Inscriptions as Artifacts: Precolonial South India and the Analysis of Texts

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This paper examines one assemblage of texts from southern India, stone inscriptions of the Vijayanagara period, and considers both how these texts have been studied and how that history of research has structured our understanding of the past. We ask how these texts might be interpreted differently, (1) under different conditions of sampling and recovery, with a specific focus on in-field locations of inscriptions, and (2) as sources of information combined with archaeological data. We suggest that traditional source-side criticism of texts might be profitably expanded routinely to include contextual analysis, such as archaeologists apply to studies of artifacts.

KEY WORDS: texts; sampling; South Asia; context.

INTRODUCTION

This is a paper about text as material culture. More than that, it is a discussion of how observations made on documentary materials are constituted as data in the study of historical process. The growing importance of historical perspectives in anthropological theory (e.g., Comaroff and Comaroff, 1992; Fabian, 1983; Ohnuki-Tierney, 1990; Sahlins, 1985; Wolf, 1982) forshadows the recent renewal of archaeological interest in history [evident, for example, in explorations of the *Annaliste* school of French structural history (Blintliff, 1991; Cobb, 1991; Hodder, 1987; Knapp, 1992)]. In a paper of limited scope, we cannot hope to trace the many uses and understandings of *history* as evidentiary source, subject matter, or conceptual framework in the archaeological literature (Deetz, 1987; Hodder, 1987;

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Lightfoot, 1995; Little, 1994; Schmidt and Patterson, 1995; Stahl, 1993; Taylor, 1948, pp. 25-44; Trigger, 1989; Young, 1987). Nevertheless, in order for archaeological engagement with history to be fruitful, these understandings must be unpacked, problematized, and subjected to critical evaluation.

Here we limit our discussion to some aspects of how archaeologists make inferences about the past using observations made on objects: texts as well as artifacts. In this paper we discuss one assemblage of texts from southern India and consider both how these texts have been studied and how that history of research has structured our understanding of the past. We consider how these texts might be interpreted differently (1) under different conditions of sampling and recovery and (2) as sources of information combined with archaeological data.

ARCHAEOLOGY AND HISTORY: METHOD AND THE PROCESSUAL/POSTPROCESSUAL DIVIDE

The scope and limitations of documentary sources and their potential congruence or complementarity with archaeological data are among many important issues in the archaeological use of texts. Often, written history occupies a privileged position relative to archaeological data, even when the latter contradict or complement textual accounts. This priority of documents can be the product of archaeological systematics when the material record is simply employed to illustrate "known" historical patterns or events. Of course, historical "knowing" is by no means simple or straightforward, as many scholars have pointed out. To the existing literature on such topics as textual multivocality and interpretation (Galloway, 1991; Lightfoot, 1995), we add a consideration of the methodological bases on which historical inferences are drawn, and of archaeological engagement with that process. How do documents come to be history? What are the contexts in which texts are produced, deposited, and made available for scholarly scrutiny? and, importantly, What are their limitations as a record of past experience? These are not obscure historiographic issues, but are questions that speak directly to the archaeological use of documentary materials and to the criteria for inclusion of historic observations as evidence in archaeological arguments.

In a recent article on the constitution of archaeological observations as evidence, Wylie (1992) notes that despite the contentious history of the processual/postprocessual debate, there actually exists a rather substantial common ground between them, a common ground that is largely methodological. Wylie begins (1992, pp. 271–272) by pointing out the inherent con-

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tradiction of some forms of anti-/postprocessualism that embrace a radical relativism of knowledge claims while at the same time denying that "just any" view of the past is acceptable. If the latter position is to be sustained, this would seem to demand that some account be given of "how, exactly, archaeologists are to judge the relative credibility of evidential, as well as of interpretive and explanatory claims" (Wylie, 1992, pp. 271-272). She adds (1992, p. 273; final italics ours),

This will require a nuanced account of how archaeological data-facts of the record-are constituted as evidence, how they are "laden" with theory such that they can have a *critical* bearing on claims about the cultural past and can, in turn, sustain what Shanks and Tilley call a 'particular and contingent objectivity' (1989:43). Whether or not this is properly termed a theory of 'testing,' or constitutes an analysis of 'scientific' (or 'systematic') enquiry, seems to me to be a semantic quibble, a genuine irrelevancy. It is here that I see convergence between the interests of processualists and the anti/post-processualists.

Our goals in this paper are limited and, in the spirit of Wylie's identification of common ground, primarily methodological. We discuss how historical knowledge, like archaeological knowledge, is influenced by the parameters of data recovery, and we suggest that our disciplinary experience of recovering, analyzing, and evaluating large data sets gives us a basis for recovering, analyzing, and evaluating historical data. Documentary records, like their archaeological counterparts, neither encode self-evident meaning about the past nor, individually, wholly encompass that past. Archaeologists routinely consider observations made on material culture in light of multiple contexts-cultural, depositional, analytical-and freely move back and forth between these in evaluating archaeological arguments. Historical data must be similarly evaluated, both in terms of internal criteria such as coherence, credibility, authenticity, and perspective (Galloway, 1991; Schiffer, 1990; Vansina, 1970, pp. 167-170; Wood, 1990, pp. 88-92) and as bodies of observations that are differentially preserved, collected, and analyzed. Such source-side evaluation is, certainly, a routine (if rarely discussed) part of the disciplinary practice of historians, although a number of recent primers on source-side criticism for archaeologists (Galloway, 1991; Wood, 1990) make the point that archaeologists sometimes remain innocent of this practice. We intend to expand this point, however, to include as source-side criticism not only such internal issues as author intention but also more explicit contextual concerns related to sampling and recovery.

Following discussions by Stahl (1993, pp. 245-250) and Lightfoot (1995, pp. 204-206), we advocate the extension of source-side criticism to all forms of actualistic data used in archaeological analysis (cf. Haekel, 1970; Wylie, 1985). Just as observed patterns in archaeological data may be influenced by both "underlying" features of those data and parameters

of data recovery and analysis—a relationship reflected in the literature on issues such as screen size (e.g., Shaffer and Sanchez, 1994) and the use of appropriate statistics for describing and comparing assemblages (e.g., Lyman, 1994)—so are patterns in textual data multiply structured (Bennet, 1984).

THE VIJAYANAGARA EMPIRE AND INSCRIPTIONAL DATA

By way of illustration we turn to a corpus of written texts: stone inscriptions from the Precolonial city of Vijayanagara and its environs. This city was the capital of the eponymous empire, a territorially expansive polity that claimed hegemony over much of southern India between the fourteenth and the sixteenth centuries A.D. (Nilakanta Sastri, 1966; Stein, 1989). The degree to which the imperial center actually realized material gain from the empire, and the nature and degree of political control exercised by imperial elites, however, are topics of active and contentious debate among historians (Champakalakshmi, 1981; Palat, 1987; Stein, 1980, 1995). Arguments regarding imperial structure and control (and their spatial and temporal variability) hinge on interpretations of a large and varied corpus of textual data, of which stone inscriptions are the most important.

The city of Vijayanagara was situated near the northern frontier of the empire in the semiarid interior of peninsular India. One of the largest cities in South Asia, Vijayanagara was a locus of monumental architecture, both sacred and secular. The impressive architectural and archaeological remains of the city have been a focus of research for nearly a hundred years (Michell, 1985; for a review see Morrison, 1995). Outside the city, the Vijayanagara metropolitan survey project has conducted regional survey and test excavations (Morrison, 1995; Sinopoli and Morrison, 1995) in the countryside surrounding the capital. The historical record of the Vijayanagara period (e.g., Gopal, 1985a, b, 1990; Filliozat, 1973; Krishnaswami Ayyangar 1919; Nilakanta Sastri and Venkataramanayya, 1946) is neither primitive ethnography nor narrative account but is, instead, a spatially and temporally variable database recording the social and economic transactions of multiple, often competing interests. In addition to inscriptions in stone, on which we focus here, there are also portable inscriptions, generally on copper plates. Other texts include literary, religious, and political treatises and accounts of foreign visitors.

We restrict our discussion to a single form of textual evidence (stone inscriptions) in order to maximize comparability between observations and facilitate quantitative treatment. As always, there are significant concerns

about chronology, authorship, and agenda in the analysis of these materials. Stone inscriptions are the most ubiquitous class of text, a situation no doubt related both to the durability of the granite on which they are carved and to their demonstrative aspect. The latter is an important point, for stone inscriptions were in a sense public documents, visible to literate and illiterate observers alike, serving as public notices of intent (Karashima, 1996). Stone inscriptions are also generally immobile, carved on large boulders, in basements of public structures, built into reservoir embankments, and so on. They cannot be conveniently carried off and rarely are defaced. In contrast, copper plate inscriptions [often forged (Nilakanta Sastri, 1955)] were private, portable documents held by individuals or families and cut into a (recyclable) matrix more expensive than stone.

When the Archaeological Survey of India was founded in 1871, epigraphy was constituted as a major branch of the survey (Chakrabarti, 1988), and it remains an important area of historical specialization. Considering all time periods, Karashima (1996, p. 2) calculates that there are approximately 30,000 inscriptions in the Tamil language, 17,000 in the Kannada language, and 10,000 in the Telugu language (all South Indian languages), while the number of inscriptions in Sanskrit and other north Indian languages he estimates at only about 23,000. Thus, South India, with its many languages, dialects, and scripts, has been a center of epigraphical research, with more than a hundred years of work in collecting, preserving, and publishing inscriptions.

Inscriptions vary a great deal in form and content. Karashima (1996, p. 2) notes, "Almost all inscriptions have in their initial part the name of the ruling king with his regnal year, sometimes also with the eulogy to the king, and Vijayanagar inscriptions have the Saka year [a South Asian calendric system] together with the king's name and the regnal year." As we note below, even a careful scholar such as Karashima is mistaken here; many inscriptions are actually very short and omit any mention of kings or dates. These inscriptions have not, however, been of great interest to historians reconstructing political or economic history and, as discussed below, are found in contexts other than the normative one of temple precincts.

Although one might assume from the historical literature that all inscriptions are associated with temples, in fact inscriptions are found in a number of contexts. Temple precincts do contain a great many inscriptions; indeed, some of the most considered historical analyses of this period are based on studies of single temple complexes containing thousands of inscriptions (e.g., Breckenridge, 1976; Heitzman, 1987; Srinivasan and Reiniche, 1990a, b; Stein, 1980). More modest shrines also may bear inscriptions, either on slabs set up in or near the temple, on the various walls, columned halls, paving stones, and other structures of the temple complex itself, or on nearby natural features such as boulders. Village and field boundaries sometimes are demarcated by boundary stones (Kotraiah, 1978), with or without inscriptions. Inscriptions are found on slabs or boulders within villages, on wells, alongside roads, in fields, and even in seemingly remote locations such as rock outcrops. Inscriptions may be associated with "secular" architecture such as walls, fortifications, and stairways. Finally, a significant number of inscriptions are associated with agricultural features, particularly canals and reservoirs (Morrison, 1995).

In addition to variation in context, inscriptions also vary greatly in length, from what are usually called "label inscriptions" of one or two words (Patil and Balasubramanya, 1991) to lengthy texts containing genealogical or historical accounts. It should be no surprise that the latter have received more attention than the former. Texts also vary in the skill of their execution and the elegance of their language. There are poorly executed inscriptions, with grammatical and spelling errors, as well as polished and erudite ones. More could be said along these lines, but it may be enough to note that lithic inscriptions vary a great deal in form, context, and visibility.

Inscription content also varies, but a large proportion refer to grants or donations, often made to temples or other religious institutions. Donations may take the form of outright gifts of cash or livestock (more common in earlier periods) or alienations of rights to produce, land, goods, or privileges.² Many of these gifts also may be thought of as investments, in that the transactions sometimes created a direct material advantage for the donor as well as having religious and political implications (Appadurai, 1978; Breckenridge, 1985). Inscriptions also record various kinds of revenue arrangements. A few examples include the granting of tax exemptions for the clearing of new agricultural land or the construction of irrigation facilities; land sales by villages, assemblies, or individuals; and payments for the maintenance of irrigation works or for specific tasks such as construction. Often these revenue-related inscriptions involve a donative aspect, and it is thus quite reasonable, particularly in light of their demonstrative na-

²For example, a king might assign his "share" of produce (tax revenue) from agricultural lands in a specific village to a temple. That is, the produce that would have been remitted to the king instead went to the temple. Alternately, land might be purchased outright and then donated. This alienation of rights can be thought of a tax exemption in some cases, with the benefit not always being reassigned—a number of Vijayanagara inscriptions record tax exemptions for barbers, for example, with no further movement of the funds. The term alienation is used thus in the legal sense to mean a transfer of property (cf. Breckenridge, 1985; Stein, 1980).

ture, to follow Appadurai (1978, 1981) and others in glossing these transactions as prestations³ or simply gifts.

Donors, along with their titles and father's names, are virtually always mentioned in donative inscriptions. Donors include not only kings and royalty, but also local elites of various types, royal officers, merchant groups, groups of villagers (apparently dominant agricultural castes), temple officials or priests, and even individuals with no apparent political or religious office (Karashima, 1984, 1992; Morrison and Lycett, 1994). While all these individuals and groups must be thought of as elites, they constitute quite a range of interests and levels of authority, with the record reflecting to some extent their struggles for resources and power (Morrison and Lycett, 1994).

One feature of this historical record is that it is easily partible into units of analysis. Individual inscriptions clearly are differentiated as blocks of text written at particular times for particular purposes. Thus, quantitative comparison between these texts and other artifacts is possible. Inscriptions are also highly conventional and repetitive, making it possible to uniformly extract from them certain basic kinds of information. Further, it is relatively easy to see in this kind of mosaic historical record that narrative history is literally constructed out of the building blocks of these small texts. Archaeologists in other parts of the world also encounter this type of historical record, but we mean to extend this discussion to texts in general and to suggest that historical understandings of all texts are no less constructed and no less subject to the kinds of data recovery and analysis issues we describe here. Many of the problems we encounter in dealing with inscriptions could apply equally well, for example, to census data or probate inventories. Texts do not represent a way out of the methodological dilemmas of archaeology. Like artifacts, structures, and landscapes, they are problematic rather than self-evident sources of information.

Sourcing the Sources: Context and Vijayanagara Inscriptions

The following sections are based on analysis of a coded database of 1610 Vijayanagara-period inscriptions from the northern part of the Vijayanagara empire (for more information see Morrison, 1995; Morrison and Lycett, 1994). Our compilation includes all the Vijayanagara-period inscriptions we know of in this area, published and unpublished, except for a few

³The term prestation, as introduced by Mauss (1967) is, of course, well known in economic anthropology but is particularly well developed in the theoretical literature on South Asian ritual economy and politics (e.g., Dumond, 1970; Parry, 1986; Raheja, 1988).

	Number of inscriptions	Mean date (A.D.)
Language		
Sanskrit	106	1483
Kannada	1290	1495
Telugu	87	1563
Tamil	49	1380
Kannada & Sanskrit	63	1470
Kannada & Telugu	5	1548
Telugu & Sanskrit	7	1478
Persian	3	1647
Script		
Nagari	146	1474
Kannada	1307	1496
Telugu	94	1560
Tamil	1	1542
Tamil & Grantha	35	1390
Grantha, Tamil, & Kannada	2	1345
Grantha	17	1386
Kannada & Nagari	1	1417
Persian	3	1647
Unknown	4	1456
Total	1610	1494

Table I. Languages and Scripts in the Database of Vijayanagara Inscriptions, with the Mean Date (AD) for Each Attribute^a

^aNote that a language need not be written in its own script. Mean date calculations omit undated inscriptions.

newly located ones that are still under study. Like all artifact samples, our database is drawn from an unknown (and unknowable) population. However, just as we study ceramic distributions without knowing the total number of vessels or sherds ever produced at a site or in a region, we proceed with what is probably a very good sample of Vijayanagara stone inscriptions.

At this point we must acknowledge the innovative work of a number of historians of South India who have treated inscriptional data in a quantitative way (Heitzman, 1987; Karashima and Shanmugam, 1988, 1989; Talbot, 1994), breaking free from the practice of using inscriptional data anecdotally. As one might imagine with such a large and diverse body of data, it is easy to support almost any position using a single inscription. More thorough analysis of the body of texts, however, forces one to come to terms with variability in many areas—political structure (Talbot 1994), temple economies (Heitzman, 1987), and revenue arrangements (Karashima and Shanmugam, 1988, 1989), for example. Our focus on the recovery contexts (cf. Schiffer *et al.*, 1978) that structure the quantitative patterns in inscriptions described by these historians builds upon their work.

Assemblage-Level Observations. We can discern a number of interesting patterns in this database at an assemblage level. For example, the intensity of inscriptional activity, reflected by the temporal distribution of dated inscriptions, is bimodal for the region as a whole, a pattern that varies in amplitude but not in form within smaller territorial units (Morrison, 1995). This pattern reflects the intensive economic and other activity associated with the founding and initial rapid growth of the city in the fourteenth century, a period of relative stasis in the fifteenth century, and a dramatic expansion of the empire and intensification of agricultural and other production in the sixteenth century (Morrison, 1995, 1996).

There are five languages and six scripts represented in the database. Their distribution shows a temporal trend, with Telugu outpacing both Tamil and (by the end of the period) even Kannada, the present-day official language of the Vijayanagara region (Table I). Thus, monolingual analyses of these texts would create a marked temporal skew in the data quite apart from the strong underlying pattern of temporal distribution in the assemblage. Further, different languages seem to have been differentially employed in their role as public or quasi-public markers. Inscriptions in Kannada are less likely to be associated with secure dates (10% are undated) than those in the database as a whole (where 6% are undated); undated inscriptions are frequently shorter, as we discuss below, and may have had more local salience than longer notices in languages less commonly understood outside certain elite circles or specific communities.

If we consider the subjects of the inscriptions (gifts) in the database as a whole, gifts of villages—that is, of rights to specified proportions of produce from particular villages (Stein, 1980)—are the most common (32.8%; N = 529), followed by what are lumped here as nonagricultural or "other" gifts (30.6%; N = 492); construction of temples or other buildings, endowments for perpetual lamps or religious offerings, tax remissions, grants of office, and so on. Various kinds of land grants (20.5%; N = 330) also figure prominently in this record, trailed by grants here labeled agricultural (4.4%; N = 70). The latter are grants specifically relating to the construction and maintenance of agricultural facilities such as canals and reservoirs. These patterns establish broad parameters of expectation for this historical record, but the database also shows significant temporal and regional variability (Morrison, 1995, Morrison and Lycett, 1994).

This variability points to the importance of inscriptional context. Context can include the following dimensions: (1) temporal context, (2) regional context, and (3) locational context. Temporal context has obvious importance for issues of comparability and change. The use of both language and script, as noted above, shows temporal variation, and like all diachronic analyses, "time" may be differently partitioned into units such as years, dynasties, periods, and so on. Such partitions may reflect units thought to have empirical significance, but also may reflect analytical necessity driven by consideration of, for example, sample size (Morrison and Lycett, 1994).

By regional context, we mean spatial variation on a large scale. This dimension of inscriptional variation has, surprisingly, been largely neglected in South Indian history, perhaps because of linguistic specialization. As Karashima (1996) notes, the largest number of inscriptions in South Asia as a whole is in Tamil and these are mostly located in the Tamil country of the far south. For this reason, perhaps, the historiographic view of the Vijayanagara empire is remarkably Tamil-centric. Our study area, however, lies in northern Karnataka—the core region of the empire (cf. Table I, showing the paucity of Tamil inscriptions in the Vijayanagara region) while the Tamil country was an outlying, albeit important province of the empire.

We have discussed aspects of both temporal and regional context in previous publications (Morrison, 1995; Morrison and Lycett, 1994). Here we explore some aspects of locational context on both the content and the interpretation of texts. The actual physical position of an inscription, like language, script, and content, indicates the intended audience, the intentions, the ability to mobilize resources, and the ritual position of the inscribers. Temple walls were not necessarily available to all, notations of land boundaries made on the spot have a different salience than those outlined in an inscription hundreds of kilometers from the land in question, and the words of a devotee who had "achieved satisfaction" by visiting a holy place could continue to "gaze" upon that place even when he or she had gone home.

Taking a Closer Look: Does Inscription Context Structure Content?

Like all artifact assemblages, this inscriptional database is subject to bias imposed by the conditions of its recovery. We illustrate this point with two examples, one that relates to what can be called *recovery context* (see Sullivan, 1978; Schiffer, 1987) and the other to *field technique*. In the first example, we use data from the northern part of the empire, while in the second we restrict the sample to the city of Vijayanagara and its immediate hinterland (represented by Bellary District).

One axiom of systematic archaeological survey and excavation may be that you cannot find what you are not looking for. Systematic survey strategies allow us to consider where things are not as well as where they are, a truism that applies in the case of texts as well. Does the context of an inscription influence the content of the inscriptional record? Does it matter

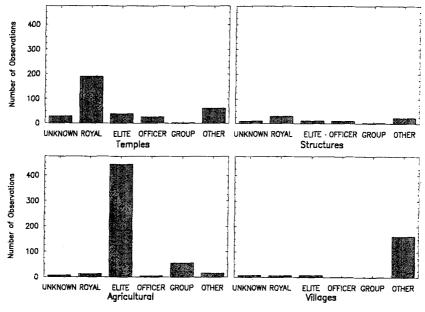


Fig. 1. Donor category, controlled for context of inscription, northern part of the empire.

where we look? Acquaintance with Indian history might lead us to assume that inscriptions are associated with temples, but as noted above, inscriptions also occur in a number of other contexts. Has the predominant focus of historians on temple inscriptions slanted perceptions of Vijayanagara prestation? In the following comparisons we employ a simplified typology of the most common inscriptional contexts: temples, other structures (nontemple structures are found throughout the region and include a wide range of formal and informal architecture), agricultural features, and villages. In the category of village we include inscriptions found in the fields of particular villages. Unknown contexts are those for which location was not recorded.

Donor Categories. Considering only the general category of donor memorialized in an inscription, a division by locational context (Fig. 1) shows sharp and significant ($\chi^2 = 1223.0$, df = 15, p < 0.000, Cramer's V = 0.591) distinctions between venues in which particular donors chose to and/or were able to place their inscriptions. Temple inscriptions are dominated by royal and "other" donors, a rather broad category comprising several rare donor types and a large number of individuals of unknown status. Another way to look at this relationship is in terms of the proportional

	Count Expected value Standard. resid.			
	Agricultural Features	Other Structures	Temples	Villages
Elite donor	444	12	39	9
	233.6	38.4	150.7	81.2
	13.8	-4.3	-9.1	-8.0
Group	56	3	3	1
	29.2	4.8	18.8	10.1
	5.0	8	-3.6	-2.9
Royal officer	5	11	26	2
	20.4	3.4	13.2	7.1
	-3.4	4.2	3.5	–1.9
Other donor	16	23	62	161
	121.5	20.0	78.4	42.2
	-9.6	.7	-1.8	18.3
Royal	13	30	190	7
	111.3	18.3	71.8	38.7
	-9.3	2.7	14.0	-5.1
Unknown	7	10	29	8
	25	4.1	16.1	8.7
	-3.6	2.9	3.2	–.2

Table II. Crosstabulation of I	Donor Type (Columns) by Locational
Association (Rows), 1	Northern Part of the Empire

representation of donor types (Table II). Here, standardized residuals (cf. Morrison and Lycett, 1994) make clear the proportional domination of both royals and royal officers in temple inscriptions. Inscriptions associated with nontemple structures follow a pattern similar to that of temples.

Donor distributions in village contexts and on agricultural facilities show quite a different distribution. Local elites constitute the overwhelming majority of donors who recorded their deeds on canals, reservoirs, and other agricultural features; this dominance is also proportional, as the standardized residuals in Table II indicate. Interestingly, inscriptions associated with villages and village lands are dominated by other donors, suggesting that nonroyal individuals not readily identifiable as *nayakas* (local elites) or as officers preferentially recorded their texts in these village contexts. One also wonders if such donors were not able to place their inscriptions in temples. "Group" in this classification refers to groups of merchants or village assemblies, neither of which have a large presence in this corpus of texts.

Grant Categories. If we further consider the actual topic of the grant or gift (Fig. 2), significant differences ($\chi^2 = 74.46$, df = 12, p < 0.0000, Cramer's V = 0.146) by context are apparent. Temples disproportionally refer to grants of villages and to "other" gifts, particularly those that relate

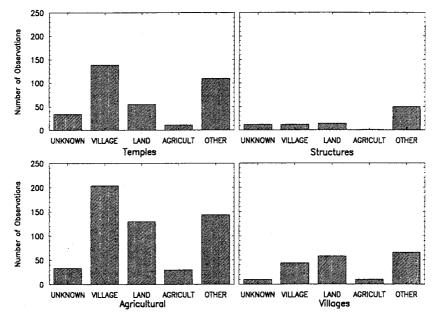


Fig. 2. Gift category, controlled for context of inscription, northern part of the empire.

either to the construction of the temple or to its functioning (e.g., endowments or gifts for flowers, oil lamps, textiles, and other offerings). Proportionally (Table III), temple inscriptions contain unexpectedly high numbers of gifts of villages [a common royal grant (Morrison and Lycett, 1994)] and unknown gifts (these often are unspecified). Inscriptions on nontemple structures such as stairways and *mandapas* (columned halls) do not follow the temple pattern as closely as they did for donor category. Grants of villages are replaced by other gifts, highlighting the association between gifts of villages, temples, and royal donation. Further, only one nontemple structural inscription refers to an agricultural facility, making it clear that inscriptions on nontemple structures focus on a limited set of concerns.

Inscriptions built into agricultural features and those found in villages and fields, not surprisingly, reflect different concerns from those carved into temples and other buildings. Here references to land and its produce dominate the record. Although other (nonagricultural) gifts are mentioned in inscriptions carved into agricultural facilities reasonably often, they occur less often (Table III) than might be expected given their overall number in the sample. There are more references to the construction of canals and reservoirs on those features themselves than there are in the numerically

	Count Expected value Standard. resid.				
	Agricultural Features	Other Structures	Temples	Villages	
Agricultural	30	1	11	10	
gift	24.1	4.0	15.6	8.4	
-	1.2	-1.5	-1.2	.6	
Land	130	14	55	58	
	119.1	19.6	76.9	41.4	
	1.0	-1.3	-2.5	2.6	
Other	144	50	110	66	
	171.5	28.2	110.7	59.6	
	-2.1	4.1	1	.8	
Unknown	33	12	34	10	
	41.3	6.8	26.6	14.3	
	-1.3	2.0	1.4	-1.1	
Village 204 185.0	204	12	139	44	
	185.0	30.4	119.3	64.3	
	1.4	-3.3	1.8	-2.5	

Table III. Crosstabulation of Gift Type (Columns) by Locational	
Association (Rows), Northern Part of the Empire	

larger temple sample. Thus, an exclusive focus on temple inscriptions would suggest a greater role for donations to temples and a reduced role for land transactions and irrigation. Clearly, the context of an inscription strongly structures its likely content and the contexts of the sample of inscriptions we study will strongly influence our interpretations of the past.

Disciplinary Traditions of Analysis: Field Technique

If, then, the context of the inscription matters to interpretations of content, we might legitimately ask how inscriptions are found and recorded. Does the sample of recorded inscriptions actually reflect the varied contexts in which inscriptions occur? Are some inscriptions more obtrusive than others (cf. Schiffer *et al.*, 1978, p. 6)? Is there a size bias to inscriptional recovery? These are issues of what might be called field technique [discussed as recovery theory by Sullivan (1978) and Schiffer *et al.* (1978)]. We demonstrate below that the association, length, and subject of inscriptions do vary with fieldwork strategy.

Here we narrow our sample to the city of Vijayanagara and its immediate vicinity (Bellary District). Although the Vijayanagara metropolitan survey project has carried out systematic regional survey over a large portion of the city's hinterland, the number of inscriptions we have recorded

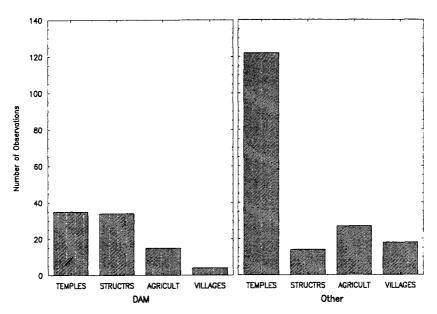


Fig. 3. Context of inscriptions, controlled for recorder (DAM, Directorate of Archaeology and Museums, Karnataka), Bellary District.

is too small to analyze convincingly and we use instead data gathered in the course of a less systematic but more concerted and focused search for inscriptions by the Karnataka State Directorate of Archaeology and Museums (DAM) (Patil, 1991; Patil and Balasubramanya, 1991). Karnataka archaeologists, resident in the area throughout the year, took the trouble to climb outcrops, examine all sides of boulders, and explore areas away from roads in order to find inscriptions. They also engaged in mapping and excavation that kept them in the field for months at a time. This research took place in an area having many more inscriptions than the surveyed hinterland, pointing to familiar sample size problems.

As noted, archaeological and historical interest in the city of Vijayanagara has a long history, and we can consider first a sample of inscriptions gathered by many different researchers over the course of approximately a hundred years. In this sample (Fig. 3, right), temples are the most common inscriptional locus, followed by agricultural features, villages, and other structures. This pattern is quite similar to that of the larger region, and it reflects much the same research agenda and recording strategies.

If inscriptions brought to light by the recent thorough scouring of the area by Karnataka State (DAM) archaeologists are considered apart from

previously recorded inscriptions, some interesting differences in locational context emerge (Fig. 3, left). First, Karnataka archaeologists recorded far fewer temple inscriptions than did their predecessors (Patil and Balasubramanya, 1991, p. 19), partly because many of the larger temple inscriptions in the city already had been recorded. Significantly, however, the Karnataka researchers also recovered a large proportion of inscriptions from other structures, agricultural features, and villages. The differences in context partly reflect differences in field strategy-both the close knowledge DAM researchers have of their study area and their willingness to record and study shorter inscriptions. Many of the inscriptions recorded by DAM archaeologists are label inscriptions and quite a few mention neither kings nor dates. In fact, 64% of the inscriptions recorded by DAM are undated, while only 6% of those gathered by others lack dates. However, the DAM sample does seem to be drawn from the same time period as the larger sample; when undated inscriptions are excluded, there is no difference (t = 0.78, p = 0.436) in time period between the two samples of texts.

Clusters of these shorter inscriptions include repetitive devotional notices memorializing pilgrimages to sacred locales. Others, interestingly, identify specific spots in the rocky hills in and near the city as being "watchtowers," or record small-scale donations such as stairways (Patil and Balasubramanya, 1991). These short inscriptions are strikingly different from longer ones, and following the discussion above, the locational contexts in the DAM sample lead us to expect different types of gifts/topics of concern as well as a different set of donors. We can explore the impact of field technique on inscription content quite directly by comparing the types of prestations memorialized in DAM versus other inscriptions, a significant difference ($\chi^2 = 28.58$, df = 4, p < 0.0000, Cramer's V = 0.316) or by comparing donor categories by recorder, again a significant difference $(\chi^2 = 31.89, df = 4, p < 0.0000, Cramer's V = 0.334)$. The "grain" of the fieldwork, then, seems to make a great deal of difference in the structure of the historical data it brings to light. The picture of the past we can put together from a focus on longer inscriptions associated with temples-a picture in which kings and royal officers donate villages to temples-differs from a more fine-grained sample that includes shorter, less well-dated inscriptions. In the latter sample, local elites, individual donors, and organized groups seem more important. This differential view of royal, official, and local elite activity should have a direct bearing on ongoing historical debates about the nature of Vijayanagara political authority and control, showing the differential fields of action for different categories of elites (Kulke, 1995; Sinopoli and Morrison, 1995).

Disciplinary Traditions of Analysis: Integrating Context, Field Technique, and Archaeology

We have briefly considered a few aspects of inscriptional context and have shown how differences in field technique can yield different kinds of samples. Further, we have shown that locational context has implications for inscriptional subject matter. These differences, we note, have to do with the goals, identities, and abilities of the inscribers. Research focused on temple contexts, and the Tamil region, has powerfully structured our views of Vijavanagara history. We have already discussed (Morrison and Lycett, 1994) how regional bias can affect our view of the empire as whole. But what happens when we seriously consider a different kind of sample, such as the DAM corpus? Chronological control is reduced, since many label inscriptions can be dated only (approximately) on palaeographic grounds. However, our view of textually recorded concerns also changes. We see, for example, more individual or perhaps personal memorials (I looked upon the sacred hill and achieved satisfaction), more military/security labels (this is the watchtower of Hanuman), and more detail on agricultural land use (duplicates of land grants recorded in a temple sometimes also appear on the landscape, providing a means of establishing "on the ground" links between places noted in texts and the material record). The activities of kings and their officers are less visible, while the actions of groups and individuals come into sharper focus.

Finally, we must bring to this discussion the important topic of archaeological data and its integration with historical data. We have tried to bring out, in the spirit of Wylie's (1991) identification of common ground, some key methodological concerns in the analysis of textual data that, we believe, have been insufficiently considered by historians (who do not usually go out and locate their own inscriptions). Historical source-side criticism does not routinely include the kind of rigorous contextual analysis that archaeologists typically apply to artifactual studies. We still have not, however, brought archaeological data into this discussion and, given constraints of space, cannot provide more than one brief example.

Archaeologists interested in the construction and maintenance of monumental architecture (Morrison and Lycett, 1994) or irrigation facilities (Morrison, 1994, 1995) long have been concerned with establishing the social role(s) and resources of those who commission such features. Inscriptional data can help us address the question of whether social scale equates to facility scale in the construction of irrigation features (e.g., Sewell, 1982, p. 162). That is, are larger facilities or facilities more demanding of labor financed by "larger" or more powerful people? Archaeological research shows immediately that agricultural facilities exhibit a much greater range of forms than the historical record suggests (Morrison, 1995). Not only are smaller-scale features such as terraces, gravel-mulched fields, check-dams, and wells not recorded in inscriptions, but the majority of even large agricultural facilities is not memorialized in texts (Morrison, 1997). Among recorded facilities, we can employ our simplified donor typology as a very rough measure of social "scale," with kings and royals at the top, royal officers and local elites in the middle, and all others in the third position. Is it the case that kings facilitate the building of canals, that *nayakas* (local elites) subsidize reservoirs, and that farmers finance wells and terraces? Analysis of the database provides qualified support for this position but also reveals a greater degree of diversity in strategies than this simple scalar correlation would suggest.

Sample sizes present some difficulties in this analysis; thus our results should be considered suggestive. Of the 10 references explicitly describing the construction of canals, kings and their officers donated 70% while constituting only about 30% of all donors. Still, three canals were said to be donated by people other than kings or their officers (one by a local elite, two by others). Canal maintenance follows a similar pattern. Reservoir construction often was financed by local elites (48% of all reservoirs; N = 25). However, a king claims to have built one reservoir in this sample and both officers (N = 11) and others (N = 10) also have a significant presence in reservoir construction (40% of all reservoirs). Although local tradition (and see Sewell, 1900) associates one very large reservoir near the city of Vijayanagara with royal patronage, there is no explicit textual support for this. Thus, the simple correlation of facility scale with donor social scale appears only roughly accurate. It can be sustained only by considering kings and their officers as a group, ignoring their sometimes competitive positions; this situation also is reflected in the way that officers endowed reservoirs, acting as local elites (cf. Morrison and Lycett, 1994). Combining archaeological and historical data can point to the chasms in our understanding that result from reliance on either data source alone. Critical opposition of these data sources also can help us guard against potentially misguided systematics from a single discipline, in this case the (simplistic) conventional interpretation that social scale (or rank) is directly reflected in the archaeological record through structures of varying scale.

CONCLUSION: VIJAYANAGARA INSCRIPTIONS AS HISTORY

As a body of narrative(s), the inscriptional texts of Precolonial South India are neither internally coherent nor complete. In spite of the large

number of inscriptions published, many more are known only to a handful of scholars or lie unrecorded. Published inscriptions are not always completely translated or transcribed. Even with these limitations, however, there are many recorded inscriptions, creating a rich documentary record. Inscriptions reveal more about some topics, such as the structure of temple economies, than they do about others, and in some cases whole groups of people are virtually invisible in these texts (Morrison, 1996). In this, Vijayanagara inscriptions differ little, if at all, from most other documentary records. Further, information from inscriptions always is filtered through cultural categories, expectations, and arguments, reflecting a multiplicity of perspectives. These considerations and others are all important for evaluating and using texts as sources of information about the past. However, it is no less important to consider the sources of the sources, or the bases of knowledge from which historical inferences are drawn. For many topics of study, such as political organization, the widely divergent historical interpretations current in the literature point to the difficulty in transforming inscriptional data into narrative history (Kulke, 1995). Neither a unitary master narrative nor a proliferation of alternative voices arises naturally from examination of these texts. Instead, they enter the construction of historical arguments only within the context of specific research programs, programs crucially dependant on methodological as well as theoretical tools. Thus, while we do not suggest that an unproblematic past lies beneath the rhetorical conventions and distributional complexity of the inscriptional record (cf. Galloway, 1991, p. 467), it is important to consider the contexts in which these texts were produced as well as their limitations as a record of past experience.

The contention that conditions of data recovery and analysis have implications for the content of historical and archaeological interpretation hardly seems controversial. In making this limited point, however, we also are suggesting to archaeologists that we employ the broader analytical experience of our discipline to the recovery, analysis, and interpretation of textual material. Like other cultural objects, texts do not produce self-evident meaning and cannot, in themselves, solve archaeology's central methodological challenges. Integrating and opposing historical and archaeological knowledge allows for particularly powerful analyses of past events and processes. As a discipline archaeologists have a role to play in the process of how texts, like artifacts, come to be constituted as history and, indeed, as archaeology. Just as the justification of archaeological inferences demands a concern for method, a concern that spans theoretical fissures in the discipline, so the use of documentary sources calls us to a shared methodological awareness that both builds on and expands existing archaeological practice.

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