SEBASTIAN BRATHER / MAREK F. JAGODZIŃSKI, Der wikingerzeitliche Seehandelsplatz von Janów (Truso). Geophysikalische, archäopedologische und archäologische Untersuchungen 2004– 2008 = Nad morska osada handlowa z okresu Wikingów z Janowa (Truso). Badania geofizyczne, archeo-pedologiczne i archeologiczne w latach 2004–2008. With contributions of Mateusz Bogucki, Susanne Brather-Walter, Norbert Buthmann, Peter Kühn, Heiko Steuer und Benno Zickgraf. Zeitschrift für Archäologie des Mittelalters, Beiheft 24. Habelt Verlag, Bonn 2012. ISBN 978-3-7749-3696-6. € 129.00. 488 pages with 100 figures, 19 tables, 4 lists, feature and artefact catalogues, 67 plates and 5 inserts. Text in German and Polish. English summary.

For centuries the almost legendary site of Trusowas solely remembered from the famous travel account of the Anglo-Saxon merchant Wulfstan sailing from Hedeby to the eponymous site situated at a lake along the course of river Ilfing, which emptied into lake Estmere at the mouth of the river Wisle. Together with the travel account of the Norwegian merchant Ohthere it was inserted into the Old English version of Paulus Orosius' Historiarum adversum Paganos Libri Septem (Seven Books of History Against the Pagans) from the first half of the 5th century A. D., which was translated in circa 890 at the court of Alfred the Great. Since the early 19th century many possible sites along the mouth of the Vistula emptying into the Vistula Lagoon have been suggested for the location of Wulfstan's port of trade. However, it was not before 1982 that the site could be identified archaeologically at the former north-eastern shore of Lake Drużno / Drausensee along the course of river Elblag at Janów Pomorski / Hansdorf by M. F. Jagodziński through field walking. While the Viking Ship Museum in Roskilde even dedicated a volume to the very sea voyage of Wulfstan, issued as volume 2 of their "Maritime Culture of the North" series in 2009, it was only in 2010 that a first monograph on Truso was published by Jagodziński titled "Truso - Między Weonodlandem a Witlandem / Between Weonodland and Witland". This bilingual tradition - this time in German and Polish – was continued in the publication under review, which comes with an additional English summary. Next to the large-scale surveys of the settlement area as a whole, it is certainly the subsequent excavations of the "Zentralfläche", an area of 370 m<sup>2</sup> (in later publications denoted as complex III), and the exemplary and comprehensive presentation of its features and artefacts that takes the book's centre stage. Another substantial part is the contribution by H. Steuer on scales and weights which, with its 96 pages, makes almost a fourth of the total volume.

The publication is the outcome of a German-Polish cooperation of the University of Freiburg and the Elblag museum taking place between 2004 and 2008 in the framework of the project "Siedlungsstrukturen des wikingerzeitlichen Seehandelsplatzes von Janów Pomorski (Truso), Polen" funded by the German Research Foundation (DFG). The project's declared main aim was to gain new insight into the overall settlement structure by means of geophysics, pedological drilling and a subsequent archaeological survey of the anomalies (p. 29–32). Earlier excavations prior to the DFG project focused on the south-western settlement area (complex I, 1983–84) and on the alleged harbour area affected by deep ploughing (complex II, 1987–91 and 2000–08). Later largescale rescue excavations due to road construction in the northern part of the settlement (complex IV, 2007–08) were prepared by geophysical surveys ("Feld 4", p. 43), coring (p. 60–65) and one limited, 5 x 5 m large trial trench (trench 2 / 2005 "nördliche Peripherie" p. 88–90) within the scope of the project, but are otherwise not incorporated in the book (p. 24).

The publication at hand is considered as an intermediary result of the bilateral cooperation and at the same time intended to form as a kick-off to the publication series on the ongoing field research at Janów that started in 1982 under the direction of Jagodziński (p. 15). In the meantime, the first volumes of the "Studianad Truso / Truso Studies" edited by the Museum of Archaeology and History in Elbląg and the Institute of Archaeology and Ethnology of the Polish Academy of Sciences have been published, so-far presenting the results of the rescue excavation in the northern periphery / complex IV (2012) and the bone and antler artefacts (2013).

After the general introduction on the identification of the site, state of research and the current project's aims (chapter I), the publication starts off with the natural scientific surveys of the years 2004-06, including geophysics (chapter II. 4), drillings ("archaeopedology") (chapter II. 5) and a methodological reconciliation of both of them (chapter II. 6). Inspired by the results from Hedeby, the geophysical survey aimed to gain information on the "size, structure and internal organisation" of the settlement (p. 35). All in all, a total area of 18 hectares was surveyed with geomagnetics and a profile interval of 0.5 m; the application of georadar was tested but dismissed. Large areas in the centre of the settlement had to be omitted as "zones of increased magnetic turbulence" of geological origin, possibly due to erosion, accumulation of soil or else water saturation (p. 40). For more definite anomalies, a classification was suggested dividing them into linear structures, positive anomalies and dipoles as well as into modern and archaeological features (insert 3). Yet despite of the immense efforts and high aims, the results are somewhat disillusioning: while linear structures from archaeological features such as ditches or plot boundaries were hardly recognisable, even archaeological single features were few in comparison to the amount of artefacts from field walking. The subsequently excavated anomalies proved to be ovens and hearths, while pits were generally not discernible against the magnetisation of the surrounding soil. Nonetheless, it can be stated that there are clear concentrations of anomalies in the east (field 8a), medium amounts in the central and northern part of the settlement (fields 2 and 4), and comparatively few towards the south and south-western part of the surveyed area (fields 1, 3, 5 and 7). Remarkably the Iron Age features of field 4 (~ complex IV) at the northern margins seem to reflect far stronger than the Early Medieval ones (p. 47-48). The pedological drillings should contribute to identify the former shoreline and the presence of occupation layers as well as to test geophysical anomalies. Additionally a grid square mapping was undertaken in a test area of 50 x 50 m close to the main excavation area ("Zentralfläche" complex III). An older, yet undated shoreline could become identified north of the main trench and the grid square mapping resulted in the identification of a merely 0.1-0.2 m thick cultural layer underneath the plough horizon; actually traces of an anthropogenic impact reached nowhere deeper than one metre. In order to align the limited geophysical results with the evidence from drilling, a susceptibility analysis of the soil from the cores was conducted (e. g. for field 5).

Chapter III is dedicated to the actual archaeological fieldwork. While in 2004 different geophysical anomalies were tested by trial trenches (2004 / Nord; 2004 / West ["harbour area"]; 2004 / Süd) (p. 80-85), the following years concentrated on a larger excavation in an area with both a concentration of anomalies and evident cultural layers of noteworthy size ("Zentralfläche", insert 4). The aim was, among others, to test the geophysical measurements source-critically against the actual features uncovered archaeologically in the larger section. Two linear structures met in the main trench and addressed as drainage ditch (feature 42) and an assumed "plot boundary" (feature 43) were probably the most important results of these attempts. By means of additional trial trenches (2008 / XXI, XXVII–XXVIII), they were even traced in a distance to the main trench and seem to continue on a length of 60 m and 35 m respectively. They are thus judged to have had a "considerable significance for the settlement" (p. 87). The comparison of the almost featureless north-eastern part of the central area (2008 / XVII-XIX) to the feature-rich trial trench 2004 / Nord led the authors to the conclusions "that intensively and barely used areas are situated in direct vicinity within the settlement; by that a considerable differencing land utilisation on short distance can be deduced" (p. 87). Evidence for any chronological depth by overlapping features was given nowhere. To make matters worse artefacts mostly were met in the black earth and not from the features themselves (cf. chapter XII). In conclusion, further extensive excavations are advised in order to understand the settlement structure and its chronological development. By the future identification of the early medieval shoreline of Lake Drużno, the verification of humid soil with wooden preservation is aspired; the localisation of the burial ground could give information on respective cultural links (p. 91).

Following this overview, the 44 features are discussed in chapter IV, in which they are presented by the categories "hearths and fireplaces", "storage and refuse pits", "postholes and stone keyings", "drainage ditch", "plot boundary (?)" and the "channel" from trial trench 2004 / West from the alleged harbour area. The chapter is strongly interlinked with the exemplary feature catalogue (chapter X) at the end of the publication, where the respective details on the individual features are to be found. Fireplaces were found in twelve cases. Those of minor size, sometimes with clay package, are taken for hearths from houses, while the large fireplaces from the northern periphery (features 8-9; trench 2 / 2005, complex IV) are believed to be technical structures (p. 96). Of the eleven pits, three larger ones are addressed as storage pits (features 14-16). The evidence of postholes was severely hindered by heavy bioturbation and they were just recognisable by the presence of stone keyings. Thus, the nine features can only represent a fraction of the formerly existing posts and the identification of actual house plots is currently not possible; the same is even more true for buildings without any earth fast posts. However, one line of five stone packages (features 37-41) might just be about shimming stones for ground-level posts of a framework house (p. 98). Above the dead straight and 1-1.2 m wide feature 42 with a flat trench bottom and a fill layer of fine sandy sediments is interpreted as drainage ditch of a slowly flowing brook, perhaps – with reference to the one in Hedeby - with former wood boarding. By its recorded alignment parallel to the lake (!), its course is supposed to have been changed deliberately in order to redirect it through the settlement (p. 102-103). Yet the cited parallel for its cross-section, the famous boundary ditch of the market place in Ribe (p. 104), might in fact be much more than just a parallel in mere shape. The assumed "plot boundary" feature 43 lies c. 11 m uphill of the "drainage ditch" taking a parallel course on a stretch of at least 35 m. The feature is about a shallow, V-shaped ditch of approximately half a metre width. Though the authors concede that plot boundaries from other emporia tend to be aligned towards the shore, they plead that the feature under discussion rather is situated in the "rearward" part of the settlement (p. 105). Lastly for the sake of completeness, the shallow "channel" feature 44 is presented as a natural depression. This chapter presenting the documented features concludes with a comparison of the geomagnetic anomalies and the archaeologically exposed features (chapter IV. 16). As is expectable, they show the biggest consensus in matters of fireplaces due to the impact of fire and the presence of stone settings. Because of the interval of geomagnetic profiles of about 0.5 m, postholes are not visible. Yet reciprocally, some geomagnetic anomalies do not show in the excavation.

Chapter V then deals with the rich artefact spectrum of 3 143 objects (tab. 5.1; cf. artefact catalogue chapter XI). This is even more remarkable, since they were not even particularly focused on: for the sake of swift progress the plough layer was removed mechanically by a digger, and even if a metal detector was used, only in exceptional cases sieving was carried out (p. 77–79; 113). The vast majority of the artefacts were met in the black earth immediately underneath the plough zone and were only seldom associated with features themselves (cf. chapter XII). However, the black earth itself seemed little "contaminated" and contained almost exclusively Viking-age objects (p. 111). Since there were no waterlogged preservation conditions, no organic artefacts were preserved. The artefacts are sorted and presented according to the five main groups "House(hold)", "Tools, Gears and Weapons" and "Ingots and Raw Material". Furthermore, there are the categories "Exchange" and finally "Clothes and Jewellery" (p. 114–115). Little surprising, the lion's share of the artefact spectrum makes the potsherds, with 2 213 specimen forming 70 % of the entire artefact material.

Its spectrum consists of local, undecorated hand-made ware, West Slavic pottery and very small amounts of Badorf Ware (0.36 %).

In general, the authors refer predominately to the Hedeby artefacts for comparison, yet Birka is also frequently quoted. Among the more remarkable finds are a complete forging tongs, a sword pommel of Petersen type H, a double-sided crucible for ingots, the fragment of a JP 37 oval brooch, a pendant from a re-worked, curved bronze plate with Broa-style ornament and a small amulet-ring with a Thor's hammer, Odin's spearhead ("sword / knife") and a third miniature, as well as a fine, beehive-shaped "gaming stone" from amber with central perforation that is also discussed for being a light spindle whorl (p. 183 note 344). As to the means of exchange (chapter V. 20), 35 new coins were found in the course of the excavations adding to the hitherto known impressive amount of 1065 early medieval specimen from Truso. They are exclusively about hacksilver of heavily fragmented dahārim from the Sāsānid and Umayyad, yet predominantly from 'Abbāsid dynasty. The only unspoiled dirham had a loop and was carried as a coin pendant. The latest dahārim are four coins issued by caliph al-Mutawakkil 'alā Allāh in A. D. 847-861. This is also in accordance with the overall picture gained previously: no hitherto known coin was minted later than A. D. 860 (p. 169, fig. 5.11) - 30 years before Wulfstan even arrived in Truso! The set of hacksilver coins is being supplemented by the finds of seven lead weights as well as 13 cubo-octahedral weights, three bipolar spherical weights plus the fragment of a folding balance. With the exception of maybe the lead weights, however, their chronological placement post A. D. 870 does not at all seem to coincide with those of the hacksilver finds (p. 172-173).

Steuer's extensive study on the scales and weights in Janów (chapter VI) of course is much more than the modest title promises. He is not just concerned with all the balance scales and every weight from the Truso excavations, but uses them as starting point for a general re-examination of the bullion economy, a circuit of twenty major trading-places around the Baltic, the distribution density of found weights, the function of the normed weights, their dating and earliest evidence, cubo-octahedra as terminals on ring brooches, places of weight-production and some general statements on weights and money. With this study, he connects to his 1997 monograph "Waagen und Gewichte aus dem mittelalterlichen Schleswig. Funde des 11. bis 13. Jahrhunderts aus Europa als Quellen zur Handels- und Währungsgeschichte". Though Steuer's chapter certainly would be worth a review on its own this matter shall be yielded to the experts in that field. In this context the focus will be limited to these results that are directly related to Truso: all in all, fragments of 16 folding balances are known from Truso that where imported together with the accordant normed sets of cubo-octahedral and spherical weights in c. A. D. 875 from the Middle East (p. 189–190). The balance scales represented in the material belong to type 3 and 4 (late 9th-10th centuries) and type 5 (10th-mid-11th centuries). Their distribution on site is clearly orientated away from the "Zentralfläche" as outer margin and aligned towards the harbour area (cf. fig. 6.2). The balance weights from excavations in Truso amount to 369 specimen in total, subdividing into 109 lead weights (type C), 207 standardised cubo-octahedral weights (type A) and 53 standardised spherical weights (type B). The latter can be further subdivided into 22 type B1 / early (A. D. 880-1000), eight type B2 (A. D. 1000-1220) and ten type B4 (A. D. 1080-1220) specimen, but in the context of Truso they are placed "generally in the 10th century through the decades around A.D. 1000" (p. 193). Solely judging from the evidence of the normed weights and scales from the late 9<sup>th</sup> century onwards, the emporium was a highly frequented trading place with its heyday around the turn of the millennium (p. 196). For the whole of the settlement estimated at a size of c. 15 hectares, Steuer extrapolates a total amount of 15 000 normed weights to be expected! Steuer tries to bridge the chronological gap between the end of the (hack) silver influx c. A. D. 860 and the arrival of normed weight sets and folding balances around A. D. 875 by suggesting a few scenarios with different grades of plausibility (p. 269-270): the hypothesis that normed weights

would have been introduced at an early stage is being rejected decisively (p. 270; cf. addendum 2, p. 278–280), since this would not explain the missing of younger coins either. However, the fact that younger coins – in contrast to the other emporia (p. 269) – did not reach Truso to this point remains an enigma.

Before the publication ends with summaries in German, Polish and English (chapter VIII) and a comprehensive body of documentation (chapters X-XII; pl. 1-67), which enables the reader to meticulously reconstruct the presented results in detail, chapter VII tightens the outcomes, relates them to the insights gained from other trenches and concludes with a historical placement of the settlement. Despite earlier reservations, a suggestion for the settlement layout is made for the "Zentralfläche" (281–282; pl. 66) comprising two house plans, plot boundaries aligned after the putative canalised brook course (and thus parallel to the shore) in addition to the indication of two hypothetical track ways leading down to the lake. In the "harbour area", complex II, the plots and buildings are oriented towards the shoreline, whereas the proposed orientation of houses (and deduced plots) parallel to the lake at the south-western settlement area complex I is not convincing (fig. 7.1). The general absence of pit houses and wells is observed. By an estimated size of 12-15 hectares for the settlement occupation, a population of 500 to 1 000 inhabitants is being suggested. The project did not yield a proof for the former shoreline of Lake Drużno; yet the land decline at a certain stage might have formed a counter movement to the obvious silting of the lake and thus the former shore might as well be suspected underneath the actual water level (p. 294). For the overall time span of the settlement activities a period of c. 150 years ranging from early 9th to the mid-10th century is suggested, while finds from the 8th and 11th century are only rare. The features met below the find-bearing black earth - the latter probably resulting from destroyed 10th century-features – are dated broadly to the 9th century (p. 296–301 fig. 7.8).

A disagreement of the authors might be evident in Brather's assessment that a closer chronological containment is not arguable and that there would be no new evidence for the duration and phasing of the settlement contrasted with Jagodziński's suggestion of three distinct settlement phases comprising a seasonal occupation from the end of the 8th to mid-9th century, the allotment and installation of harbour facilities in between the mid-9th to mid-10th century and finally a subsequent fortification, both sea- and landward, from mid-10th to the first half of the 11th century (p. 300-301). The horizontal artefact distribution within the margins of the project's trenches is broken down into miscellaneous artefact groups (pl. 53-65) which are used in order to define certain "activity zones" for trade and production. Typically different crafts were practiced in close neighbourhood, which again is taken as indication for rapidly changing utilisations of plots due to itinerant craftsmen (p. 305–306). In terms of trade, the early hacksilver is taken up as evidence of intensive economic exchange and currency of a restricted "local numismatic area" - albeit without own coinage - between the lower Vistula and the Neman (p. 308-313 fig. 7.9), while the absence of  $10^{\text{th}}$  century coins is tackled by the postulate of normed weights as potential currency (p. 313-315). As a final point, the urbanism debate is touched upon largely reflecting the actual but bewildering state of discussion. Truso, together with sites such as Åhus II and Reric / Groß Strömkendorf, is categorised as second-level trading site with a restricted economic focus on the Baltic Sea only (p. 319). With an impeccable map the site's important borderland situation between the West Slaves and Balts is accentuated (fig. 7.12), while the existence of an associated manor at "one of the [Baltic] hill forts at the Elblag Upland" is contemplated (p. 323). The absence of pit houses is evaluated as a non-Scandinavian feature, rather indicating a "Slavonic type" of urban settlement. For their field of work the authors conclude that since other urban sites as e. g. central sites are not known from the 9th century new impulses on urbanism only appear with the supra-regional formation of power in 10<sup>th</sup> century northern East-Central Europe. These developing new towns, however, belittled the exceptional position of the long-distance trading places turning them into *emporia* for the hinterland.

In spite of an exemplary methodological approach to get a grip on the large-scale layout and internal structure of the emporium, quite undeserved deeper insights remained beyond the project's grasp due to the poor preservation conditions on-site. Unfortunately, this more or less is also true for the declared aim to focus on features rather than artefacts (p. 78–79). Against the background of the good results gained in Kaupang featuring comparably poor site-conditions, the introduction of soil micromorphology might be an analysis to add to the range of methods in future campaigns. The "Zentralfläche" with somewhat better preservation conditions for actual features was central for the attempts of the actual field campaign, yet in terms of settlement occupation it rather seems to be situated at the fringes of something that in certain circumstances might be understood as a legal boundary ditch. A critical review of its seemingly lineal course would be a central aim for future campaigns in Janów. However, against all odds the results of the Polish-German cooperation provided not only important aspects of a key site, but will clearly help to develop future research questions and direct impending field research in Truso. The publication as such can be judged nothing less than exemplary, not least in terms of documentation, setting extraordinary high standards for the future presentation of any results in settlement archaeology.

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KLAUS BRANDT (Hrsg.), Hollingstedt an der Treene. Ein Flusshafen der Wikingerzeit und des Mittelalters für den Transitverkehr zwischen Nord- und Ostsee. Schriften des Archäologischen Landesmuseums Band 10. Wachholtz, Neumünster 2012. € 80,–. ISBN 978-3-529-01811-4. 416 Seiten, zahlreiche Abbildungen und Tafeln.

Nachdem die Ausgrabungsergebnisse in den Ostseehäfen Haithabu (Wikingerzeit) und dem zeitlich anschließenden Schleswig in einer Fülle von Bänden dokumentiert sind, dokumentiert der anzuzeigende Band die archäologischen Befunde in deren Brückenkopf zur Nordsee, dem ca. 18 km weiter westlich gelegenen Hafenplatz Hollingstedt. Dort wurde aber nicht so großflächig gegraben, sodass nur jahrzehntelang gesammelte Lesefunde, Aufschlüsse bei Bauarbeiten, systematische Probebohrungen, etliche Suchgräben und drei relativ kleine Grabungsflächen in ihrer Relation zur Topografie und zur spärlichen schriftlichen Überlieferung ausgewertet werden konnten. So fasst Klaus Brandt, der Leiter des von der Deutschen Forschungsgemeinschaft unterstützten Projekts, die Forschungsgeschichte eingangs zusammen. Die Grabungsflächen wählte er nach Prospektionen so aus, dass er Aufschluss über hafentechnische Anlagen erwarten konnte, und fand sie in weit größerem Maße und mit aufschlussreicheren Ergebnissen als er in seiner über hundert Seiten langen Interpretation aller archäologischen Untersuchungen selbst ausführt!

Als Voraussetzung für das Verständnis der archäologischen Befunde analysiert er zuerst die historische Topografie Hollingstedts und erkennt zwei sehr unterschiedliche Ortsteile. An die von Nord nach Süd fließende Treene reicht von Osten ein schmaler Geländesporn heran, auf dessen Höhe nahe am Fluss der Ortsteil Nedderend liegt. Nach dieser Lage kennzeichnet die früheste, vor 1200 überlieferte Namensform "Huhelstath" ihn als einen Hafenplatz (stath = Gestade) am Hügel.