

*The limits of long-distance exchange:
evidence from sixth-century
Palaestina/Arabia*

Article

Published Version

da Costa, K. (2006) The limits of long-distance exchange: evidence from sixth-century Palaestina/Arabia. Reading Medieval Studies, XXXII. pp. 35-45. ISSN 0950-3129 (ISBN 9781407300788) Available at <https://centaur.reading.ac.uk/84538/>

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Publisher: University of Reading

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The limits of long-distance exchange: evidence from sixth-century Palaestina/Arabia

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Introduction

In contrast to the other papers in this volume, and as a way of putting the question of long-distance relations into deeper perspective, this paper comprises a case-study of *local* trade patterns in the sixth century. In particular, it examines the way that ceramic evidence has been used to posit a decline in long-distance trade in the Mediterranean world, and uses the Levant as an area of special focus.

There is no doubt that there is a gulf of understanding between the scholarship of Western and Eastern parts of the Roman Empire. This is in part due to the division of scholarship between the Latin- and Greek-speaking parts of the Empire which is, in turn, related to the division between Europe and the Near East.¹ More practically, it is an unfortunate consequence of the sheer volume of material which has become available during the course of the 20th century. Ironically, in scholarly terms, the distance between each end of the Mediterranean often appears to be wider in modern times than it was in antiquity. For scholars of the Western Empire, the sixth century is often seen as the century in which Roman structures were lost or discarded and European, 'mediaeval' economies and societies began to emerge. Western scholars are wont to contrast the situation with the prosperous economy they imagine persisted in the Eastern Empire (usually without citing references). Conversely, for scholars working in the sixth-century East, the western half of the Mediterranean is largely forgotten, as already effectively lost to Roman civilization, except for its undeniable role as the production centre of African Red Slip (ARS) vessels.

As scholars of long-distance change are all too aware, the data available for comparative discussion of this period is unevenly distributed, poorly published – I speak here particularly of quantitative data – and in any event, imperfect. That is the nature of the material. We must therefore be particularly rigorous in our interpretations and try harder to extract more accurate data.²

Let us begin by summarizing one school of thought about trade patterns in the Western Mediterranean in the sixth century. Chris Wickham's interpretation serves as an

example of the minimalist position.³ He sees the vast bulk of material that moved over long distances as being transported within the state, or fiscal system, and representing the *annona* and supply of the army. Certainly, the resulting infrastructure and networks facilitated commercial trade, of which ARS is an outstanding example. However, since the state was dominant in that mechanism, when the state and its attendant fiscal system was broken up by various invasions, such as that of the Vandals in North Africa, the commercial system also disintegrated, as there was insufficient business to support it on its own. Since the bulk of state trade was in perishables, we can trace this breakdown only through changes in the distribution and quantity of pottery, principally the various major Red Slip wares and local imitations, and particularly away from the coast.

Wickham has described the following situation in relation to Red Slip wares and their copies, focusing particularly on Italy.⁴ ARS wares begin to decline in numbers from the middle of the fifth century, when regional imitations, some of them from the East, begin to replace it. The distribution of ARS in the Italian peninsula from 450 to around 570 is clearly extensive, but largely confined to the coast apart from a cluster in the south of the Apennines (possibly related to the old Via Appia) and in the western Po valley centring on Milan.⁵

A clear bias towards the eastern part of the Italian peninsula for the distribution of Phocaean Red Slip/Late Roman C (PRS) needs no explanation. At the villa di

³ C. Wickham, 'Overview: Production, distribution and demand', in *The sixth century: production, distribution, and demand*, eds. Richard Hodges and Will Bowden (Brill, Leiden, 1998), pp. 279-292; C. Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800* (Oxford, Oxford University Press, 2005). Wickham's substantial and important study *Framing the Early Middle Ages* (2005) was not available to me when preparing this paper for seminar presentation and publication. It, by and large, presents the same arguments as in the 1998 article used as the basis of this paper, and certainly restates his position on the relationship of commerce to state structures as reflected in the ceramic record (2005, 708-720). Any criticism here of Wickham's studies is restricted to specific points and should not be construed as a dismissal of his broader arguments, which are persuasive and backed by extensive scholarship.

⁴ Wickham, *Framing*, pp. 728-41. In his later work, Wickham makes no mention of the import into Italy of Phocaean and Cypriot Red Slip, ceramics he had characterized as regional imitations of ARS in his 1998 article. In reverse, the earlier article barely mentions the extensive and localised production of Italian fine table wares.

⁵ S. Tortorella, 'La sigillata africana in Italia nel VI e nel VII secolo d. C.: problemi di cronologia e distribuzione', in *Ceramica in Italia: VI-VII secolo*, ed. L. Sagui (Firenze, All'insegna del giglio, 1998) pp.41-69 (fig. 7).

¹ This has recently been discussed by I. Morris and J. G. Manning, 'Introduction', in *The Ancient Economy: Evidence and Models*, eds. I. Morris and J. G. Manning (Stanford University Press, Stanford, 2005), pp. 1-44 (8-14).

² *Ibid.*, pp. 33-35.

Agnuli a Mattinata in coastal Apulia nearly 58% of imported fine wares are PRS, and at Otranto the proportion is 1:3 Phocaeen:North African.⁶ The general distribution of finds follows that of ARS – coast sites predominate except along the Via Appia route through Lucania.

John Hayes has confirmed these numbers – fifth-century Western coastal sites still have both ARS and PRS, but inland the numbers decline precipitously (1998). In the South Etruria survey the amount of ARS from 470-550 is one-third the amount known from 400-450, and one-tenth that of the fourth century.⁷

Local production of fine table-wares also existed, with increased production from the late fifth century.⁸ This material, including a variety of Red Painted Wares, had fairly restricted distribution in sub-regions of the Italian peninsula.⁹

By the end of the sixth century, fine wares had completely disappeared from some Western regions.¹⁰ In northern Gaul, which became the centre of the Frankish dominions, Wickham suggests that ‘exchange can be divided into the local and regional commercial networks represented by ceramics like Argonne or Mayen ware (and, of course, smaller-scale, simpler, local agricultural and artisanal exchange networks)’.¹¹ In both Italy and Gaul, he also proposed that these changes in ceramic distribution were accompanied by profound changes in settlement patterns. The distribution of ARS in Italy between 550 and the seventh century is even further reduced (although some examples have been found on inland sites which did not have ARS in earlier periods) and less likely to be found in regions under Lombard control.¹²

S. Giovanni di Ruoti is a good example of the pattern of both ceramic and settlement change. There was a fair amount of imported fine ware in the early fifth century, abundant local versions largely replaced imports in the late fifth/early sixth century, the site was abandoned by the middle of the sixth century, however regional or local wares were still known in the area until the seventh or, perhaps even the eighth century.¹³

All this, Wickham contrasts with ‘the liveliest and most articulated exchange patterns’ in the East.¹⁴ His argument from these data is that ARS represents long-distance trade which piggy-backed on the *amna*. As a marker of the Roman infrastructure, its decline means the corresponding decline of the state structures. Further proof of the removal of the Roman state is the increasing self-sufficiency of regions, as represented by regional or local imitations of ARS – presumably the lack of supply stimulated regional/local production.

It is therefore pertinent to examine the patterns of distribution of ARS, PRS and other regional and local fine wares in the East, and this article takes as its case study the situation in the southern Levant.¹⁵ Unfortunately, the assembling of data is handicapped by the state of publication. Few sites could be found which quantified the total amount of recovered pottery, the amount of Late Roman red wares, and provided sufficient information to calculate the difference between fifth, sixth and early seventh material. Landgraf’s publication of material from Tel Keisan set the standard for quantitative publication (regrettably still rarely met) but Byzantine occupation at the site appears to have begun as late as 520, so that changes from the fifth century cannot be documented.¹⁶ The same problem applies for the fort at Upper Zohar, which began no earlier than the late fifth century.¹⁷

The figures provided therefore in Table 1 are not in any way statistically robust, nor, regrettably, as extensive as the data for Italy, but some information can be extracted and trends, if not patterns, identified. What is not clear for the figures from Italy, and what could not be controlled for in the Levantine data is the effect of amphorae on ratios. Hayes has suggested that since amphorae are often very frequent at coastal sites, we should leave them out of investigations such as this, and compare the amounts of table wares alone, which might produce a quite different picture.¹⁸ This certainly seems to be the case for coastal sites in Palaestina, as is detailed below.

⁶ A. Martin, ‘La sigillata focese (Phocaeen Red-Slip/Late Roman C ware)’, in *Ceramica in Italia: VI-VII secolo*, ed. L. Sagui (Firenze, All’insegna del giglio, 1998) pp. 109-122.

⁷ J. Hayes, ‘The Study of Roman Pottery in the Mediterranean: 23 years after *Late Roman Pottery*’, in *Ceramica in Italia: VI-VII secolo*, ed. L. Sagui (Firenze, All’insegna del giglio, 1998) pp. 9-21 (13).

⁸ Wickham, *Framing*, p. 729.

⁹ Wickham, *Framing*, pp. 731-39.

¹⁰ Wickham, ‘Overview’, p. 292) includes parts of the Po valley in this, but Tortorella’s figures suggest otherwise.

¹¹ Wickham, ‘Overview’, p. 283.

¹² Tortorella, fig. 8.

¹³ Hayes, ‘The Study of Roman Pottery’, pp. 13-14.

¹⁴ Wickham, ‘Overview’, p. 291. Wickham’s lack of references to Eastern economic patterns to support his statement presumably represents a widely held conviction that the statement is self-evident and needs no extensive substantiation. Of the two works he cites in 1998 (although see the much more extensive data on the East in 2005 (759-794)), one study deals with amphorae alone and the other with the Aegean, an area which from the Levantine perspective is practically part of the Western empire. As it happens, I agree with his statement, and recent, epigraphically based survey treatments simply reinforce an impression of the volume of private trade at all levels in the East. For an example of that latter, see B. Levick, ‘The Roman Economy: Trade in Asia Minor and the Niche Market’, *Greece & Rome*, 51 (2004): 180-198.

¹⁵ C.f. Wickham, *Framing*, 770-80.

¹⁶ J. Landgraf, ‘Byzantine Pottery’, in *Tel Keisan (1971-1976): une cite phénicienne en Galilee*, ed. J. Bricard and J.-B. Humbert (Fribourg, Switzerland, Editions Universitaires Fribourg Suisse, 1980) pp. 67-80.

¹⁷ R. Harper, *Upper Zohar: An Early Byzantine Fort in Palaestina Tertia: Final Report of Excavations in 1985-1986* (Jerusalem/Oxford, BSAJ/Oxford University Press, 1995).

¹⁸ Hayes, ‘The Study of Roman Pottery’, p. 17.

Site	LRRW % (where available)	ARS quantity	CRS quantity	PRS quantity	Egyptian RS quantity
Caesarea Maritima	Riley's figures in text	11.8%	23%	25.2%	rare
	Recalculated from lists (appears to be 1-3% of total ceramics)	19.8%	38.3%	40.7%	1.2%
	From Oleson harbour, 14.9% is ARS and Byzantine misc. fine wares	14.9%			
Sumaqa	Total qty: 5505 (or 55000) 755 sherds LRRW= 13.7%	6%	59%	26%	0
Tell Keisan	500-550 (55 datable sherds)	1 2%	4 7%	49 89%	
	550-650 (29 datable sherds) Total site pottery 4881, (not including lamps; LRRW = 4.7%)	5 17%	8 28%	16 55%	
Jalame	Half the ARS is mid-4 th , site should end in late 5 th , LRRW N=988 (9.6 - 13.4%) Pottery N=7559-10334 depending on amphora counts (not including 400+ lamps)	84 8.5%	742 75.1%	162 16.4%	
Kh Cana	46.58% total ceramics is EByz LRRW = 15.4% of EByz pottery = 7% site pottery	Yes, ?	Yes, ?	Yes, ?	No
Jezreel	0.87% pottery in Area E 1992	?	?	?	0
Jerusalem	81	39 48%	5 6%	37 46%	0
Upper Zohar	43692 (or 43699), LRRW = 2.9%, only 132 sherds published	58 44%	21 16%	53 40%	0
En Boqeq	1098 (may have some forms counted twice if rim joined base); not <1120 as Hayes has as total	110 10%	438 40%	550 50%	0
Capernaum	Only 1 deposit gave actual counts, and in summary Loffreda is clear that the greatest number in later deposits is CRS	75+ ~22%	98+ ~29%	165+ ~49%	0
Hippos	2 pieces CRS in city centre, more in NW church	Some	Some	Most common	0
Pella	LRRW (715/699) must be <1% of site total	16% of 6 th - 7 th LRRW	16%	67%	1%
Jarash	Macellum data only	Main import	Some	Some	Jerash bowls most common fine ware
Kh. Nakhil	No figures	?	?	Most common	No ERS or Jerash bowls
Aqaba	130,000 760 LRRW = 0.58%	Most common	Small	Small	2 nd to ARS

Table 1: Quantities of Late Roman Red Wares (LRRW) as proportion of site pottery, and amounts of African (ARS), Cypriot (CPS) and Phocaeen Red Slip (PRS) out of the LRRW corpus at each site.

Caesarea

Caesarea Maritima was the capital of Palaestina Prima, principal port and administrative centre of all Palaestina.¹⁹ Riley's figures come from the excavations at the Hippodrome and show that the Late Roman Red Wares (LRRW) appear to comprise only 1-3% of the total corpus, which includes significant amounts of amphorae.²⁰ If all fine wares, including Pompeian Red and Eastern Terra Sigillata A are included, the LRRW account for just over 37% of fine wares. PRS and Cypriot Red Slip (CRS) are nearly equally abundant, while ARS falls from 50% of the pre-fifth-century fine ware material to 20% of the later corpus. Other excavations at Caesarea have produced different results, although the actual figures are not published. Magness' work on the material from the Temple platform suggests a predominance of CRS, and Oleson found not one sherd of PRS in underwater excavations.²¹

Sumaqa

Sumaqa lies on a watershed of the Carmel range, not far south of Haifa, and can therefore be considered a coastal site. It is described as a small village, with an estimated population of 900 – 1000 inhabitants.²² Significant processing installations are found in the immediate agricultural hinterland and within the settlement some with massive 750kg crushing weights. Several of the 'workshops' can be confidently identified as either wine or oil presses, but several used grooved columns to crush the products. Dyeing, nut oil production or tanning are suggested purposes, but none have been conclusively identified.²³ It would be reasonable to assume that the village produced an agricultural surplus. The coinage profile ranged from the fourth to the seventh centuries. The diagnostic pottery was discussed by Kingsley.²⁴ This comprised 5505 sherds, predominantly from a range of amphorae, but including 755 sherds of imported fine ware bowls, representing 13.7% of the diagnostic pottery. However, the actual ratio is unclear: Dar estimates that the diagnostic sherds on which Kingsley worked represented about 10% of excavated ceramics and there is

no indication that any of the unpublished 50,000 sherds were identified in any way.²⁵ Nor is there any information on whether only diagnostic LRRW sherds (i.e. rims, bases, decorated fragments) were kept, or whether, as is the case at Pella and the early seasons at Tel Keisan all LRRW, even undecorated body sherds, are considered diagnostic and therefore kept.²⁶ If the former, we might assume that the 755 come from some 7550 LRRW sherds. In the more likely case that every LRRW sherd was considered a diagnostic, the ratio of LRRW at the site falls to about 1.4%, similar to Caesarea. Whatever the case, at Sumaqa CRS seems dominant.

Tel Keisan

The predominantly Bronze Age and Phoenician site of Tel Keisan is just north of the Carmel sites, about four kilometres from the coast and eight kilometres from Akko.²⁷ There is a clear break in occupation after the Hellenistic period, and the church and associated Byzantine levels appear to begin in around 520.²⁸

The vast bulk of recovered Byzantine pottery was of amphorae: 70% of the 4906 vessels sherds recovered were storage jars. The LRRW comprised 4.7% of the corpus.²⁹ Amongst the LRRW (229 sherds) PRS was clearly dominant with 80% overall. However, when differentiated by date, an interesting pattern occurs, with PRS falling to 55% in the period 550-650. Hayes, in contrast, considered all the PRS to date before 550, which would leave only late CRS and ARS in the late sixth – seventh century.³⁰

Jalame

Jalame lies on the inland side of Mt. Carmel and is best known as a glass manufacturing centre of the Late Roman period.³¹ As we now know, the excavators' coin-based dating of the site tightly to the third quarter of the fourth century conflicts with the evidence of the pottery, which can be dated up until the late fifth century.³² Depending on how the material is counted, LRRW comprise just over 9 – 13% of the site total, with CRS predominating. Total figures for each class or ware of pottery were not

¹⁹ L. Levine and E. Netzer (eds.), *Excavations at Caesarea Maritima 1975, 1976, 1979 - Final Report* (Jerusalem, Hebrew University, 1986) (= *QEDEM* 21); K. Holum et al., *King Herod's Dream: Caesarea on the sea*, (London, W. W. Norton and Co., 1988); R. L. Vann (ed.), *Caesarea Papers: Straton's Tower, Herod's harbour, and Roman and Byzantine Caesarea* (Ann Arbor, Journal of Roman Archaeology, 1992); A. Raban and K. Holum (eds.), *Caesarea Maritima: A Retrospective after Two Millennia* (Brill, Leiden, 1996).

²⁰ J. A. Riley, 'The Pottery from the First Session of Excavation in the Caesarea Hippodrome', *Bulletin of the American Schools of Oriental Research*, 218 (1975): 25-63

²¹ J. Magness, 'Late Roman and Byzantine pottery, preliminary report, 1990' in Vann, pp. 129-153; J. Oleson, 'Artifactual Evidence for the History of the Harbors of Caesarea' in Raban and Holum, pp. 359-377.

²² S. Dar, *Sumaqa: A Roman and Byzantine Jewish village on Mount Carmel, Israel* (Oxford, British Archaeological Reports International Series 815, 1999).

²³ Dar, p. 94.

²⁴ S. Kingsley, 'The Pottery', in Dar, pp. 263-329.

²⁵ Dar, p. 263 n. 1

²⁶ Landgraf, pp. 67-68.

²⁷ J. Briand and J.-B. Humbert (eds.), *Tel Keisan (1971-1976): une cite phenicienne en Galilee* (Fribourg, Editions Universitaires Fribourg Suisse, 1980).

²⁸ *Ibid.*, table 1.

²⁹ Landgraf.

³⁰ J. Hayes, 'Late Roman Fine Wares and their Successors: a Mediterranean Byzantine Perspective' in *La céramique byzantine et proto-islamique en Syrie-Jordanie (IVe-VIIIe siècles apr. J.-C.) Actes du colloque tenu à Amman, 3-5 Dec. 1994*, eds. P. Watson and E. Villeneuve (Beyrouth: Institut français d'archéologie du Proche-Orient, 2001), pp. 275-282 (281) (figures in table are incorrect).

³¹ G. D. Weinberg (ed), *Excavations at Jalame: site of a glass factory in Late Roman Palestine* (Columbia, University of Missouri Press, 1988).

³² G. D. Weinberg, 'Chronology and Stratigraphy', in *Jalame*, ed. G. D. Weinberg, pp. 1-4 for the pottery; Hayes, 'The Study of Roman Pottery', pp. 11-12; Hayes, 'Late Roman Fine Wares', p. 278.

given in the publication, although the 400+ lamps from the site are definitely not included in the counts examined here. Some classes have exact figures, others are uncertain because the published examples are said to represent unspecified numbers of other examples (e.g. 59 jugs are catalogued with no indication of how many each form represents).³³ Although amphorae predominate at the site, there are significant numbers of cooking, local serving and fine wares. It is likely that the true proportion of LRRW is much less than the 9% calculated here.

Kh. Cana

Kh. Cana, one of three sites associated with the miracle of water into wine, lies eight kilometres north-west of Nazareth and a few kilometres north of Sepphoris.³⁴ It is an inland site. Pottery dates from the Early Bronze age to the 15th century, although the only substantial architectural remains uncovered during excavations have been Byzantine.³⁵ At Kh. Cana we know only that all three wares (ARS, PRS, CRS) were present at the site, but that together they formed 7% of the site pottery.³⁶ The dating of the contexts assigned to the Early Byzantine period is not clear, given that the following period, 'Early Arab', is said to date from 640 and is characterized by Kh. Mefjer ware, which is otherwise considered a characteristically Abbasid fabric.³⁷

Tel Jezreel

Further inland, Tel Jezreel in the Esdraelon Valley (more or less on the main Roman road from Arabia to the coastal harbours, a road carrying significant trade traffic) has a relatively limited amount of Roman material excavated, compared to the significant Iron Age deposits there. Final cataloguing of the late period pottery is still underway, so that only the material from the 1992 season could be used to estimate proportions.³⁸ Less than 1% of the pottery recovered in that season from the Roman and Byzantine areas could be identified as LRRW. Grey identified, even within this limited sample, ARS, CRS, LRC, a possibly Late Roman/Asia Minor Light-coloured ware, and locally produced fine wares. The local wares were approximately equal in number to the Red Slip wares in Area E. No Egyptian Red Slip was identified.

³³ B. L. Johnson, 'The Pottery' in *Jalame*, ed. G. D. Weinberg, pp. 137-226 (203-209).

³⁴ D. R. Edwards, 'Cana of the Galilee', www2.ups.edu/community/cana/sitepg.htm, [accessed 26 July 2006].

³⁵ J. Olive, 'Field Director's Preliminary Report' in *Excavations at Khirbet Cana: 1998 Preliminary Reports*, ed. D. R. Edwards, 1998, <http://nexusfind.com/cana/fielddirector.html> [accessed 26 July 2006].

³⁶ D. Avshalom-Gorni and A. Shapiro, 'Pottery Report' in *Excavations at Khirbet Cana: 1998 Preliminary Reports*, ed. Douglas R. Edwards, 1998, <http://nexusfind.com/cana/ceramic.html>, [accessed 26 July 2006].

³⁷ A. Walmsley, 'Turning East. The Appearance of Islamic Cream Ware in Jordan: The "End of Antiquity"?' in Watson and Villeneuve, pp. 305-313.

³⁸ A. D. Grey, 'The Pottery of the Later Periods from Tel Jezreel: an Interim Report', *Levant*, 26 (1994): 51-62.

Jerusalem

This religiously significant city was not a regional administrative capital during the Roman period. It was raised to a patriarchy in 451 at Chalcedon and its role as both Jewish and Christian religious capital meant that it was a major market in the Late Roman and Byzantine periods. The early limited soundings in the city have been revised in the light of more modern Israeli excavations by Jodie Magness, but principally to assess reliability and revise chronologies.³⁹ Limited pottery from the Jewish Quarter excavations by Nahman Avigad were published by Magness in that study but since only diagnostic sherds were included in her catalogue, quantities are difficult to establish. However, she noted that there was no CRS in the excavated areas, suggesting that none was imported to Jerusalem before the mid-sixth century.⁴⁰

Hayes catalogued the fine wares from Tushingham's excavations in the Armenian Garden, which produced only 81 sherds of LRRW.⁴¹ Of these, 6% were CRS, the rest divided evenly between ARS and PRS.

Upper Zohar

Upper Zohar is a small fort on the west side of the Dead Sea.⁴² The dating of the site is disputed: the excavator considers it to have begun in the late fifth century, while Magness has re-dated both Upper Zohar and the fort at En Boqeq to not earlier than the sixth century.⁴³ Although figures were given both for the total amount of sherds at the site (43692 (or 43699 based on figures in text)) and the proportion of LRRW (1,251 sherds, 2.87%) and local fine wares (29, 0.7%), a problem of identification remains. Only 132 of the LRRW were listed in the catalogue, of which 16% were CPS, and around 40% each of ARS and PRS. There is no indication of the wares of the other 1119 sherds of LRRW. No Egyptian Red Ware was found at the site.

³⁹ J. Magness, *Jerusalem ceramic chronology circa 200-800 CE* (Sheffield Academic Press, Sheffield, 1993).

⁴⁰ Magness, *Jerusalem ceramic chronology*, pp. 119-152.

⁴¹ J. Hayes, 'Hellenistic to Byzantine Fine Wares', in *Excavations in Jerusalem I*, ed. A.D. Tushingham (Toronto, Royal Ontario Museum, 1985), pp. 179-194; Hayes, 'Late Roman Fine Wares and their Successors'.

⁴² Although Wickham (2005) stresses the inland penetration of RS in Syria and Palaestina (pp. 716 and 771), it should be remembered that Upper Zohar and En Boqeq lie closer to the main port of Gaza (ca. 85 km as the crow flies) than do the cluster of sites in southern Italy lie to any major port. Those Italian sites, at least 100kms from a port, seem to have been supplied overland, perhaps by the Via Appia route. The Jordan River/Dead Sea was used for shipping in antiquity, as was the Orontes in Syria. Overland trade routes were also extensive. RS did not penetrate inland in the East any further than it had in the West.

⁴³ Harper, p. 115; J. Magness, 'Redating the forts at Ein Boqeq, Upper Zohar and other sites in SE Judaea, and the implications for the nature of the Limes Palaestinae', in *The Roman and Byzantine Near East vol 2: Some Recent Archaeological Research* ed J. H. Humphreys (Ann Arbor, JRA Supplementary Series 31, 1999), pp. 189-206.

General ware	Loffreda	Hayes	Contexts	total	% LRRW (340)
ESA*	6			6	
PRS	19	24 +70 stamps	+71(+)	165	49%
CRS	31	30 + 5 stamps	+63(+)	98	29%
ARS	28	31 + 27 stamps	+17(+)	75	22%

* Eastern Sigillata A

Table 2. Quantities of LRRW at Capernaum based on Loffreda (1974) counts in section 1, Hayes' recalculations

En Boqe

There are various structures at En Boqe, on the south western shore of the Dead Sea, of which we are concerned with the excavations of the small fort.⁴⁴ The forts at Upper Zohar and En Boqe are roughly similar in size, so that the 1098 (revising Hayes' count of <1120) sherds of LRRW are comparable.⁴⁵ At En Boqe PRS accounts for half the LRRW while ARS is only 10%.

Capernaum

Capernaum, at the northern end of the Sea of Galilee, was a major pilgrimage centre by the fourth century, as Egeria's itinerary makes clear.⁴⁶ Ceramics from that part of the site owned and excavated by the Franciscans have been relatively well published.⁴⁷ Unfortunately, Loffreda gave no counts of the ceramics by type or ware. Hayes attempted to improve the statistics by re-examining the illustrated pottery sherds and stamps. However, it is not clear from his table what overlap there is between illustrated pieces and stamped pieces.⁴⁸ Even combing through the second part of the report where important contexts are discussed, and where the pottery is contextualized, cannot generate accurate counts. The best that can be attempted is to sum the numbers illustrated by Loffreda in the type section, the figures obtained by Hayes from illustrated sherds in the second part of the book and from the stamp illustrations and counts made from the text references in the second part of the book (Table 2).

PRS seems to dominate at the site, and ARS is only 22% of the LRRW. Loffreda is clear that in the latest levels (sixth century) CRS occurs in the greater numbers.

Hippos

Lying on the east shore of the Sea of Galilee, Hippos was one of the Decapolis cities. Excavations have been undertaken since 2000, and are continuing. Impressions here are taken from the on-line pottery reports, which do not give exact figures, and which by and large discuss the LRRW in terms of the dating evidence they provide for critical loci.⁴⁹ PRS is reported as the most common of the LRRW fabrics, with all ARS forms (dating from the first half of the third century to the third quarter of the seventh century) less common. In the upper city few sherds of CRS were found. In contrast, in the North West Church, destroyed in the earthquake of 749, all three wares were found, and the latest in date were the CRS.

Pella

Situated along side a permanent spring, occupation at Pella (ancient Semitic name: Fahl/Pihel, modern name: Tabaqat Fahl) dates from the Neolithic to the Hashemite period.⁵⁰ The most extensive habitation occurred during the late Roman/Byzantine period (approx. fourth – seventh centuries). At Pella, the available figures reflect the situation up until the early 1990s. Although total pottery figures were not provided by Watson, experience at the site suggests that 699 sherds would be less than 1% of recovered pottery.⁵¹ Pella's dominant LRRW fabric is PRS.

⁴⁹ Anon. 'Pottery report 2001', 2001, <http://hippos.haifa.ac.il/excavationReport/2001/potteryReport.htm> [accessed 26 July 2006]; J. Mlynarczyk, 'Pottery report: Sussita 2002', in *Hippos: Third Season of Excavations, July 2002*, Arthur Segal et al. (Zinman Institute of Archaeology, Haifa, unpublished manuscript), pp. 38-59; J. Mlynarczyk, 'Pottery report', in *Hippos-Sussita: Fourth Season of Excavations, June-July 2003*, Arthur Segal et al. (Zinman Institute of Archaeology, Haifa, 2003), pp. 50-88.

⁵⁰ i.e. R. H. Smith, *Pella of the Decapolis I: The 1967 season of the college of Wooster Expedition to Pella* (The College of Wooster, Wooster, 1973); R. H. Smith and L. P. Day, *Pella of the Decapolis II: Final Report on the College of Wooster Excavations in Area IX, the Civic Complex, 1979-1985* (College of Wooster, Wooster, 1989); A. W. McNicoll, R. H. Smith and J. B. Hennessy, *Pella in Jordan 1* (Australian National Gallery, Canberra, 1982); A. McNicoll et al., *Pella in Jordan 2* (Sydney, Mediterranean Archaeology Supplement 2, 1992).

⁵¹ P. Watson, 'Change in foreign and regional economic links with Pella in the seventh century AD: the ceramic evidence', in *La Syrie de Byzance a l'Islam VIIe-VIIIe siecles: Actes du Colloque international (Lyon - Maison de l'Orient Meditteraneen, Paris - Institut du Monde*

⁴⁴ M. Gichon, *En Boqe: Ausgrabungen in einer Oase am Toten Meer* (Mainz am Rhein, von Zabern, 1993).

⁴⁵ Hayes, 'Late Roman Fine Wares and their Successors', p. 282.

⁴⁶ J. Wilkinson (ed. and trans.), *Egeria's travels* (3rd. ed.) (Warminster, Aris and Philips, 1999).

⁴⁷ S. Loffreda, *Cafarnao II: La ceramica* (Jerusalem, Studium Biblicum Franciscanum, 1974).

⁴⁸ Hayes, 'Late Roman Fine Wares and their Successors', p. 282

Jarash

Although several teams have or are working at Jarash, none have published their pottery in such a way as to be usable for this table, with the exception of the Spanish *macellum* material, which is a relatively small corpus.⁵² The majority of LRRW sherds are of 'Jerash bowls', the main identified local imitation of ARS, which as the name suggests, were made in Jarash. Of the imported material, ARS was the greatest, which may suggest why Hayes and Watson consider this ware to be the inspiration for the first generation of Jerash bowls.⁵³

Kh Nakhil

Lying 25 kilometres south of Kerak, parts of the 1000 acres site of Kh. Nakhil were excavated in 1993.⁵⁴ Trenches revealed part of a Nabataean temple compound and a Byzantine church which was used as domestic premises in the Ayyubid through to Ottoman period. Surface collection of sherds previous to the excavations suggests that habitation began in the Early Bronze Age. No figures were provided, but PRS appears to be the main imported fine ware, and no Jerash bowls were identified at the site.

Aqaba

Roman Aila has been under excavation since 1994, revealing a settlement concentrated about one kilometre north-west of Islamic Ayla, due to silting up of the earlier shoreline. Settlement at the site ranges from the Nabataean to Byzantine, while sites in the area date from at least the Chalcolithic. The port was the beginning of the ancient King's Highway which led to Damascus via Amman/Philadelphia. The final report is not yet available, so that figures have been taken from the data in the 1996 season report, which provides excellent quantifiable figures.⁵⁵ The general trend has not fundamentally changed, although more, and earlier, Egyptian Red Slip has been found.⁵⁶ In 1996 the team excavated 130,000 sherds of which around 0.5% were LRRW (760 sherds). These were mainly ARS, followed

in second place by Egyptian Red Slip. A few sherds of PRS and CRS were found from the fifth century and all four wares were present in deposits of the seventh century.

Locally made fine wares

The only class of fine wares produced in the Southern Levant which has received systematic scholarly study is the 'Jerash bowl', which is predominantly a group of plates, decorated with paint, and explicitly Christian in its iconography.⁵⁷ Inspiration for the forms comes from ARS and for the painted and stamped decoration from Egyptian Red Slip and Coptic painted pottery.⁵⁸ Their place of manufacture is certain, based on kiln wasters, unfired examples and distribution.⁵⁹ 'Jerash bowls' date from 500/525 to the mid-seventh century, although production seems to be considerably reduced after the early seventh century.⁶⁰ They are found principally in Jordan, north of the Wadi Mujib, and the three sites with the greatest concentrations are, in order, Jerash, Kh. Samra and Pella.

Other local fine wares, such as Rouletted Rim bowls and Fine Byzantine ware, although discussed by Magness, who suggests Jerusalem for their place of manufacture, need more comprehensive study to determine their correct dating and distributions.⁶¹ Nonetheless, locally produced fine table wares did exist in the southern Levant from the later fifth century through to at least the end of the seventh century.

Although a very crude statistical analysis, we can see that LRRW decrease as a proportion of the site pottery with distance from the coast. The exceptions appear, paradoxically, to be the absolute waterfront sites of Caesarea and Aqaba, both major ports (one Mediterranean the other on the Red Sea) where no doubt the very high levels of amphorae are diminishing the proportion of fine wares.

Within the fine ware corpus, it seems as if ARS and CRS are less popular away from the Mediterranean coast. The distribution of CRS might be explained by weight; its

Arabe 11-15 Septembre 1990, eds. P. Canivet and J-P Rey-Coquais (Damascus, Institut français de Damas, 1992), pp. 233-248.

⁵² A. Uscatescu and M. Martin-Bueno, 'The Macellum of Gerasa (Jerash, Jordan): From a Market Place to an Industrial Area', *Bulletin of the American Schools of Oriental Research*, 307 (1997): 67-88.

⁵³ P. Watson, 'Jerash bowls. Study of a provincial group of Byzantine decorated Fine ware', in 'Jerash Archaeological Project 1984-1988 II', ed. F. Zayadine, *Syria* 66 (1989): 223-261; Hayes, *Late Roman Fine Wares and their Successors*, p. 279.

⁵⁴ J. Kareem, 'The pottery from the first season of excavations at Khirbet Nakhil', Villeneuve and Watson, pp. 77-93.

⁵⁵ S. T. Parker, 'The Roman Aqaba Project: The 1996 Campaign', <http://www.chass.ncsu.edu/history/rapweb/1996.htm> [accessed 26 July 2006]

⁵⁶ S. T. Parker, 'Review of Estelle Villeneuve and Pamela M. Watson, eds.: *La céramique byzantine et protoislamique en Syrie-Jordanie (IVe-VIIIe siècles apr. J.-C.)*. Actes du colloque tenu à Amman les 3, 4 et 5 décembre 1994', *Bulletin of the American School of Oriental Research*, 341 (2005): 78-80 (79).

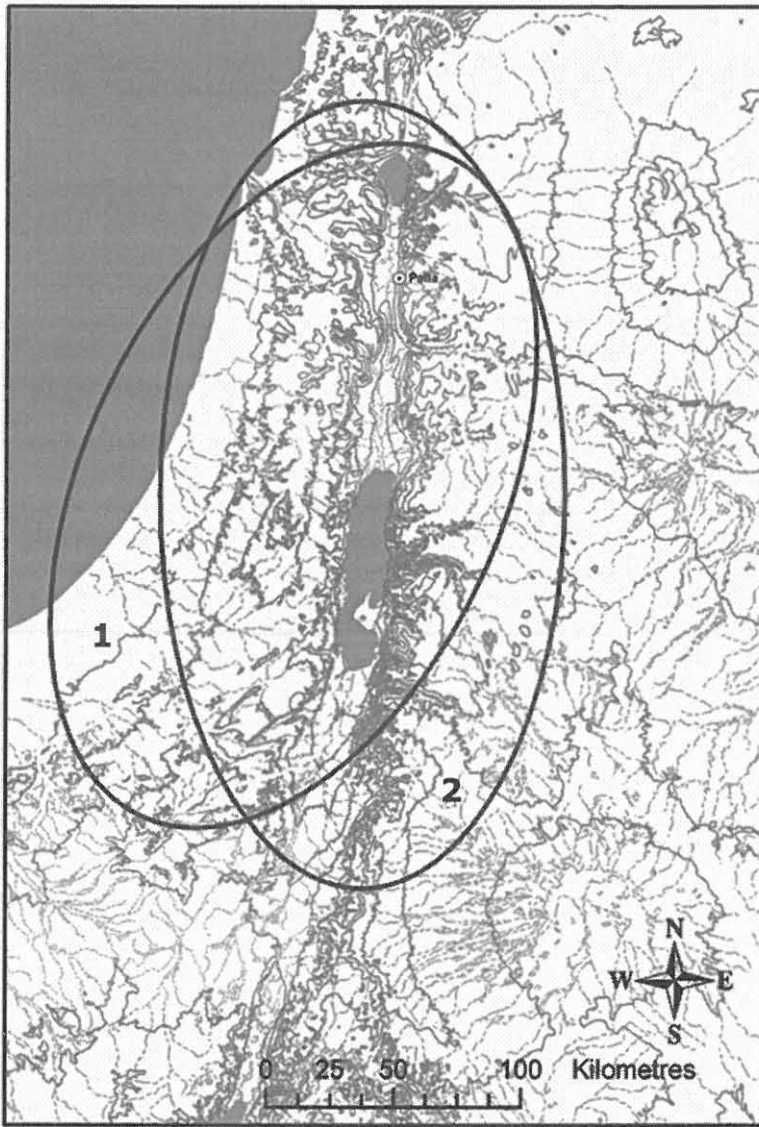
⁵⁷ P. Duerden and P. Watson, 'PIXE/PIGME Analysis of a series of Byzantine Painted Bowls from Northern Jordan', *Mediterranean Archaeology*, 1, (1988): 96-111; Watson, 'Jerash bowls. Study of a provincial group'. P. Watson, *Jerash Bowls: Byzantine Decorated Fine Ware from Jordan*, University of Sydney, unpublished PhD, 1991; P. Watson, 'Ceramic Evidence for Egyptian Links with Northern Jordan in the sixth-eighth Centuries', in *Trade, Contact, and the Movement of Peoples in the Eastern Mediterranean: Studies in Honour of J. Basil Hennessy*, eds. S. Bourke and J.-P. Descocudres (Sydney, Meditarch, 1995), pp. 303-320.

⁵⁸ Watson, *Jerash Bowls: Byzantine Decorated Fine Ware*.

⁵⁹ E. Lapp, 'A Comparative Clay Fabric analysis of Fired and Unfired Jerash Bowl Fragments by Means of Petrography and Direct Current Plasma (DCP) Spectrometry', in Watson and Villeneuve, pp. 129-137.

⁶⁰ Watson, *Jerash Bowls: Byzantine Decorated Fine Ware*, pp. 195-196.

⁶¹ Magness, *Jerusalem ceramic chronology*.



Map 1. First – third century distribution:
1: Darom, 2: Roundbodied no disc lamps

forms are generally hefty basins rather than fine plates.⁶² Jerusalem, Upper Zohar and Jarash do not fit this pattern, all having relatively high proportions of ARS. However, the sample numbers at all three sites are low, and the *macellum* as a special market place at Jarash might be expected to have anomalous sampling.

It is unlikely that the patterning is a factor of date, although in Hayes' summary of the apparent situation in the southern Levant, he notes that ARS is predominant until the late fourth century, when the regional imitators of CRS and PRS begin substantial production.⁶³ CRS seems to be most popular in the fifth century. After 550 there is a split between Syria and Palaestina: in the south between 450-550 we have lots of PRS, then CRS

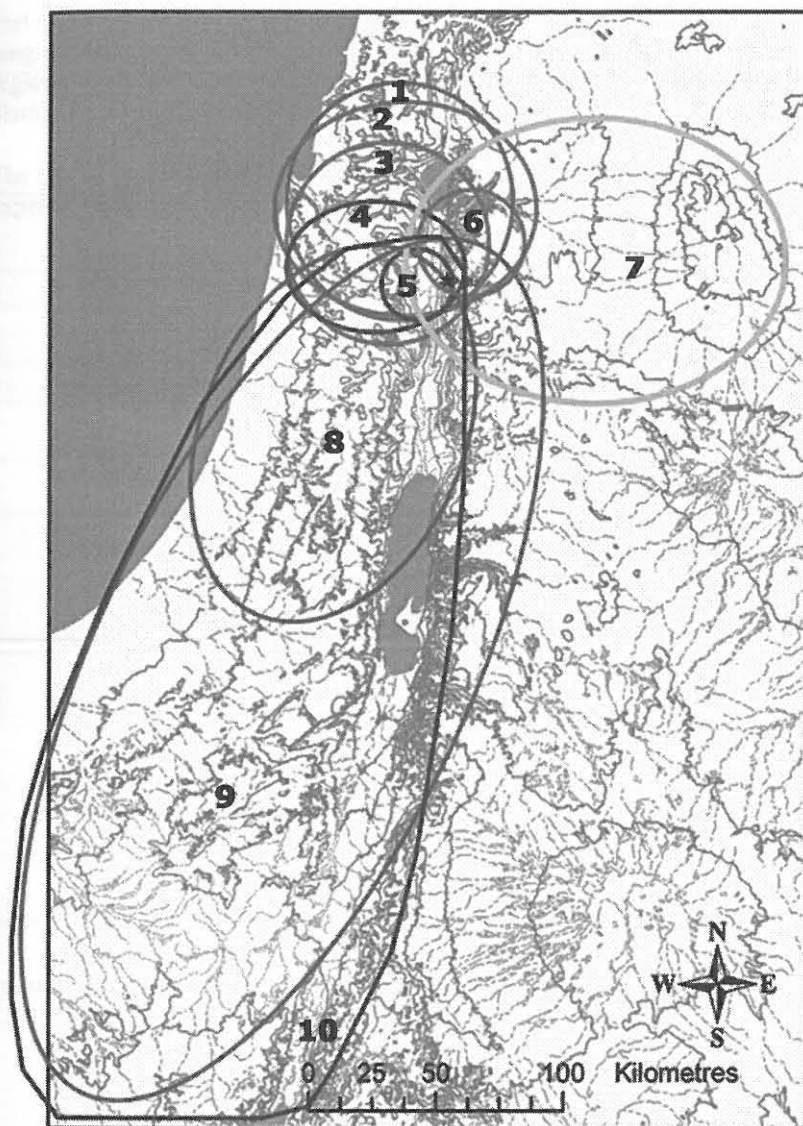
increases again, with some ARS coming back into the region.

This pattern, the decrease of ARS, the increase in regional and local 'imitations', the decline of regional wares from the end of the sixth century – and PRS does seem to fall away rapidly by the end of the sixth – and the continued presence of ARS, even in diminished amounts throughout the sixth century, seems to match fairly closely the situation Wickham described in Italy.

One other class of ceramics in the southern Levant has been quantified in more detail than locally made fine wares. Mould made lamps provide excellent evidence for changes in local and regional trade patterns and can be

⁶² J. Hayes, *Late Roman Pottery* (Rome, British School at Rome, 1972), pp. 371-386.

⁶³ Hayes, 'Late Roman Fine Wares and their Successors', p. 279.



Map 2. Fifth-sixth-century distributions:
1: Bilanceolate, 2: Galilean, 3: Bowshaped nozzle, 4: Pear shaped fan handled, 5: Broad nozzle, 6: North Jordan, 7: 'Hauran', 8: Small Candlestick, 9: Byzantine Wheelmade, 10: Negev Wheelmade

used to examine the sixth century.⁶⁴ The figures show clearly that from the mid-fifth throughout the sixth century in the southern Levant is the period of most intense regionalism, i.e. the greatest number of workshops distributing over relatively small areas. Three maps of the distribution of lamp types in the earlier Roman, Byzantine and late Byzantine/early Islamic period show this phenomenon (maps 1-3). The lamp types used for these maps are those considered indigenous, so that the ubiquitous early Roman discus lamp has been excluded, and are based only on lamp types found at Pella, in order to reduce complexity.⁶⁵

⁶⁴ K. da Costa, 'Byzantine and early Islamic lamps', pp. 241-257; K. da Costa, 2001, 'More Evidence from Ceramic Lamps for Local Trade Patterns in the Byzantine and Umayyad Periods', in *Australians Uncovering Ancient Jordan: Fifty Years of Middle Eastern Archaeology*, ed. A. Walmsley, (University of Sydney, Research Institute for the Humanities and Social Sciences, 2001), pp. 259-270.

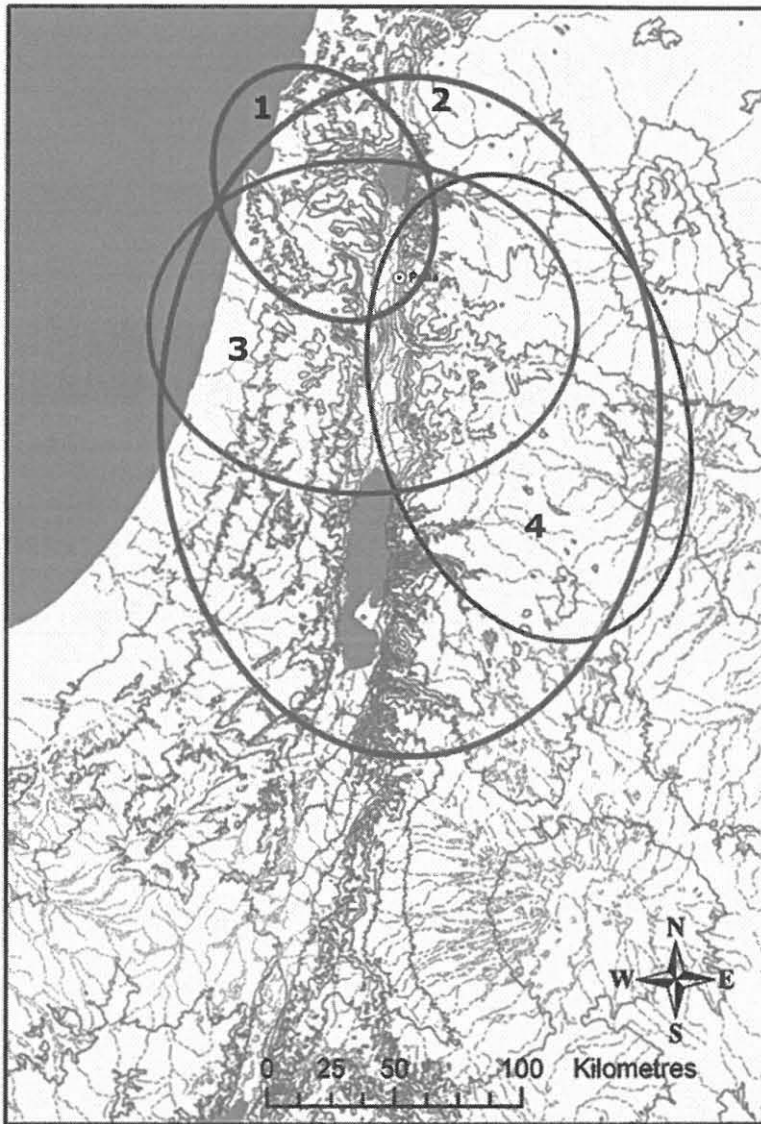
⁶⁵ The southern Levant has a distinct lamp tradition which, although related to other mould made lamps in the Mediterranean, is conspicuous by the avoidance of a discus, and the orientation of the lamp to be viewed with the nozzle 'up'. Roman discus lamps were important prototypes for the later Roman through to Umayyad locally made

lamps, but their figured discuses set them apart from the local tradition, even when they were undoubtedly manufactured in the southern Levant. See K. da Costa, *Byzantine and early Umayyad ceramic lamps from Palaestina/Arabia (ca 300 - 700 AD)*, unpublished PhD, University of Sydney, 2003.

From the first to the third centuries two main types (map 1) were distributed very widely in the regions, although the indications are that each was manufactured at more than one site.⁶⁶ In marked contrast, during the fifth to sixth centuries (map 2), many distinctive lamp types existed, most restricted to relatively small areas and probably only manufactured at one place.

The contraction of production at the end of the sixth century is illustrated in map 3. Here we see much more widespread distribution of fewer types. In this case, as in the earliest cycle, manufacture of some types is known at

⁶⁶ da Costa, *Byzantine and early Umayyad ceramic lamps*; K. da Costa, 'The Byzantine lamps from Pella: their trade relationships', *Acts of the ILA/IFPO Roundtable Ancient Lamps of the Bilad esh-Sham Nov. 2005, Amman Jordan*, (International Lychnological Association/Institute Français de Proche Orient, forthcoming) for quantities and more detailed discussion.



Map 3. Late sixth-mid eighth-century distribution: 1: Phoenician Slipper, 2: Large Candlestick, 3: Samaritan 4, 4: Jerash

more than one site, although to date it has not been possible to visually distinguish these. Lamps of this time period were also distributed across the Palaestina/Arabia/Phoenicia borders, unlike the types shown in map 2.

The lamp data has been interpreted as showing an increase in prosperity in the late fourth – later sixth centuries.⁶⁷ It appears, and it is not clear whether demand led the way or not, that more people lit lamps after dark and more lamps were put into tombs during funerals. This encouraged new manufacturers to open shop in a field where the profit margins were possibly quite small. A downturn or structural change in the economy over the second half of the sixth century caused these small manufacturers to go out of business, leaving only the larger concerns afloat in the seventh century.

In summary, in Palaestina and Arabia we have decreasing amounts of fine wares on inland sites, we have regional

imitations of ARS – that is CRS and PRS – which largely disappear by the end of the sixth century, there are locally produced fine table wares in use during the sixth century, there is a slight pick up in ARS in the seventh century, and we have extremely localized production and distribution of locally produced lamps, especially in the fifth and sixth centuries.

Here is the paradox. The sixth century is usually seen as a prosperous period in the East. Certainly, its ‘lively’ economy is often contrasted with the supposed situation in the West in that period. However we seem to be observing the same ceramic pattern in East and West. Although today many would hesitate to describe the Western situation as a ‘decline’, there seems no doubt that during that century, despite Justinian’s best efforts, the Roman Empire effectively disappeared in the western end of the Mediterranean. There is equally no argument that the Empire remained the political and therefore fiscal power in the eastern half of the Mediterranean. We must therefore reinterpret the ceramic patterning Wickham used to support his interpretation. Our figures, both in

⁶⁷ *Ibid.*

east and west are insufficient to determine whether in fact long-distance trade fell away, or whether the products of regional and local workshops simply supplanted our distinctive identifiers, ARS above all.

The rise of regional and local trade, not necessarily at the expense of long-distance trade, may be an indicator of a

change in overall economic structures in the entire Mediterranean basin. This may not have to do with the presence or absence of the Roman state, but the changes in long-distance relations other papers in this volume examine, possibly with areas beyond the Graeco-Roman world.