

## Silks, skills and opportunities in Byzantium : some reflexions

Jonathan Shepard

*Faculty of History, Cambridge University*

Silks gave visible form to Byzantium's political culture and, being light to carry, could circulate widely. Many of the garments issued to recipients of offices and titles were made of silk and the *Book of the Eparch* takes for granted the close connection between imperial prerogatives, silken vestments of various shades of purple and restrictions, on foreigners access to them<sup>1</sup>. Through whetting appetites for silks and maintaining a monopoly over the finest quality products, the emperor could hope to arouse in his own subjects and foreigners alike the desire to gain them through some form of 'Servia'. These 'class' when cut up into pieces. That products simultaneously expressed his wealth, superior knowledge and - by the symbols on them - the antiquity and unsurpassable legitimacy of his rule.

Gold and silver coins could likewise attest these qualities, but they were easily melted down and re-used as ornaments or for other purposes unrelated to the emperor. Large-scale sumptuous silks manufactured in imperial workshops and the silks bestowed as vestments on title-holders and others in favor might appear less likely to be re-used in a form which wholly effaced their origins. The former category of silks tended to bear characteristic marks of imperial authority such as eagles; the latter lost 'class' when cut up into pieces. That re-use and fragmentation did in fact often occur after the silks left Byzantine soil is shown in Anna Muthesius' collection of studies. She discusses their eventual

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<sup>1</sup> - *Das Eparchenbuch Leons des Weisen*, 4.1, 3, 4; 8.1, 2; ed. J. Koder (Vienna 1991) 90 - 3, 102 - 5. See also D. Jacoby, "Silk" in *Western Byzantium before the Fourth Crusade* BZ 84/85 (1991 - 92) 456 - 7. Now repr. in *Jacoby's Trade. Commodities and Shipping in the Medieval Mediterranean* (Aldershot 1997), no. 7.



use as, for example, chasubles, wrappings of relics, cushions and bindings of Gospel-Books<sup>2</sup>. But it is worth noting that the numerous examples of Silks, Fragmentary or more less whole, found in Church treasuries probably represent only a small fraction of those originally sent to Western Europe. Many ended up in lay hands and those of top quality would often have been put on display, probably retaining something of their original form. To that extent they were likely to impress more foreign beholders, and to be more readily comprehensible as imperial Byzantine products, than were other items, including gold and silver coins. The value of silks to the emperor in terms both of domestic patronage and diplomatic gifts is indicated by Constantine VII'S treatise on imperial expeditions. It provides for various types of silken garments and cloths, specifying which sorts were brought 'for distinguished refugees and for sending to distinguished and powerful foreigners'<sup>3</sup>. That all this effort made its mark was inferred by R.S. Lopez; the borrowing of Byzantine ceremonial by the Western rulers is the best acknowledgement of Byzantine "hierarchy through clothing"<sup>3</sup>.

Lopez's classic study might have been expected to prompt many publications on aspects of Byzantine silks. Yet this did not happen. As the late John Beckwith observed, 'the study of medieval woven textiles is highly complex and is, perhaps, the most difficult discipline in the entire field of art history', in that it calls for competence in the art of weaving, ability to read inscriptions in Coptic, Greek, Latin and Arabic and wide-ranging historical knowledge. For some time after Beckwith made this remark textiles continued to be appraised primarily in terms of iconography and style. But Anna Muthesius has taken a major step towards the kids of interdisciplinary investigation for which Beckwith appealed,

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<sup>2</sup> A. Muthesius, *Studies in Byzantine and Islamic Silk Weaving* (London 1995) 21 - 4, 29 - 30, 36 - 42, 77 - 80. See also Jacoby, 'Silk' 473. The celebrated Gunthertuch, a huge silk originally measuring 210cm by 260cm and showing a triumphant emperor, was re-used intact as a bishop's shroud, most probably just after its arrival in the West: G. Prinzing, 'Das Bamberger Gunthertuch in neuer Sicht', *BS* 54 (1993) 219 - 20 and n.8.



starting with some heroic feats of cataloguing. A catalogue of 120 silks found in the West has been prepared, together with a handlist of many other examples, including some related Islamic ones. She had to prepare her own preliminary catalogues of the contents of major holdings such as Sens Cathedral Treasury, in default of detailed local catalogues, and this led to important acts of identification. Thus she tracked down the famous Siegburg Loin silk, falsely supposed to have been destroyed during the Second World War. Such feats highlight the fact that the lack of a corpus of surviving silks has been a serious weakness of Byzantine studies as a whole and the imminent publication of the forementioned full catalogue is to be warmly welcomed<sup>3</sup>.

Muthesius' technical expertise has enabled her to determine the likely origins of silks by the nature of their weaves. There are limits to this method: Byzantine and Islamic workshops favored some identical types of twill in the ninth to twelfth centuries, as we shall see below (p. 253f.). Even so, certain techniques were characteristic of particular regions, for example, grège - textiles with silk threads which had not had their coating of gum removed and which had not been twisted. Detecting these traits in the Lion Silk of St. Servatius, Maastricht, Muthesius proposes Central Asia as the likely place of manufacture: the manufacturers may have been imitating an authentic Lion Silk, made in imperial workshops. Her suggestion is very plausible, seeing that imperial interest stretched as far as Central Asia and guardsmen from Ferghana played a part in tenth-century palace ceremonial<sup>4</sup>. Muthesius' familiarity with all the technical aspects of silk production reaches back to the grub, which makes it possible. She has studied the organisation and methods of silk workshops in modern Indian villages and paid close attention to the looms, to the point of attempting to weave textiles from a

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<sup>3</sup> A. Muthesius, *Byzantine Silk Weaving A.D. 400 to A.D. 1200*, J. Koder and E. Kislinger (eds.) (Vienna, forthcoming).

<sup>4</sup> Constantine Porphyrogenitus, *De cerimoniis aulae byzantine*, II. 15, ed. I.I. Reiske, I (Bonn 1829) 576.



reconstructed drawloom . Data on the raising of the worms has been adduced from Chinese sources, notably the twelfth-century *Geng Zhi Tu*. Muthesius' scope extends beyond the finished products to the uses to which they were put. She underlines the similarities of usage in the Christian East and West, arguing from abundant evidence that the eighth - and ninth-century papacy seems to have played a key role in displaying, distributing, and arousing Western appetites for, eastern silks.

Muthesius' expertise gives weight to her reappraisal and redating of a number of other individual silks, for example the 'Krefeld-Berlin' number of other individual silks, for example the 'Krefeld-Berlin Dusseldorf' Imperial Lion Silk, which should probably be re-assigned to the co-emperorship of Basil II and Constantine VIII from that of Basil I and his son Constantine . From a different perspective, she rebuts the estimate of raw silk yield in Calabria made by the editor of the sole text to specify the location of mulberry plantations in the Byzantine lands: it 'seems one hundred times too great' and may exaggerate the importance of Southern Italy as a source of raw silk for Byzantium<sup>5</sup>. Muthesius also casts doubt on some general conclusions drawn about the organisation of silk production from the *Book of the Eparch*. It is highly unlikely that the *serikarioi* could personally have engaged in preparing the raw silk and dyeing it as well as weaving<sup>6</sup>. For the degumming process alone occupies one man and perhaps an assistant, while the boiling of the gum creates dirt incompatible with the high standards of cleanliness required in a weaver's workshop. Muthesius suggests that the *serikarioi* were 'factory owners with a series of workshops' rather than manual workers. This suggestion is compatible with the evidence of the *Book of the Eparch* that the *serikarioi* had

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<sup>5</sup> - *Le brebion de la metropole byzantine de Region (vers 1050)*, ed. A. Guillou (Corpus des actes grecs d'Italie du Sud et de Sicile 4) (Vatican City 1974) e.g. 17 - 33, 63 - 70; cf. Idem, 'production and profits in the Byzantine province of Italy (tenth to eleventh centuries) : an expending society', *DOP* 28 (1974) 92 - 5, repr. in his *Culture et societe en Italie byzantine (VI-XI s.)* (London 1978), no. 13.

<sup>6</sup> - As proposed by D. Simon 'Die byzantinischen Seidenzunft', *BZ* 68 (1975) 34.



slaves and also paid workers; these slaves could themselves open workshops<sup>7</sup>.

Some important themes emerge from 'Muthesius' investigations. Firstly, there seems to have been an endemic shortage of raw silk before the eleventh or twelfth centuries. As she points out, much of Asia Minor was unsuitable for growing mulberry trees. While accepting N. Oikonomides' interpretation of the seals of *kommerkiarioi* to the extent 'the seals most plausibly do have a relationship to sericulture', she justly doubts do whether they necessarily attest mulberry growing or silk-worm rearing in all the places mentioned on the seals<sup>8</sup>. In any case, the amount and quality of the silk yarn produced seems to have been unequal to demand. An underlying condition of shortage helps explain the government's interest in trade with Syria, an important region

<sup>7</sup> - *Eparchenbuch* 8.7, 10, 12, 13; ed. Koder, 140 - 70. Muthesius, *Studies* 285.

<sup>8</sup> - Muthesius, *Studies* 323. That *kommerkiarioi* became 'mainly related to silk production' in the seventh century was suggested by N. Oikonomides ('Silk trade and production in Byzantium from the sixth to the ninth century: the seals of *Kommerkiarioi*' *DOP* 40 (1986) 43 - 4). It seems most probable that *kommerkiarioi* then possessed special links with the silk-trade, as they had done in previous centuries. But in an era of demonetisation and slackening economic exchanges their role is likely to have broadened out into one of buying up, selling and stockpiling other valuable manufactures and commodities which became available in their districts, as well as performing a fiscal function. Their functions were probably multiple and variable and they could well have dealt in or accepted as revenue 'agricultural and other primary products', as A. Dunn proposed ('The *Kommerkiarios*, the *Apotheke*, the *Dromos*, the *Vardarios* and *The West*,' *BMGS* 17 (1993) 10). However, it seems likely that their 'depots' (*apothekai*) mostly contained higher-value commodities rather than run-of-the-mill, perishable, agrarian produce. The high insecurity and need for constant improvisation of the mid-seventh to mid-ninth-century provinces will have created an acute need for regional stores of valuables and related supply networks under the care of officials who had some competence as valuers of, and dealers in, them. The *kommerkiarioi* could well have performed the role of local 'fix-its', having powers to buy up valued manufactured goods as they came on the market, to commission production of them, to tax and also to sell or dispense them gratis, according to circumstances. Silks, being highly valued and highly portable, would have ranked prominently but by no means exclusively among these 'big ticket' commodities and instruments of manipulation. See the critique of Oikonomides and comparable suggestions made by J.F. Haldon, *Byzantium in the Seventh Century. The Transformation of a Culture* (Cambridge 1990) 232 - 4.



for the production of silks: the number of Syrian merchants resident in Constantinople for ten or more years was substantial enough for provision to be made for them in the *Book of the Eparch*<sup>9</sup>. These were, presumably, distributors distinct from the visiting Syrian exporters who were only allowed three months in the city. Further, the government's ambivalence towards silk produced in workshops not under its direct supervision gains in perspective. As the *Book of the Eparch* attests, the authorities were apprehensive, issuing, for example, injunctions against private production of the 'forbidden' categories of textiles, unauthorised sales to foreigners and covert purchases by raw silk traders on behalf of a 'dynatos or wealthy man' (*Eparchenbuch*, 6.10; ed. Koder, pp. 98 - 9). But, as Muthesius argues, it was in the state's interest to maintain standards of quality and general order among the silk-producers and to maintain levels of production. The government benefited from taxes on transactions so long as they took place in easily supervisable places. And it needed to draw on the silk supplies and the silk-making skills of the 'private sector'. Hence the *Book of the Eparch's* note that officials and private persons were permitted to manufacture purple garments of high quality if they were ordered to do so 'for supplies (*choregian*) for the *eidikon*<sup>10</sup>'. It may well have been fear of loss of skills rather than of transmission of them to foreigners that underlay the penalty for selling a slave from a silk workshop 'to outsiders or foreigners' (*Eparchenbuch*, 8.7; ed. Koder, pp. 104 - 5). The picture which emerges for the tenth century is one of, essentially, cooperation between the private and imperial sectors, the degree of collaboration being rather higher than the *Book of the Eparch* expressly acknowledges.

This leads to a further consideration. Muthesius rightly lays emphasis on the sheer complexity of silk manufacture: the delicate worms had to be fed on finely chopped mulberry

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<sup>9</sup> - *Eparchenbuch*, 5,2,5; ed. Koder 94 - 7; Muthesius, *Studies* 307.

<sup>10</sup> - *Eparchenbuch*, 8.2; Koder 104 - 5; Lopez, *Industry* 15; (Muthesius, *Studies* 259 - 60, 286.



leaves and close liaison was necessary between the providers of the leaves and the rearers of the worms. At the other end of the process, a top-quality piece such as the Aachen Elephant Silk 'required 1.440 manipulations of the pattern making device' for just one roundel (p. 290). Time, as well as skill and equipment was needed for this and sudden shortages of raw materials further increased the risks, while restrictions on prices curbed producers' ability to recoup their losses. To these constraints, noted by Muthesius, needs to be added the question of the strength and geographical location of the demand. The highest-quality silks were very costly indeed and presumably even the lower-grade fabrics came within purchasing range only of the well-to-do. To master difficult skills or to invest heavily in an industry where one did not enjoy fairly constant demand would have been quixotic. There are hints as to the vagaries of the market in the *Book of the Eparch's* stipulation that workmen should be hired by the *metaxopratai* on monthly contracts (*Eparchenbuch*, 6.2; ed. Koder, pp. 96 - 7). Perhaps fluctuating supplies of materials made it imprudent to take on wage-earning workers for long, while the imperial workshops themselves may have needed to take on skilled hands at short notice. These circumstances not only make it overwhelmingly probable that (as Muthesius argues) the highest quality silks were produced exclusively in the imperial workshops; they also suggest that the state was the purchaser of many of the lesser quality textiles woven by the guilds. That such purchases were common is clear from the treatise on the imperial baggage-train's specifications<sup>11</sup>. The demands some assurance of sales to those engaged in production or trading. On the other hand the State officials could not entirely foresee sudden expenditure needs - gifts of *skaramangia* to buy off menacing Bulgarians or Hungarians, for example. To be able to resort to a market in privately produced or imported silks was therefore highly desirable and it gave the State a keen interest in quality control. It was thereby freed from the cost and organisational strain of

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<sup>11</sup>- Constantine Porphyrogenitus, *Three Treatises*, ed. Haldon 108 - 9, 112 - 13, 126 - 7; 219, 230 (commentary).



maintaining a massive over-capacity in its own, imperial workshops. Close collaboration involving a high degree of flexibility in arrangements and mobility of skilled labour is understandable against a background of shortages of raw materials and skills, military insecurity, uncertain communications and a concentration of wealth in Constantinople. Such was, essentially, the empire's condition at the turn of the ninth and tenth centuries, when the *Book of the Eparch* was being drafted.

The collaboration between the imperial authorities and the private sector was wary, at least from the State's viewpoint. But the forementioned constraints weighed against private production rivalling imperial workshops in terms of sustainable quality or becoming very large-scale. There was, above all, the problem of finding a market for one's products and although the *Book of the Eparch's* injunctions against sales outside the City imply that such things were done, they could scarcely have been risk-free or very profitable. Constant, flagrant breaches of the restrictions would have attracted the attention of the Eparch's officials or other functionaries, venal as these may have been. So long as purchasing-power was concentrated in the capital and was more or less directly connected with the palace, an alternative nexus of sericulture and manufacturing far from Constantinople was unlikely to be a going concern. The fact that the main foreign source of raw silk was formally in a state of permanent warfare against Byzantium put a further constraint on illicit private enterprises. The number of authorised trading emporia was small and fairly easily supervisable by the authorities. Those traders attempting evasion risked interception by both Byzantine patrols and Moslem raiders.

One might expect an improvement in the empire's strategic situation and an easing of communications to have lifted some of the foresaid constraints on private silk production outside Constantinople. That this seems to have happened, albeit gradually, is suggested by David Jacoby's study of silk production and trade in what is now Greece. Of



course, this development is just one facet of the general upswing in population-size, economic exchanges and wealth-formation, which Alan Harvey has documented, and Jacoby himself draws attention to it<sup>12</sup>. But it is very probable that the silk industry, already possessing close ties with the Islamic world, was peculiarly sensitive to the greater security in eastern border areas and the Aegean which set in from the later tenth century onwards. Muthesius offers evidence of the identity - rather than just similarity - of the techniques of Byzantine and Moslem weavers in changing from single to paired main warp twills from the ninth century onwards and Cairo Genizah documents attest the sale of raw silk to Byzantine merchants in the 1060s and 1070s. A Byzantine presence in Syria, with Byzantine agents reportedly levying taxes on the silks traded in Aleppo, is likely to have further encouraged cross-border exchanges - including, perhaps, migration of craftsmen. One possible witness to burgeoning collaboration comes from the eleventh-century Griffin Silk from St. Trond, whose stylistic features are fairly distinctively Byzantine, but whose use of cotton selvedge points to a Moslem workshop. Muthesius considers Syria to be a possible location for it. A still more significant mark of contacts is what Muthesius calls 'a technical breakthrough', the development of the 'lampas' weave and the related incised twill silks, both types being monochrome<sup>13</sup>. This took place c. 1000 in both Byzantine and Islamic production centres, seemingly without an appreciable time lag between the two milieux. The monochrome silks required a high level of skills to produce, but they did not call for expensive dyes or the dyeing process and this, together with the relatively large number of examples found in the West, suggests that they may have been made in non-imperial workshops. In other words,

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<sup>12</sup> - Jacoby, 'Silk' (as in n. 1 above), 452 - 500; A. Harvey, *Economic Expansion in the Byzantine Empire, 900 - 1200* (Cambridge 1989) 148 - 4, 213 - 20. I have not had access to Jacoby's study 'Silk crosses the Mediterranean' (in S. Origone (ed.) *Le vie del Mediterraneo, idee, uomini, oggetti*) reported as 'in press' in *Lexikon des Mittelalters*, VII (Munich 1995) S.V. *Seide . B. Byzantinisches Reich*, col. 1709.

<sup>13</sup> - Muthesius, *Studies*, 107, 112, 136, 290; Plate 83.



they might well exemplify economic expansion, with production of high-quality but not hugely expensive silks opening up in provincial centres.

Attention to economic growth and its periodisation is paid in one of the most recent papers incorporated in Muthesius' Studies<sup>14</sup>. But this aspect needs to be integrated more fully with the technical issues of which she shows such mastery. A wide-ranging investigation of the silk industry in Byzantium's western provinces is offered by Jacoby. He points to firm evidence of production on Andros as well as in Thebes and Corinth from the later eleventh century onwards, while noting much earlier hints of the Peloponnese's connections with the silk industry: already in the ninth century its north-western part was known as 'Morea' for its mulberry-trees, when the widow Danelis disposed of weavers and precious textiles of some sort in the neighbourhood of Patras<sup>15</sup>. Jacoby emphasises that Theban private manufacturers received commissions from the central administration to make very high-grade silks, dyed with murex purple. However, as Jacoby suggests, this was essentially a twelfth-century phenomenon. Moreover, Thebes seems to have been rather exceptional, benefiting from a particular combination of natural resources, easy communications and the capital and organisational skills of the *archontes*, members of the local landed *élite*. The latter seem to have been the driving force in the formation of a large-scale manufacturing industry, producing for the market. Thebes' elaborate nexus of production ranged from mulberry growing to dyeing with purple produced in Athens.

The quality of Theban fabrics was well-known to Western Europeans and Turks in the twelfth century as well as

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<sup>14</sup>- Mention is also made there of developments in the provinces in the eleventh and twelfth centuries: 'Constantinople and its Hinterland: Issues of Raw Silk Supply' (27<sup>th</sup> Spring Symposium of Byzantine Studies, Oxford, March 1993), in *Studies* 315 - 35.

<sup>15</sup>- Jacoby reserves Judgements as to whether the *silken sendes* despatched by Danelis to Basil I had actually been made in workshops under her control: 'Silk' 458 - 60; *Vita Basilii*, in Theophanes Continuatus, V.74, ed. I. Bekker (Bonn 1838) 318.



to the central administration. Jacoby points out that Thebes' high-quality silks were denied to the Genoese and Pisans and 'judging by the evidence pertaining to Alexius III, imperial control over a portion of Theban silk production and trade remained surprisingly strong by 1195'<sup>16</sup>. This raises the questions of what proportion of Thebes' silks was reserved by the government for its own uses and of whether all the highest quality silks belonged to this category. One might suppose that a 'high-profile' production centre such as Thebes was relatively easy for the imperial authorities to regulate effectively, and thus that top quality Theban silks remained a governmental monopoly. This would imply that examples found in the West arrived there as diplomatic gifts rather than as traded commodities. In contrast, it may have been fairly straightforward and not unprofitable to put on the market medium- and lower-grade silks, especially those manufactured in other, poorer, production complexes. The latter may have escaped close government scrutiny, being at once less capable of really high-quality product, less fiscally remunerative and more dispersed. It was the easier to avoid taxation on such silks in that much of the carrying-trade was in the hands of the Venetians who, unlike the Genoese and Pisans, were allowed to buy costly textiles. And in Northern Italy the Greek silk-producers were assured of a robust market, accessible yet well beyond the reach of imperial fiscal officials and thus more lucrative than markets within the empire.

To hypothesise thus is, of course, to make large assumptions about the degrees of intrusiveness and venality of government officials in Thebes and the other western provincial centres. Even the highest-quality silks may have found their way from Thebes onto the market in Italy and one will never be able precisely to chart the volume of production in twelfth-century Thebes or the relative importance of government commissions and the internal Byzantine and foreign markets for it. But systematic identification of the extant products of Theban workshops would be a step in the

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<sup>16</sup> - Jacoby, 'Silk' 492.



right direction. If, as seems to be the case, Thebes was second only to Constantinople in its ability to produce red samite and gold-interwoven silks, and if the attribution of Roger II's coronation mantle to its workshops can be confirmed,<sup>17</sup> the task might prove feasible. Extant examples of medium- and lower-grade silks might also be submitted to investigation although, as Jacoby points out, their survival prospects are poorer than are those of the finest-quality silks<sup>18</sup>. Were it to prove possible to distinguish between Greekfinished and Constantinopolitan products, the quantitative data, however crude, would contribute to understanding of the relative roles of the provincial centres and the capital in exporting silks to the West. This would have a bearing on Jacoby's postulate of 'a progressive contraction in Constantinopolitan silk production since the late eleventh century or, at any rate ... [a reduction of] the capital's share in the overall supply of the Byzantine market in a period of rising demand'<sup>19</sup>. This is a field where further collation of Muthesius' expertise with Jacoby's analysis would be fruitful.

There is another corpus of extant material, which could be brought to bear on the debate, silks from the lands of the Rus. There, notably in the burial-grounds of the north-eastern settlements, excavations have revealed a considerable number of fragments of strips of gold braid and of monochrome silk; they served as the collars and yokes of garments of relatively well-to-do peasant women. These burials date from the twelfth to the beginning of the thirteenth century - roughly the period of expanding production in Greece highlighted by Jacoby - and the silks are reportedly for the most part of Byzantine origin<sup>20</sup>. Whether these silks were spun and woven in Greek

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<sup>17</sup>- See Jacoby, 'Silk', 462 - 4, 483.

<sup>18</sup>- Jacoby, 'Silk' 473 - 4.

<sup>19</sup>- Jacoby, 'Silk' 498.

<sup>20</sup>- K.I. Komarov, 'Importnye tkani vo vladimirskikh kurganakh', *Kratkie Soobshcheniia Instituta Arkheologii* 210 (1993) 79, 81, 83 - 4 and map on 81. M.V. Fekner estimated that 'over 70% of imported silk [found in pre-Mongol Rus lands] is connected with the production of Byzantium's silk-weaving workshops':



centres or the capital, they attest the dynamism of the Byzantine economy at that time and have a bearing on the separate but related question of State finances. Even if the imperial authorities were unable to gain much fiscal benefit from silks exported directly to the West from minor centres such as Euripos or Patras, textiles carried by sea via the Bosphoros to the Rus lands were likely at some stage to pass through their fiscal net. This ambivalence seems to exemplify the effect on central government finances of the growth of regional production centres no longer geared solely to the demand and commands of Constantinople. Ultimately the proliferation of these and the growing allure of foreign markets facilitated political fragmentation but in the shorter term it probably contributed substantially to an increase in the revenues readily at the imperial authorities' disposal. Further work in collating the extant silks in Western church treasuries with the silk materials from archaeological excavations and the written evidence should illuminate this often paradoxical process and shed light on the growth of the Byzantine economy between the tenth and the twelfth centuries.

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'Shelkovye tkani v srednevekovoii vostochnoi Evrope' , *Sovetskaia Arkheologiia*, 1982, no. 2, 69. See also M. A. Saburova and M.V. Sedova, 'Nekropol' Suzdalia', in I.P. Rusanova (ed.), *Kul'turai isskustvo srednevekovogo goroda* (Moscow 1984) 121-7.