more randomly distributed, suggesting that people were inhabiting a wider variety of landscapes again.

The period of 7000–4500 years ago marks the first fluorescence of pithouses in the archaeological record of this region (Smith 2003). Pithouses provide evidence for increasing investment in specific places and reduced mobility, if only on a temporary and seasonal basis. As in the children’s game of musical chairs, pithouses suggest hunter-gatherers grabbed the landscape’s best places and perhaps exerted some control over them. The increase in pithouses is accompanied by an increase in groundstone artefacts (Fig. 10.2a). These artefacts point to an increase in the use of tubers and/or seeds, marking an expansion of the diet breadth. Optimal foraging models suggest this trend is expectable: as population density increases, we expect foragers to encounter high-ranked resources less frequently and consequently, for diet to expand and include lower-ranked foods such as tubers and especially seeds (Kelly 2013b). Groundstone helps make those resources more edible (e.g. by removing seed coats that make seeds difficult for humans to digest).

Population begins a slow decline after about 4500 years ago, reaching a nadir about 2000 years ago. Elsewhere, we have shown that the growth and decline of human population in Wyoming is tightly linked to available moisture (Kelly et al. 2013) and we expect such environmental changes are at play throughout the state. As population declines, foragers abandon the mobility strategy that entailed pithouses and groundstone tools, and sites are less clustered. After 2000 years ago, population again grows, reaching a zenith about 1200 years ago. As that population grows, groundstone again increases in frequency, and pithouses, too, make a short-lived return about 1200 years ago, when population reaches perhaps its highest point in Wyoming’s prehistory. Population then declines sharply toward the present beginning around 1200 years ago, most likely in response to the aridity of the Medieval Climate Warming. (Although some of the decline may be due to the edge-effect of summed probability distributions, European-introduced disease, and a reduction in the use of radiocarbon dates in favour of European trade goods to date protohistoric sites, the data probably still point to significant population decline after 1200 years ago.) Groundstone and pithouses both decline in frequency as population declines after 1200 years ago.

The 13,000-year long story here is, at one level, a simple one in which hunter-gatherers used a combination of mobility and technology to cope with changes in the availability of foods, changes that were jointly linked to both climate and human population density (which, as we showed previously, are linked themselves; see Kelly et al. 2013). Foragers maintained a nomadic lifeway with widely spaced settlement, relying heavily on high-ranked game during the initial period of population growth, 13,000 to 7000 years ago. We imagine that as local population pressure increased, some families moved to unoccupied land. But as population grew, it eventually reached the
Figure 10.2. (a) Summed probability distribution of ~5000 radiocarbon dates from the state, calibrated and taphonomically corrected (see Kelly et al. 2013; Zahid et al. 2016 for methods), and the frequency of groundstone in dated contexts, (b) a nearest-neighbour analysis of the distance between radiocarbon-dated sites, with mean, 68, and 95% confidence intervals, and (c) box plots of the average distance that obsidian artefacts move from their geologic sources by time period (data from Wunderlich 2014).
current foraging strategy’s carrying capacity during the late Early Archaic and Middle Archaic periods (about 7000 to 3500 years ago). Foragers then shifted their strategy, relying less on mobility (as evidenced by pithouses) and more on technology (as evidenced by groundstone) to continue to live as foragers in the Wyoming landscape. Certain regions, notably southwest Wyoming, appear to have been more amenable to this strategy than others (Smith 2003).

Sharing at some level played a role in this adaptive scheme, and the Winterhalder-Kelly model anticipates the trend: as subsistence moved toward a heavy reliance on seeds and tubers, foragers relied more on intensification of their resource gathering efforts, and less on outside contacts and support. Evidence for this comes from the distribution of obsidian artefacts.

Since we can trace them to their geologic sources, obsidian artefacts tell us something about social connections across a landscape. Geological sources of obsidian are rare in Wyoming; in fact, the only sources lie in far northwestern Wyoming (Obsidian Cliff, Cougar Creek, Park Point, Grassy Lake and Jackson Hole); other obsidian artefacts come from sources in Idaho (Bear Gulch, Big Southern Butte, Malad, Brown’s Bench and Timber Butte), and one source in Utah (Wild Horse Canyon). Our database consists of 568 pieces of obsidian (Table 10.1), slightly more than half (54 per cent) of which are formal tools (see also Smith 1999), mostly bifaces and projectile points, with the other half split between waste flakes (23 per cent) and unknown (24 per cent). All but 15 pieces (from Natrona and Crook counties) are from western Wyoming, which is expected given the lack of geologic sources outside the state’s northwestern corner; this also explains the abundance of obsidian in Park and Teton counties, which lie in the state’s northwest. In addition, there are only two obsidian artefacts from an Early Palaeoindian context, and 33 from Late Palaeoindian contexts (combined for analysis here).

Obsidian artefacts moved the shortest median distance during the Middle Archaic period (68 km), from about 5500 to 3500 years ago, and the greatest median distance in the Late Prehistoric period (259 km), about 1800 to 300 years ago (Fig. 10.2c). Obsidian also moved long distances during the protohistoric period (median = 197 km) but this may be due to the greater mobility that horses allowed. An earlier study of obsidian use in Wyoming, Montana, and Idaho found that the diversity of sources used is very high during the Late Prehistoric period, and declined sharply during the protohistoric and historic periods (Scheiber & Finley 2011).

Southwest Wyoming is particularly interesting because it is where Middle Archaic pithouses – the evidence of reduced residential mobility – are most common (Smith 2003). Note there are few obsidian artefacts in Middle Archaic contexts in the four southwest Wyoming counties (Fremont, Lincoln, Sublette and Sweetwater; there is no obsidian recorded for Uinta county sites in the database); most (82 per cent) Middle Archaic obsidian comes from sites in Park and Teton counties, where geologic sources are located. Obsidian did not move very far during the Middle Archaic. Scheiber & Finley (2011) also found low counts of obsidian in Middle Archaic contexts for southwest Montana and Idaho as well, and they found a decline in the diversity of sources represented in southwest Wyoming Middle Archaic sites.

Reducing residential mobility in the Middle Archaic of southwest Wyoming would have reduced

| County     | Protohistoric | Late Prehistoric | Late Archaic | Middle Archaic | Early Archaic | Early and Late Palaeo | Total | % |
|------------|---------------|------------------|-------------|---------------|--------------|----------------------|------|
| Bighorn    | 17            | 67               | 27          | 1             | 0            | 1                    | 113  | 19.9|
| Crook      | 0             | 4                | 5           | 0             | 1            | 0                    | 10   | 17.6|
| Fremont    | 0             | 1                | 4           | 0             | 0            | 1                    | 6    | 10.5|
| Hot Spring | 0             | 7                | 0           | 1             | 1            | 0                    | 9    | 15.8|
| Lincoln    | 5             | 15               | 28          | 4             | 18           | 0                    | 70   | 12.3|
| Natrona    | 2             | 3                | 0           | 0             | 0            | 5                    | 7    | 0.9 |
| Park       | 34            | 25               | 29          | 25            | 3            | 0                    | 116  | 20.4|
| Sublette   | 0             | 13               | 3           | 4             | 22           | 0                    | 42   | 7.4 |
| Sweetwater | 5             | 19               | 1           | 5             | 0            | 1                    | 31   | 5.5 |
| Teton      | 0             | 27               | 41          | 45            | 21           | 31                   | 166  | 29.2|
| Total      | 63            | 181              | 138         | 85            | 66           | 35                   | 568  | 100 |
| Median distance moved (km) | 197 | 259 | 126 | 68 | 99 | 55 |
the likelihood of encountering and trading with people from northwest Wyoming, people who would have had greater direct access to obsidian sources. But that very fact also points to a contraction of social relations, and a reduction in the broader arena of sharing behaviour, for example using the territory that ‘belonged’ to others (i.e. those who saw themselves as holding the privilege to grant the right to use a given tract of land). As we noted above, the Winterhalder-Kelly model anticipates this.

The distance obsidian moved during the Late Prehistoric period increased, as did the diversity of sources represented (Scheiber & Finley 2011). This is intriguing because the Late Prehistoric witnessed an increasing population, and then a sudden loss of carrying capacity (and people) during the Medieval Warming (c. 1150–600 cal. yr), which presumably reduced foraging returns across the region and, through severe drought, made some areas unliveable at times (see Mann et al. 2009).

The Middle Archaic was also a time of drought and population decline, and the adaptive response to it was to grab a good spot on the landscape and reduce social ties, or sharing. Although pithouses make a brief appearance at the beginning of the Late Prehistoric period, they soon disappear, and evidence suggests foragers used high elevations (> 3000 m) more intensively (e.g. Morgan et al. 2012), and eventually participated in warfare. In fact, the Late Prehistoric presents us with the strongest evidence of warfare throughout the region’s entire chronology (Kelly 2013a). Thus, the Late Prehistoric shows a different adaptive response to competition for lifespace and food than that of the Middle Archaic: foragers at once rapidly increased their populations and expanded their shared access to obsidian. Why was the response to competition in the two periods so different?

One possibility is that the larger Late Prehistoric world of North America was different from that of the Middle Archaic. North America in the Late Prehistoric contained several large, socially complex entities, notably in the Midwest (e.g. Cahokia and other Mississippian communities) and the southwest (e.g. Chaco Canyon and its descendants). These could have spurred trading networks across the country (obsidian from Wyoming’s Obsidian Cliff appears in Hopewell contexts as far east as Ohio so such trading networks already existed before Mississippian communities did). Those trading networks may have provided support for far distant social groupings, perhaps an expected outcome of the vast geographic scope of some effects of the Medieval Warming. Additionally, competition in the Middle Archaic may not have been as strong as in the Late Prehistoric due to lower overall numbers of people, who resolved competitive pressures by reducing their residential mobility and localized their sharing (which in southwest Wyoming did not entail obsidian since there are no local geologic sources). In the Late Prehistoric, population density may have been simply too high relative to the effects of the Medieval Warming, and resulted in more frequent violent encounters with close neighbours (box A, in Fig. 10.1) and the need for support from more far-flung groups. What we do not yet know is the precise timing of these changes, such as the use of high elevations, the onset of warfare, and the shift in obsidian use, relative to the onset of the Medieval Warming. The Late Prehistoric was also a time of great social movements, with new ethnic entities (e.g. Avonlea, and possibly ancestors of the Shoshone) moving into the high plains and Rocky Mountains (Kornfeld et al. 2010), new groups who could have increased tension by introducing different customs and languages to the region. Such population shifts point to a response predicted by box C (long-distance migration), perhaps produced by low, but less variable returns, but widespread correlation in how poorly all foraging groups were doing during the Medieval Warming. How these social movements, environmental changes, and related shifts in the broader area of sharing are interrelated is a direction for future research.

Conclusions

Archaeology and (social/cultural) anthropology contribute different pieces to the anthropological puzzle. There is no point in asking that each do the same, and, in fact, doing so would lessen the capacity of each to contribute its strength to the field. Ethnographic observation leads us to understand the factors that condition quotidian patterns of sharing while archaeological study shows how those patterns play out over long spans of time and space, and how they link to environmental or social variables.

We know from ethnographic data that the degree of variance and correlation in foraging returns affects sharing behaviours among individuals, and we can hypothesize that the same models account for long-term patterns of sharing of food, land, and information between villages and regions. There is a cost and benefit to every act of sharing, and foragers – anyone in fact – considers them in deciding whether to be generous or stingy. Our goal as anthropologists and archaeologists is to figure out how and why people make the decisions that they do, and to understand the consequences of those decisions. In this regard, we need both the long-term and short-term scales of archaeology and anthropology.
Studying sharing from the archaeological record: problems and potential of scale

References


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