A plan on the roof tile? Reflections on the allegedly ancient city map of Aguntum (Austria)

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Abstract: During excavations in Aguntum (Austria; Tyrol) in 1976, a map carved on a roof tile was discovered, which was interpreted by the excavator as an ancient city map or architectural sketch of Aguntum dated to the 3rd century AD. Soon afterwards, the authenticity of the plan was strongly doubted by several archaeologists. As the plan is still considered a Roman original today by some scholars, this essay aims to draw attention once again to the discussion on the authenticity. While the argumentation so far has concentrated primarily on the circumstances of the discovery and recovery of the roof tile and on technical questions concerning the scratchings, further arguments concerning the cultural history, ancient mentality as well as conventions of space representation are presented. As research on Roman plans and the ancient perception of space has improved since the 1970s, further indications for addressing the plan of Aguntum as a forgery are found. However, a definite clarification of the authenticity question cannot be provided.

Keywords: Aguntum, Austria Romana, Forma Urbis Romae, Roman Plans, Roman Cartography.

Riassunto: Durante gli scavi presso Aguntum (Austria; Tirolo) nel 1976 è stata scoperta una mappa scolpita su una tegola, che è stata interpretata dagli scopritori come un'antica mappa della città o uno schizzo architettonico di Aguntum, datato al III secolo d.C. Subito dopo, l'autenticità della mappa è stata fortemente messa in dubbio da diversi archeologi. Poiché la pianta è ancora oggi considerata da alcuni studiosi un originale romano, questo saggio si propone di richiamare ancora una volta l'attenzione sulla discussione riguardo l'autenticità. Mentre l'argomentazione finora si è concentrata principalmente sulle circostanze del ritrovamento e del recupero della tegola e su questioni tecniche relative ai graffiti, vengono qui presentati ulteriori argomenti riguardanti la storia culturale, la mentalità antica e le convenzioni di rappresentazione dello spazio. Poiché la ricerca sulle planimetrie romane e sull'antica percezione dello spazio si è sviluppata dagli anni '70 in poi, sono stati trovati ulteriori elementi per interpretare la planimetria di Aguntum come un falso. Tuttavia, un chiarimento definitivo della questione dell'autenticità non è ancora possibile.

Parole chiave: Aguntum, Austria Romana, Forma Urbis Romae, Planimetrie di età romana, cartografia Romana.

INTRODUCTION

On August 13, 1976, during the excavations by the Austrian Archaeological Institute in Aguntum in Eastern Tyrol, directed by Alzinger, a roof tile was discovered on which a plan had been scratched (Fig. 1; Fig. 2).



This was interpreted as an ancient city map of Aguntum, dating from the 3rd century AD. The archaeologists Karwiese and Fleischer doubted the authenticity of the plan at an early stage in oral discussions that followed lectures on the rooftile (BREIN 1980: 5) The Italian scholar Moscati publicized the find in Italian research and did not doubt its authenticity (MOSCATI 1978). The archaeologist Brein and the ancient historian Weber argued that the plan was a modern forgery (BREIN 1980; WEBER 1980). Based on the language used in the publications, the dispute (especially between Brein and Alzinger) can be described as emotionally charged, to say the least. The temporal distance to the events and the researchers involved, allows for an objective discussion of the issue now. Since the issue of the authenticity was published in an Austrian Journal (Römisches Österreich), it may not have been noted by parts of the international scientific community. Moreover, essays by Alzinger and Eibner, which were published after the above criticism and which continued to support the authenticity of the plan, were not rejected for a long time (ALZINGER 1985; EIBNER 1981-1982). Apparently, proponents of authenticity and critics had presented their point of view, and the discussion fizzled out. Later contributions dealing with the plan in the context of Roman architectural drawings referred to it, but mostly expressed doubts about its authenticity (see below). However, the dispute about authenticity met different reactions. Corso, for example, considered the plan to be Roman only a few years ago, but without reference to any doubts about its authenticity (CORSO 2016: 46, 104). A good summary of the present status of research is due to Müller (MÜLLER 2020).

The current state of research on Roman plans and their conventions of space representation and history of Roman culture and mentality, as well as of the space perception in antiquity, however, give rise to new arguments. They support the the assumption that the city map of Aguntum is to be regarded a forgery (MENEGHINI 2008, 2016; TALBERT 2008; TRIMBLE 2008).

THE ROOF TILE WITH THE PLAN

According to Alzinger, the roof tile came from a late antique pavement (ALZINGER 1977a, 1977b, 1985a, 1985b). The fractures of the roof tiles were explained as the result of stepping on them. The scratched plan, first pointed out by a student, is described as follows: "At first glance, the two streets represented at an acute angle were visible, a particularly characteristic sign of this city map and furthermore the already known buildings, the atrium house, the thermal bath and the city wall with the two towers. Cross streets, the *cardines*, are also marked, one of which has already been excavated at least partially. Merely the houses of the craftsmen's quarter and the eastern settlement are indicated only schematically by many stalls. ... East of the city wall there are still unknown buildings: a forum-like complex with a building in the centre, possibly a temple, south of it a square building with many *tabernae*, which might be a kind of *macellum*, and in the southeast a larger building with an apse, which looks like a *curia* or an *auditorium*. In the very east, south of the road, there is a round building.

Exciting is a group of buildings visible south of the street immediately adjacent to the city wall, a scenic theatre and next to it a structure that looks like a fountain house" (ALZINGER 1977a). According to Alzinger, the form of the turreted city gate built at the end of the 2nd century AD defines the *terminus post quem*, while an annex building, which is not represented in the plan that was constructed around 275 AD provides the plan's *termnius ante quem*.

ARGUMENTS IN FAVOUR OF THE AUTHENTICITY OF THE PLAN

Alzinger put forward arguments in favour of the plan's authenticity, which can be summarised as follows (ALZINGER 1977a, 1977b, 1985b):

- Stylistic considerations, especially with reference to the *Forma Urbis Romae* (Fig. 3; Fig. 4) and further architectural scetches from Rome, Ostia, Perugia and Urbino (Fig. 5).
- The scratches on the roof tile differed in appearance and behaviour in laboratory tests from those made later for comparative purposes.
- The find context, as the roof tile had been taken from an undisturbed fired humus layer.
- The correspondence of buildings depicted in the map and excavation results. In addition, aerial photographs would possibly point to further buildings depicted on the plan. Furthermore, Alzinger poses the question from the outset, "Does the plan consistently show buildings that actually existed in the 3rd century AD? Or did the draughtsman only want to show where one or the other building could be erected?"
- The discovery of an ancient wall structure at a site where excavations had been carried out to verify the existence of a building represented in the plan.

However, Alzinger also wrote of doubts about its authenticity: "Immediately the question arose, whether this find could be a genuine plan made in antiquity or a forgery. The question is difficult to answer inasmuch as there is no sinter of any kind on the roof tile as there is none on any other roof tile or pottery vessels at Aguntum" (ALZINGER 1977b: 13).

ARGUMENTS IN FAVOUR OF A FORGERY

Brein's main arguments for a forgery can be summarized as follows (BREIN 1980):

- Stylistic considerations could not be made where there was no style. They should be regarded as "soap bubbles".
- The roof tile had been broken into fewer fragments on an earlier photograph showing it stuck in a soil profile, and therefore must have been broken again later on (before the recovery and the discovery of the plan). The tile had already been uncovered on August 4, 1976, but had only been recovered on August 13. In the meantime its position had been changed. Brein does not doubt that the roof tile itself is antique, but only the scratching.

- Scientific methods would permit only to identify fakes as such, but not conversely to prove that a piece was genuine. In addition, a different appearance of scratches later added for comparison with those of the plan is attributed to the treatment that the tile's surface underwent in the meantime: The roof tile had been rubbed with a root brush, brushed with Mowilith 40 and coated with latex.
- With regard to a possible verification based on the known monuments, the change of the scale between 1:1000 and 1:5000 leads to a margin for the location of individual recorded buildings of up to 100 m.
- It is striking that the town's area, depicted in the plan, fully coincides with the best researched and published part of the town.
- The wall structure uncovered as a result of the verification excavation was not relevant.
- The city wall on the roof tile plan turns to the east, although the city was actually situated in the west.
- The plan assimilated the Forma Urbis Romae, which was imitated.
- The plan had been scratched from north to south and the roof tile had already broken at the time of scratching, as one line had met a fracture as it was drawn.
- A plan on a roof tile apart from one example in Grenoble would be unique.

Brein concludes: "If one weighs up the circumstantial evidence that could be used to support the authenticity of the plan with the evidence supporting a modern origin, one cannot avoid the compelling conclusion that the plan must be modern" (BREIN 1980: 25). Weber claims a key difference in the fact that the scratches made in the laboratory were produced on a surface that had been washed and hardened before (WEBER 1980: 30).

RESPONSE TO THE DOUBTS

Alzinger wrote with regard to the scientific investigations: "An archaeometric investigation carried out by the Institute for Technical Physics of the Technical University Vienna (director: Prof. Ebel, experimenter: Dipl.-Ing. Dr. techn. J. Wernisch) provided scientific proof of authenticity, in which the weathering in the scratches was measured using various methods and compared with the conditions on the surface versus recent scratches". Eibner (1981-1982) also argues for the authenticity of the plan carving: The lines have been scratched before the firing in the leather-hard condition of the roof tile. These scratches would have in fact been engraved. In addition, the lines would displace each other at intersections without skip.

Concerning the modern fractures of the roof tile, which Brein had put forward as an argument, Alzinger states that in addition to some fractures caused by lifting the object, there were also ancient fractures, which were presumably caused by the use of the roof tile as a stepping stone (ALZINGER 1985b: 54). Unlike Brein, Alzinger assumes that the plan was

scratched from west to east, as the representation becomes larger towards the east (ALZINGER 1985b: 54).

The inconsistency of scale, which Brein regards as an argument against the authenticity of the plan - as already expressed in a publication in 1977 - curiously enough favours the idea of authenticity in Alzinger's view: "For our knowledge of ancient towns is far too much based and affected on ground plans to be so skilfully freed from them as is the case with the draughtsman of our Aguntian roof tile" (ALZINGER 1977b: 15). This probably means that a person used to scale plans would find it too difficult to make an out-of-scale drawing! Alzinger considers buildings in front of the city wall as suburbs, excavations in search of the theatre were unsuccessful. According to Alzinger, this could be due to particularly deep burying, as the necessary depth was not reached, moreover it was also possible that the theatre had been a wooden construction, for which evidence would have been even harder to find (ALZINGER 1985b). The bending of the city wall to the east, criticized by Brein, is explained by the fact that it may have filled the function of a protective wall for the buildings in the suburbs against mudflows (ALZINGER 1985b).

In the case that no archaeological evidence of the buildings depicted in the plan can be found, Alzinger considers it possible that the drawing was a "utopia or an architect's sketch" (ALZINGER 1985: 150). He mentions early Christian architectural representations from Ohrid as comparisons for plan drawings on roof tiles (ALZINGER 1985: 150-151).

From handwritten notes by Alzinger for lectures in 1978 and 1981, which are kept in the archives of the Austrian Archaeological Institute at Vienna, the following can be added: At the site of the round building depicted on the plan, sherds had been found which was unexpected, since the excavation site was situated far to the east. Alzinger considered it possible that hearths were indicative of *tabernae* recorded on the plan, for which there was no other evidence. In his lecture notes, Alzinger's doubts seem somewhat stronger than in the publications, for example in the manuscript of 1978: "I must confess that I imagined the matter to be easier than it was. ... We wanted to find practically everything and found practically nothing" (Manuscript in the archives of the ÖAI). Alzinger admitted in the manuscript for a 1981 lecture that the roof tile had been rotated 90 degrees with respect to the original situation of its discovery, thus confirming a central argument of Brein. Alzinger explained this by saying that the roof tile could have fallen out of soil profile and then been put back in before being documented by drawing.

REFERENCES TO THE PLAN IN THE FURTHER HISTORY OF RESEARCH

Moscati, who mentions in his essay the first criticism of the plan's authenticity, probably expressed orally by Karwiese and Fleischer was convinced by the results of the scientific investigations and presented the plan to an Italian-speaking audience as genuine (MOSCATI 1978). In his essay he reports Alzinger's statements and interprets the roof tile plan as a draft of an official cadastral plan that was later executed in stone. The buildings on the plan, which

had not yet been verified were in his view only a problem of secondary importance, since they could either still be found or could otherwise have been destroyed and would therefore no longer be verifiable (MOSCATI 1978: 55). Rieche also considers the plan to be genuine and refers to it in his description of the Forma Urbis Romae: "The Forma Urbis is not the only preserved marble plan. From Aguntum in East Tyrol, for example, and several Italian cities, fragments of city plans or individual building outlines are known" (RIECHE 1978: 117).

In his essay on Roman ground plans on marble, von Hesberg deals with the plan only very cursorily: "The fragment of a plan from Aguntum scratched on a roof tile in the manner of the building indications of the Forma Urbis is disputed and will not be discussed here. On the authenticity see also C. Eibner, ÖJh 1978-81 Beih. 50 f' (V. HESBERG 1983: 130).

Pleyel addresses the question of the authenticity of the plan without taking a clear position: "The most important find in the small collection of the atrium house would have to be the inconspicuous roof tile discovered in 1976, which shows a simplified plan of an entire quarter of the former Roman city with forum, temple of the town, roads, stores and theatre in a fine incised drawing, if its authenticity was not vividly disputed" (PLEYEL 1987: 300).

The doubts on the authenticity is reflected as well in the caption of the illustration of the plan, "Real or fake? City plan of Aguntum scratched on Roman roof tile" (PLEYEL 1987: 301). Heisel reproduces an illustration of the plan and describes it in his work on ancient architectural drawings (HEISEL 1993: 197).

Walde wrote in an essay on Aguntum: "The plan of Aguntum discovered during the excavation in 1979 and played up in the press, a plan of the town scratched on an ancient roof tile after the model of the Forma Urbis Romae with the parts excavated so far, supplemented by a theatre, amphitheatre, basilica, etc., turned out to be a student's 'excavation hoax' and can therefore not improve the knowledge of Aguntum's topography" (WALDE 2002: 152). The year of discovery mentioned is incorrect. With regard to the content of the depiction, it is surprising that Walde speaks of an amphitheatre and a basilica, since such an interpretation of the buildings depicted on the plan is put forward for the first time. Unfortunately, there is no explanation which representations are referred to. The assessment that the press had played up the find sounds like a criticism, whereas the discovery of a genuine Roman map would actually have been sensational. Unfortunately, no further explanation is provided why the plan is regarded as a hoax. Therefore, it remains unclear whether she merely shares Brein's arguments or if she – an archeologist working in Tyrol – has any further information.

Corso, who refers to Heisel in his account, considers the plan to be Severan, without mentioning any doubts on the chronology (CORSO 2016: 46; 204; HEISEL 1993).

Müller summarizes the discussion so far and clearly speaks out in favor of a modern forgery: "More interesting, however, are alleged archaeological finds, which were by no means prepared for profit, but deliberately as 'excavation finds' either for fun or for malice foisted upon serious researchers, in order to deceive and embarrass the professional world or even

certain individuals. The "ancient" town plan of Aguntum can also be counted among the "finds" of the latter category. ... The city plan of Aguntum is considered in today's literature at best as controversial and doubtful. Mostly, however, the carvings on the roof tile are interpreted as an excavation hoax or a student's excavation joke. Staff members of the excavation team at the time had tampered with the roof tile and added the incisions" (MÜLLER 2020). Furthermore, Müller suggests that a particular plan could have inspired the drawing on the roof tile: "In a book published a year before the discovery by the archaeologist Stefan Karwiese (*1941), who was also involved in the excavations, there is a plan of the orgoing excavations of Aguntum, which he himself thinks may have served as a template for the creators of the roof tile plan" (MÜLLER 2020). As Corso's contribution shows, however, the factual situation has been less clear for the scientific world until more recently than Müller believes (CORSO 2016; MÜLLER 2020).

REFLECTIONS ON NEW ARGUMENTS

With regard to the form of representation, Brein rightly observed that it is reminiscent of the Severan Forma Urbis Romae, which had already been extensively discussed in 1960 (BREIN 1980 with reference to CARETTONI *et alii* 1960). However, he leaves it at that, since "a stylistic discussion is not possible". This offers a starting point for new considerations.

First of all, a theoretical approach to the field of research of Roman plans will be made from the perspective of research mentality history: Talbert notes that the debate on ancient maps barely predates the 1980s - and thus began only after the publication of the Aguntum plan (TALBERT 2008: 9).

There was no unequivocal expression for "map" in Greek or Latin. Several terms could signify something like "map" alongside with various meanings, and the term "forma" in particular could have various meanings (TALBERT 2008: 12-13). Sometimes it is argued that although cartography existed in antiquity, it played a subordinate role, because it was seen as of little use. This is sometimes linked to the view that space in Roman logic was primarily perceived one-dimensionally with lines and not – as it is now the case - two-dimensionally in the form of maps (With reference to further sources: TALBERT 2008: 13-14). The Roman tineraries can be considered as a supporting argument. Trimble suggests that people in antiquity were far less familiar with maps than is the case today and that cartographic literalism was rare (TRIMBLE 2008: 95). Trimble supports approaches by Harley, who stated that a map reflects a social construction of the world, expressed through a cartographic medium. A map could therefore be seen not merely as a mirror of the world, but as the expression of power structures, cultural practices, preferences and priorities (TRIMBLE 2008 with reference to: HARLEY 1990).

Fragments of 12 marble plans from the Roman world are known today (MENEGHINI 2008: 180, 2016). Almost all of them depict buildings in Rome. A fragment from the Isola Sacra at Portus depicts the commercial centre either of Ostia, Portus or Rome, and a probably private

Neronian plan from Perugia depicts a tomb and a residential building (Illustration of the plans: MENEGHINI 2008: 181-185, 2016: 181). The plans show significant stylistic similarities. Although the Severan Forma Urbis is particularly significant due to its good preservation, a comparison with other plans shows that its form of representation differs from all others due to deliberately used adaptations and variations (TRIMBLE 2008: 69; DE CAPRARIIS 2016: 82): The walls of ordinary buildings are represented on the Severan Forma Urbis Romae by only a single deep line while other plans use shallow double lines between which the surface has been slightly deepened (TRIMBLE 2008: 78-81; ROSADA 2007: 145; DE CAPRARIIS 2016: 82; MENEGHINI 2016: 179). In the Severan Forma Urbis only some central public buildings are marked by a double line (TRIMBLE 2008: 79; MENEGHINI 2016: 179). Almost all plans have numerous inscriptions by which, for example, private owners of buildings can be identified (TRIMBLE 2008: 85). In addition, dimensions of parcels of land are provided in many cases. These were crucial for taxation, if a plan served as a cadastre (MENEGHINI 2008: 184, 191; TRIMBLE 2008: 85-86). Signs inside buildings may be interpreted as indicating multiple storeys (PEDRONI 1992). On the Severan Forma Urbis, however, only the name of the house of the *praefectus urbis* Lucius Fabius Cilo, under whom the plan was probably created between 205 and 208 AD, is marked as property of a private person. Otherwise labels are only provided for public buildings (DE CAPRARIIS 2016: 82; ROSADA 2007: 145). A possible explanation for the fact that no private owners are mentioned on the Forma Urbis is that the corresponding designations only represented a current snapshot, since ownership and building layouts were continuously changing due to alterations (TRIMBLE 2008: 87). The plan was not primarily intended for representing the current state of affairs with a practical function for the administration, but for demonstrating the size and power of Rome in a supra-temporal form. For this purpose, the geographical and social hierarchy of the city was smoothed out (TRIMBLE 2008: 70). It is argued that several monuments on the Forma Urbis Romae are depicted in a form that pre-dates the Severan period (TRIMBLE 2008: 76). Moreover, a detailed inscription on the plan, which measured 18 m x 13 m, roughly the height of a four-storey building, would probably have reduced its legibility without being decipherable in detail by an observer (TRIMBLE 2008: 69). Another exception to the inscription tradition where the owners' names are indicated in the genitive case, is the small, unlabelled plan fragment from the Isola Sacra (TRIMBLE 2008: 85). Entertainment buildings are preserved only on the Forma Urbis Romae. Unlike other buildings, however, this one does not show the ground floor plan, which would have to show the substructures and aisles, but a kind of plan view of the seating tiers (TRIMBLE 2008: 82).

Rodriguez-Almeida attributes the similarities of the marble plans to fixed conventions of representation that had been developed in Augustan times at the latest (RODRIGUEZ-ALMEIDA 2002; ROSADA 2007: 147 - critical of Rodriguez-Almeida: NAJBJERG, TRIMBLE 2004). This is not improbable in view of the efforts of the first *princeps* to survey the empire and for an administrative reorganization of Rome, even if this argumentation cannot be accepted as clear evidence (NAJBJERG, TRIMBLE 2004: 577).

The oldest archaeologically attested plan of Rome was found under the Nerva Forum and dates from the 1st century A.D. (ROSADA 2007: 156). The marble plans are all dated to the 1st and 2nd century A.D. and predate therefore the Severan plan (ROSADA 2007: 152-153; TRIMBLE 2008: 70-72). The similarities between the plans suggest the existence of specific cartographic conventions (ROSADA 2007: 153; TRIMBLE 2008: 69).

Marble plans are available mainly because of the durability of the material. The cadastral documents themselves may have been made of bronze. A small fragment of a rural cadastral plan from Spain has survived (Illustration: TALBERT 2008: 10). Cadastral plans must have been easier to use and update than marble plans (TRIMBLE 2008: 76). Furthermore, perishable materials such as papyrus and parchment must be taken into account as evidenced by an Egyptian papyrus from the 2nd century AD with a house sketch (MENEGHINI 2008: 184-186). Clay tablets for records are also mentioned in the writings of surveyors.

The plan of Aguntum differs very clearly in size and material from the plans described so far, which may have required alternative, specific forms of representation. Although the object is singular - apart from some very vaguely related building ground plans from late antique Ohrid - a comparison with the ancient marble plans must be made: Moscati considered the plan from Aguntum, as the draft of an official cadastral plan in line with canonical representation schemes (Moscati 1978). The plan, on the other hand, does not use the described canonical forms of representation of cadastral plans, nor does it emphasise public buildings such as temples or theatres in the manner of the Forma Urbis Romae with double lines. Dimensions are not given, and there are no indications of ramps, stairs, or multi-storey buildings. Thus, considering detail, the plan of Aguntum is contrary to all conventions of map representation. All this invalidates the idea that it could be a sketch of a cadastral plan. There would certainly be no reason for an imperially glorifying, supratemporal representation of Aguntum without any practical purpose.

Another problem with regard to functionality arises from the widely varying scale of the plan: The marble plans all have a much higher resolution, roughly from 1: 240 to 1: 246 (TRIMBLE 2008: 67). Research by Sasso D'Elia and Crespi shows that the plans can be largely georeferenced (SASSO D'ELIA 2011; CRESPI 2011). However, important buildings were shown on the Forma Urbis Romae on a larger scale than their actual dimensions, so there are slight shifts in scale here (DE CAPRARIIS 2016: 82). On the so-called Pianta di Urbino there are considerable scale variations, ranging in representation from 1:100 to 1:320. However, a tomb and a residential building are also depicted here side by side, which perhaps justifies the use of different resolutions in a given representation.

On a fragment that may have remained unfinished, there are errors in comparison with the real buildings of the Augustus Forum, in addition to scale variations in the range from 1:230 to 1:338 (MENEGHINI 2008: 184). However, it is possible that it was merely a planning sketch for a renovation project (RODRIGUEZ-ALMEIDA 2000: 230). Perhaps it should also be

regarded as a workpiece that was not completed precisely because of apparent errors (MENEGHINI 2008: 183).

The aforementioned differences on the marble plans are large, but nevertheless significantly smaller than in the case of the map of Aguntum.

The changing scale would hardly allow a practical use of the plan of Aguntum. Public buildings are shown in detail, private buildings, which would have been essential for a cadastre, on the other hand, are mostly indicated only coarsely.

The plan of Aguntum is oriented approximately north, i.e. tilted about 30 degrees to the northwest. According to Brein, the lines were also scratched in a north-south direction, whereas Alzinger assumes that the map was scratched from west to east.

The ancient plans of Rome, on the other hand, were oriented to the southeast - shifted 135 degrees to the north (ROSADA 2007: 146; LE PERA 2016: 171). The axis of the projection of the Severan Forma Urbis may have been determined by the line between the temple of Iupiter on the Capitol and the sanctuary of Iupiter on Mons Albanus (RODRIGUEZ-ALMEIDA 2002; ROSADA 2007: 146). The *auguraculum* on the Capitol may have formed the geometric center of the plan as a cultic reference point (CHILLET 2016: 201).

In the plan of Aguntum, no corresponding local orientation can be discerned, which could have been indicated by the depicted temple, for example. A northing of the plan and the scratching of the lines from north to south seem to make sense only with regard to modern spatial concepts and conventions of representation, since northing is common.

Since, according to Alzinger, this could have been a private plan or the plan of a "town-planning visionary", aspects of the ancient history of mentality and perception of space will also be considered. Suetonius reports that Mettius Popusianus was executed by Emperor Domitian for possessing a horoscope that predicted his rule and for circulating a world map drawn on parchment (Suet. Domit. 10, 2. For further discussion: ROSADA 2007: 148). The private preparation or possession of maps could be seen as a violation of social norms and as act of arrogance towards the gods and the emperor (ROSADA 2007: 148). In modern times, the use of maps is commonplace, but in antiquity space was regarded more in terms of paths along landmarks. Written itineraries also describe routes via reference points and distances without referring to the topographic particularities of the landscape. Given the limited cartographic literality (see above) the question arises how probable the assumption of a private "urban planning visionary" may be for Aguntum.

Finally, reference should be made to today's more advanced state of research on the ancient topography of Aguntum, which clearly shows that there was indeed a pre-urban development to the east of the city wall, which however in no way corresponds to the structures shown on the plan (Fig. 6). Alzinger always took into account the possibility of discrepancies between the plan and the actual findings by pointing out that the plan could show an urban utopia.

CONCLUSIONS

The preceding investigation yields the following results about the city map of Aguntum: Today's understanding of Roman plans and aspects of the history of mentality of Roman spatial perception as compared to the 1970s and 1980s provides further material-immanent arguments that the alleged city plan of Aguntum was scratched only after the discovery of the roof tile. The Severan Forma Urbis Romae is in fact not a typical cadastral plan, since essential elements are missing. The city map of Aguntum, however, is more similar to the Forma Urbis Romae, which was well-known in the 1970s, than to the cadastral plans which have become somewhat more comprehensible in the meantime. However, there are considerable differences to the Forma Urbis Romae. Thus the plan from Aguntum remains unique stylistically. Further arguments are the approximate northing of the plan, as well as the large fluctuations in scale, which have already been mentioned in the past, but evaluated differently.

Even after several decades, the history of the discovery and the discussions on the plan of Aguntum, though taken up from time to time, remain fascinating and curious. The supposed hoax has found its way into the Austrian, German, Italian and English-language scientific literature. The most recent natural science research has apparently never been verified by later research or revised by the original authors taking into account the archaeologists' critique. Apparently, in an emotionally charged situation it was easier to draw a veil of silence over the matter. Nevertheless, the certainly correct assessment that the plan was modern has prevailed in recent research. Certain aberrations and dead ends in research could have been avoided if the originator of the plan had clarified the issue with the director of the excavations in time. It is curious that a modern plan ultimately led to the discovery of ancient building remains – the structures described in the literature as "inconspicuous walls" and the sherds at the site of the recorded circular building - unless one expects the presence of ancient structures in the vicinity of an ancient town anyway.

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Fig. 1: Roof tile with incised plan (documentation photo from the archive of the Austrian Archaeological Institute Vienna ©ÖAW-ÖAI).

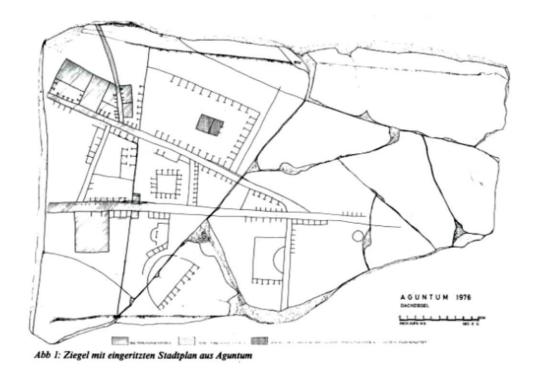


Fig. 2: Redrawing of the plan, source: ALZINGER 1985: 149, fig. 1.



Fig. 3: View of the actual state of the wall of the Templum Pacis to which the *Forma Urbis Romae* was fixed (left) and a reconstruction of the room in antiquity (right). Source: MENEGHINI 2016: 180 (R. *Meneghini-Inklink*).

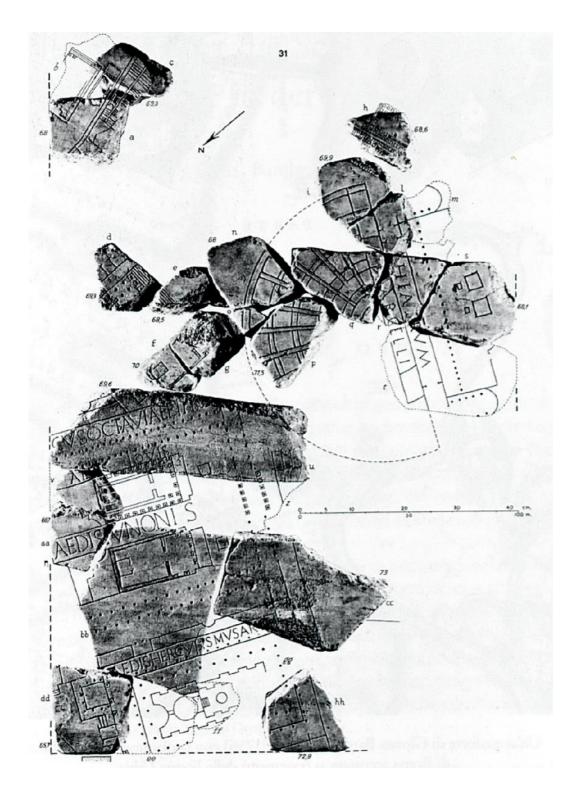


Fig. 4: Forma Urbis Romae (detail). Source: ROSADA 2007: 157.

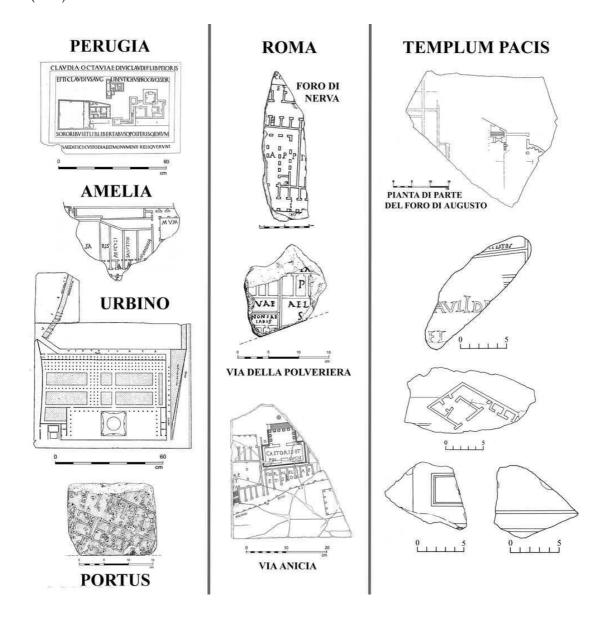


Fig. 5: Fragments of marble plans other than the *Forma Urbus Romae*. Source: MENEGHINI 2016: 181.

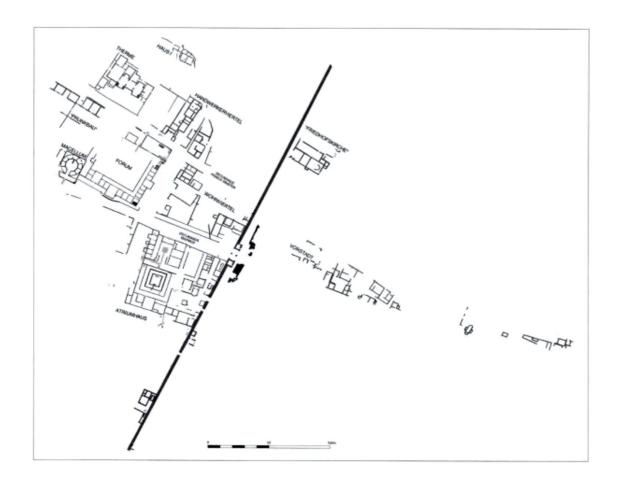


Fig. 6: Current map of Aguntum, source: TSCHURTSCHENTHALER 2018: 152, Fig. 1.