

## PTOLEMY AND THE ANCIENT GEOGRAPHY OF MOLDAVIA

BY

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The geographical knowledge concerning Moldavia in the Dacian epoch is due mostly to the following text in Ptolemy (*Geogr.*, III, 10, 8) : Πόλεις δὲ εἰσὶ καὶ ἐν τῇ πλευρᾷ ταύτῃ μεσόγειοι παρὰ μὲν τὸν Ἰέρασον ποταμόν, Ζαργίδαυα (54° 40') (47° 45'), Ταμασίδαυα (54° 20') (47° 30'), Πιροβορίδαυα (54°) (47°).

It is about some purely Dacian place-names lying near the river *Hierasos*, identified with the river Siret of today (Τιάραντος in Herodotus IV, 48; *Gerasus* in Ammianus Marcellinus, XXXI, 3, 7, and Σέρετος in Constantin Porphyrogenitus, *De admin. imp.*, XXXVIII, 7)<sup>1</sup> Piroboridava, the southernmost of the mentioned places, being indicated as lying at a certain distance from the disembogement of the river Hierasos into the Danube, at Dinogetia, whose situation Ptolemy gives (III, 8,2; 10,1) as being 53° in longitude and 46° 40' in latitude.

As the above mentioned text has undergone an almost exhaustive criticism, the only way to bring forth new contributions is to compare it with the archaeological sources, surface investigations and excavations.

We find ourselves now in a far better position to start such a comparison thanks to the intensive archaeological investigations which have been made in Moldavia in the last twelve years. This province is today one of the most systematically and evenly studied in Rumania regarding both surface investigations and regular diggings<sup>2</sup>. Thorough investiga-

<sup>1</sup> V. Pârvan, *Considerațiuni asupra unor nume de riuri daco-scitice*, Acad. romină, Memoriile secți. istorice, S. III, vol. I, Mem. 1, București, 1923, p. 10 and passim.

<sup>2</sup> The researches have been made at different times by diverse researchers and directors of museums. Noteworthy among these are the surface researches systematically made by our colleagues in Jassy and especially those by the geographer N. Zaharia who has identified more than 2 000 settlements from various epochs; then the general estimates made under the guidance of R. Vulpe on the occasion of the excavations at Poiana, covering the whole of the lower half of the Siret; those made in the Piatra-Neamț area by C. Mătasă; those in the Fălticeni area by V. Ciurea a.s.o. Recently M. Petrescu-Dimbovița and N. Zaharia have drawn up a volume containing the results of all these researches (in MS form).

tions have been made along the Siret and three of its western tributaries : the Trotuș, the Bistrița and the Moldova. A less investigated area is the woodland watered by the Suceava and Sucevița rivers. Investigations have also been made along the Prut and its tributaries : the rivers Jijia and Bahlui. The plain lying in the north of Moldavia, the Central Plateau and the valley of the river Bahlui are likewise well investigated.

But before embarking upon a reexamination of the toponymy handed down to us by Ptolemy and comparing it with the cartographic distributions of the Dacian settlements in Moldavia, we deem it useful to give in a nutshell the older finds concerning the three localities on the banks of the Hierasos that led to the critical examination of the ancient geographer's text.

Above all, it appears conspicuous the dissimilarity between the course taken by the river Hierasos as it follows from the situation of the three mentioned settlements on its bank, and the actual course of the Siret. If we took *ad litteram* Ptolemy's data it would mean that we should imagine the Hierasos river as flowing from NE to SW, a fact that made some researchers think the ancient geographer had taken the Hierasos for the Prut, although the latter did have a name of its own, similar to that of today (Σκύθαι Πόρτα καλέουσι, "Ἕλληνας δὲ Πυρετόν, in Herodotus IV, 48)<sup>3</sup>.

Other researchers have preferred to separate the three *dauae* from the river Siret and to determine their position according to their co-ordinates within the area bordered by the Siret and the Dniester giving thus up the close interpretation of the phrase ...παρὰ μὲν τὸν Ἱέρασσον used by the Alexandrine geographer to specify their situation<sup>4</sup>.

Finally, a third stand is that which, on the contrary grants due respect to this geographical specification offered by the text, and is inclined to think Ptolemy's co-ordinate figures as being mistaken since they do not tally at all with the real ones of today<sup>5</sup>.

Since Ptolemy writes (III, 8, 2) that the Hierasos represents the eastern boundary of Dacia, and on the other hand specifies that the three settlements are part of the trans-Danubian annexes of Moesia Inferior, it follows that those settlements were lying on the left side of the river<sup>6</sup>, and from the phrase παρὰ μὲν τὸν Ἱέρασσον ποταμὸν we are compelled to infer that they were situated on its very bank. Availing of this opportunity, we draw the attention to a geographical fact which has not been pointed out so far in the exegesis of the text, namely that the river Siret is among the fewest rivers of the northern hemi-

<sup>3</sup> A. Forbiger, *Handbuch der alt. Geogr. von Europa*, p. 751, 755, note 90; cf. also Gooss, *Studien zur Geographie u. Geschichte der Trajanischen Daciens*, Hermannstadt, 1874, p. 13 and 25. The same opinion issues from G. Schütte's replotting of the map of Dacia, in *Ptolemy's Maps of Northern Europe*, Copenhagen, 1917, fig. 17.

<sup>4</sup> Gr. Tocilescu, *Dacia înainte de Romani*, București, 1880, p. 457.

<sup>5</sup> Above all even C. Muller, in his notes to the 1883 edition; cf. also V. Pârvan, *op. cit.*, p. 10 and passim; R. Vulpe, *Piroboridava*, in *Rev. Arch.* XXXIV, 1931, 2, p. 237-276.

<sup>6</sup> R. Vulpe, *op. cit.*, p. 237-276.

sphere that make an exception to the general rule of eating away their right bank as a consequence of the earth's rotating motion. This fact is accounted for by the existence of its right bank, rich in water tributaries which are pushing to the left the rapid flow of the river. The Siret is collecting all the waters from the Moldavian slope of the East Carpathians. That is why its left bank is higher and steeper, and therefore more favourable to fortified settlements, especially during the 1<sup>st</sup> century B.C. and the 1<sup>st</sup> of our era — the flourishing epoch of the Dacian state — when such banks were sought after.

In fact, as it will be presently seen, the archaeological discoveries corroborate this observation. A quite different condition is offered by the river Prut, where, as matters stand with all rivers, the right bank is the highest and steepest one, and thus favourable to fortified settlements.

It must be also pointed out that the sequence of these three localities lays out an itinerary along the valley. It is known that the Siret Valley is not only auspicious to a trade route, but, thanks to its position, it represents the main road which ramifies, along the Carpathian tributaries, at least into two passage ways towards Transylvania. These arguments, mainly, of a geographical order, determined R. Vulpe to identify Piroboridava with the Getic settlement at Poiana, near the mouth of the Trotuş<sup>7</sup>.

The publication in 1925 of the Hunt papyrus, which has preserved a *pridianum* concerning the situation of the auxiliary troop *cohors I Hispanorum veterana quingenaria (equitata)*, confirms the existence of Piroboridava certifying the fact that a detachment of this cohort made up of a small body of soldiers had been sent there *in praesidio*.

As it follows from the context, at the date of the papyrus (99 A.D. according to R. O. Fink<sup>8</sup>, 105 according to R. Syme<sup>9</sup> or 110–117 according to the older opinion of Hunt<sup>10</sup> and Cantacuzino<sup>11</sup>) this locality was *intra provinciam* (Moesia Inferior). Leaving aside the discussion occasioned by the dating of this important document<sup>12</sup>, the location of Piroboridava *intra provinciam* confronted with Ptolemy's specification (περίγειον), — the nearness of Danube being, therefore, out of the question (the phrase being about this stream) — rises highly significant questions concerning the political status of lower Moldavia about 100 A.D.<sup>13</sup> Without embarking upon this course — fact that would mean a derogation from the subject — we may note however, that Ptolemy mentioned the three *davae* on the Hierasos when describing Moesia Inferior and not when describing Sarmatia, as would have been

<sup>7</sup> *Ibidem*, p. 258; E. Polaschek, in RE, XX s.v. *Piroboridava* (nevertheless he doubts this identification).

<sup>8</sup> In The Journal of Roman Studies, XLVIII, 1958, p. 102–116.

<sup>9</sup> In The Journal of Roman Studies, XLIX, 1959, p. 26–33.

<sup>10</sup> In *Raccolta di scritti in onore di Giacomo Lumbroso*, Milano, 1925, p. 265–272.

<sup>11</sup> In Aegyptus, IX, 1928, p. 63–96.

<sup>12</sup> Summaries to R. Vulpe, in Studii Clasice, II, 1960, p. 337–357.

<sup>13</sup> Cf. R. O. Fink, *op. cit.*, and R. Vulpe, *op. cit.*, p. 353 and especially in Dacia, N.S., V, 1961, p. 369.

natural since they were not lying in Dacia. The fact represents the echo of a historical moment during which they formed a constitutive part of the province from the lower Danube.

The main contradiction however, — the lack of consistency between the geographical co-ordinates and the actual position, is stressed by the existence of the SQT MSS, a version to the text, that does not mention the existence of the Hierasos (ἐν δὲ τῷ ὑπὲρ τὸν Ἰστρον τμήματι μεσόγειοι) and of the site of these three localities on the map from Vatopedi outside the course of the Siret. In spite of the fact that it has been objected that the SQT MSS represent a later shortening omitting the Hierasos<sup>14</sup> (it is true they alone have this omission, a fact that determined the editors of the text, the last one being C. Muller, to regard as genuine the version comprising the Hierasos), yet it is obvious that the still existing doubts cannot be cleared away only by dint of the now available texts.

Before passing to the expounding of some arguments of another nature, let us bear in mind that the state of things presented by Ptolemy in Dacia refers to the 1<sup>st</sup> century of our era and therefore to a time previous to the Roman conquest. It is acknowledged by all researchers<sup>15</sup> that Ptolemy, as he himself confesses in the preface to his work, had Marinus of Tyr as a model (first half of the 2<sup>nd</sup> century of our era), whose source was doubtless *Forma Orbis* written by order of Augustus and which constituted the official source of the knowledge of the ancient world. Marinus and in a lesser degree Ptolemy made nothing else but to complete this source, bringing it to date as regards the state of things in their times. It is worth mentioning that Sarmizegethusa, the main city of Dacia, is given by Ptolemy in its Dacian form, Σαρμιζεγεθούσα βασιλείον from the 1<sup>st</sup> century of our era when it was still the residence of the Dacian kings, and not as *Colonia Vlpia Traiana*, its Roman form, and capital of Dacia — the province at the beginning of the 2<sup>nd</sup> century of our era. At the same time: *Angustia* as well as *Praetoria Augusta*, Ζεύγμα (*Pons*) a.s.o., Roman place-names, situated in the east of Dacia<sup>16</sup>, represent, of course, additions made by Marinus or Ptolemy concerning at the earliest the moment of Trajan's military operations.

Now, let us examine the state of the archaeological researches which provide us with very rich materials for study. Perhaps it is suitable to recall the fact that in 1931, — when use was made for the first, and up to now, for the last time of archaeological sources in view of Piroboridava's identification, — but one Dacian fortified town, that of Poiana, was indeed thoroughly known. Today for the Dacian epoch (2<sup>nd</sup> century B.C. — 1<sup>st</sup> century of our era) matters stand as follows:

The Dacian settlements were made up either of small villages concentrated round a fortified and densely peopled acropolis (representing

<sup>14</sup> R. Vulpe in *Rev. Arch.*, XXXIV, 2, p. 264.

<sup>15</sup> See especially G. Schütte, *op. cit.*, p. 10 and *passim*.

<sup>16</sup> R. Vulpe, *Angustia*, in the volume *În amintirea lui C. Giurescu*, București, 1944, p. 551 and *passim*.

its territory), — an *oppidum* in the true sense of the word (this type, met in Moldavia in plain and hill areas along great water courses, is represented by the settlements of Poiana and Brad on the Siret, and by those at Piatra-Neamț and in Tg.-Ocna — Oituz district in the sub-Carpathian area) — or of isolatedly disseminated settlements of lesser expanse and denseness, sometimes fortified by means of a wall, met all through the region. These last mentioned settlements cannot represent the *dauae* in the strict sense of *oppida*, and that is why we think they could not be taken into account when identifying the towns mentioned by Ptolemy. An example is provided by the settlement at Corni<sup>17</sup> (Adjud district, Bacău region) on the Siret, having a very poor culture layer, about 0.2 m deep, or by the similar one at Suceava<sup>18</sup>, in comparison with the large settlements from Poiana or Brad, of which we are going to speak presently.

We even dare to take upon ourselves the responsibility of stating that, within the areas mentioned as investigated, there is next to no chance of discovery, in the future, of any significant settlement capable of modifying the present archaeo-geographical outlook.

On the Siret there are to be found only these two last mentioned large settlements and the Bărboși settlement near the mouth of the Siret river, whose Getic (pre-Roman) culture level is of little significance. Lying all of them on the left bank of the Siret, these settlements are characterized as follows :

*Bărboși* (Galați district)<sup>19</sup>. The culture layer has a depth of 0.3 m, displays only one level of mean intensity and well marked traces of arson. The settlement is fortified with walls and palissades. The material concerns the period between the 1<sup>st</sup> century B.C. and the 1<sup>st</sup> century of our era. Above the Getic layer there have been found important traces belonging to a Roman camp raised, most sure, not a long time after the destruction of the aboriginal settlement. We lack, so far, precise data referring to the end of the Getic settlement.

*Poiana* (Tecuci district, Galați region)<sup>20</sup>. Fronting the mouth of the Trotuș (whose valley facilitates the passage towards Transylvania through the Oituz and Ghimeș mountain passes), it has an unusually rich culture layer which only for the Getic epoch measures almost 3 m having six levels and several sublevels that indicate a continuity beginning with the 4<sup>th</sup> century B.C. and ending with the 1<sup>st</sup> of our era. It is fortified by a wall, possibly provided with a stockade. The last coin found in the last level but one was, however, minted in the year 71 A.D. and belonged to Vespasian. The settlement was abandoned without obvious violence (the last level does not display any traces of arson) sometime about the year 100 A.D.

<sup>17</sup> Diggings carried out by R. Vulpe in 1933. Unpublished.

<sup>18</sup> Limited exploring digging made by M. Matei in 1962.

<sup>19</sup> Diggings, 1959–1962, N. Gostar (Materiale, VIII, p. 505).

<sup>20</sup> The most part of the settlement was dug out by R. Vulpe between 1926–1951. Cf. Dacia, III–IV, 1927–1932, p. 253–351; Rev. Arch., XXXIV, 1931, 2, p. 237–257; SCIV, II/1, 1951, p. 177–216; III, 1952, p. 191–209; Dacia, N.S., I, 1957, p. 143–164.

*Brad* (Bacău region) <sup>21</sup>. It had a commanding site, at equal distance between the confluences of the rivers Bistrița and Moldova with the Siret (the Bistrița Valley especially was an important passage way towards Transylvania). The culture layer corresponding to the Getic epoch is about 1.8 m deep. It lasted from the 1<sup>st</sup> century B.C. until the end of the 1<sup>st</sup> century of our era. A Dacian coin belonging to the end of the 2<sup>nd</sup> century B.C. was found within its lowest level. No coins have been found within the higher levels. Judging after the aspect of the archaeological material, the settlement lasted as long as did the one at Poiana.

Within the area covering the higher course of the Siret there have been found several small Dacian settlements (at Suceava <sup>22</sup>, Siret <sup>23</sup>) which could point to the presence of an *oppidum* in the neighbourhood. Nevertheless, in spite of all investigations, this could not be discovered either because of the woodland, or because of its going to pieces as a result of the action of natural phenomena.

Along the Prut, there was made no discovery of any important Dacian settlement that could on the least ground claim the denomination of *oppidum*. The same situation is encountered in the Jijia and Bahlui valleys (very minutely searched) as well as on the Central Plateau between the Siret and the Prut.

In the western sub-Carpathian area of Moldavia only two big settlements are encountered :

*Piatra-Neamț* (Bacău region) <sup>24</sup>. One meets here a Dacian *oppidum* overlooking the Bistrița valley (at the point called "Bîtea Doamnei") and controlling an important passage way towards Transylvania as well as the neighbouring depression covered with smaller Dacian settlements <sup>25</sup>. During the excavations made at Bîtea Doamnei there have been found vestiges of religious builds of the same type with those found in Decebal's Sarmizegethusa. The settlement is fortified with stone walls. The fortified town proper lasted (taking into account the analogies concerning its materials) as long as the Brad *oppidum*, that is during the period comprised between the 1<sup>st</sup> century B.C. and the 1<sup>st</sup> of our era.

<sup>21</sup> Excavations made by Alex. Vulpe, Victoria Eftimie and V. Ursache in 1963. Unpublished.

<sup>22</sup> Cf. note 18 above.

<sup>23</sup> C. A. Romstorfer, in Mitt. der K.K. Central-Kommission, N. F., XVII, 1891, p. 70 and passim; cf. also J. Szombathy in Jahrbuch des Bukowiner Landes-Museum, II, 1894, p. 20. In 1963 the Author made inquiries in the town of Siret finding that the settlement mentioned by Romstorfer as destroyed about 1891 by the existence of a brick yard that, as he was told, continued to work until 1940, has now completely disappeared. He could not find any trace of the Dacian material.

<sup>24</sup> A. Nițu, I. Zamosteanu and M. Zamosteanu, in Materiale, VI, p. 359–374; VII, p. 339–349. The discovery of the walls and sanctuaries was made during the excavations made by N. Gostar and N. Scorpan in 1961 and 1962. Unpublished.

<sup>25</sup> Among these the most important is that at Calu, 13 km south of the citadel at Bîtea Doamnei (Piatra-Neamț). Dug out by R. Vulpe in 1935 and 1940 (Dacia, VII–VIII, 1937–1940, p. 13–67); as a matter of fact it represents only one of the several secondary settlements round the impressive fortified town at Bîtea Doamnei (Piatra-Neamț) which together made up the territory of a *daua*, very likely Petrodava's.

*Tisești* (Tg.-Ocna district, Bacău region)<sup>26</sup>. It represents the acropolis of several small settlements scattered within the area of Tg.-Ocna depression. Having a commanding site, it exerts the control over both the depression and the Trotuș Valley at the point where the two roads leading to the Oituz and Ghimeș mountain passes sever from each other. Today the settlement is destroyed to a great extent. The archaeological diggings have brought to light an intense culture layer about 1 m deep, similar in point of duration with the settlement at Bitca Doamnei near Piatra-Neamț. The settlement is fortified by a wall.

It is noteworthy that in the areas described above life was going on in the 2<sup>nd</sup> and 3<sup>rd</sup> centuries of our era as well, under the Roman occupation or protectorate, the only difference being that the sites of the settlements were usually shifted on an easier accessible ground by taking into account the needs of the commercial traffic only and not those of military defence. For example on the Siret, all the settlements from the 2<sup>nd</sup> and 3<sup>rd</sup> centuries of our era are situated on the low terrace of the right bank, exactly opposite to the oppida from the 1<sup>st</sup> century. During the same period, however, no trace of dwellings from the 2<sup>nd</sup>—3<sup>rd</sup> centuries of our era has been found on the left bank. Thus fronting the high fortified town of Poiana, there lies down and across the Siret the vast settlement of Călimănești (Adjud district)<sup>27</sup>, and still across the Siret and covering the same expanse (almost 1 km long) there lies, fronting the *daua* of Brad, the settlement of Aldești (Bacău district)<sup>28</sup>. A similar situation is met at Piatra-Neamț<sup>29</sup>.

Comparing now the archaeological data with the Ptolemaic text, we advance the following statements:

a) The Prut can be safely dismissed from the discussion concerning the identity of the Hierasos. Likewise any attempt to attribute other sites to the three fortified towns mentioned by Ptolemy, near the bank of the Siret, is groundless.

b) The three *davae* lie surely on the left bank of the Siret; they are archaeologically attested as having existed in the 1<sup>st</sup> century of our era by the settlements of Poiana and Brad, which represent two of them.

These two finds lend authority to the Ptolemaic text, refuting at the same time his geographical co-ordinates concerning the above mentioned localities. These co-ordinates cannot be taken into consideration but with utmost care, taking into account their relative value only. It is a matter of common knowledge that the ancient geographers did not describe the curvature of the Carpathians, ignoring it, and regarding this mountain chain as being a horizontal range situated within the northern area of the present day Carpathians. Accordingly, in order to fit in the orographic system, the course of the Siret was "distorted" as if coming from the NE and, together with it, the whole configuration

<sup>26</sup> A. Nițu and M. Zamoșteanu, *l. cit.*

<sup>27</sup> Limited exploring digging made by R. Vulpe (SCIV, III, 1952, p. 217).

<sup>28</sup> Diggings 1961–1962 made by V. Ursache. Unpublished.

<sup>29</sup> A. Nițu, I. Zamoșteanu and M. Zamoșteanu, *l. cit.*

of Moldavia acquired in the mind of the geographers of the time a different tilt from the actual one (Fig. 1). Obviously, there is little wonder that the longitude and latitude no longer corresponded to the actual situation, being added abstractedly to the text for reasons of symmetry and in order to specify the preconceived situation of the respective localities.

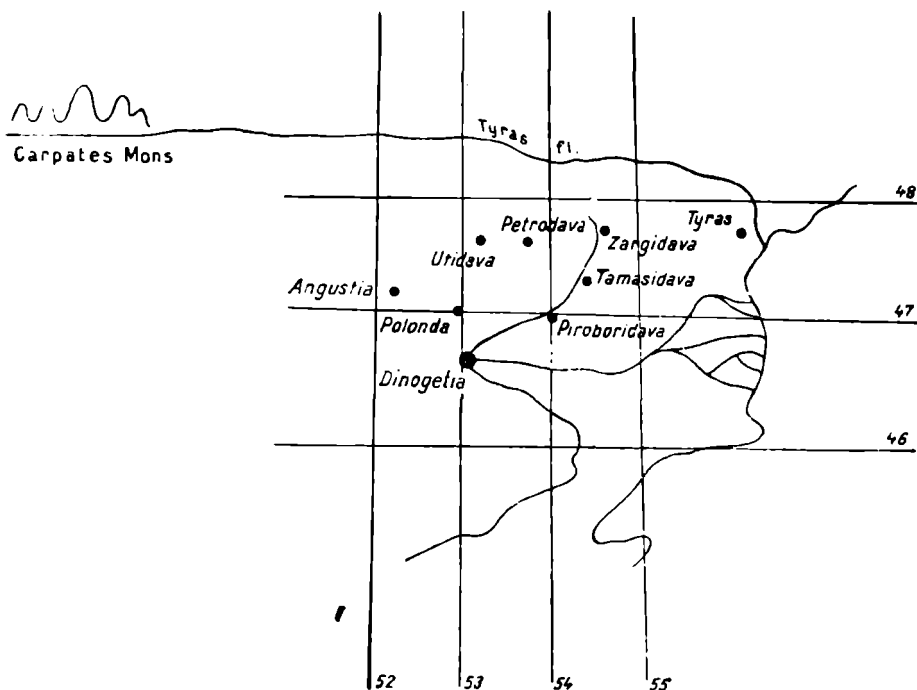


Fig. 1. Moldavia according to Ptolemy's co-ordinates.

c) The archaeological researches confirm the comments made by the critics of Ptolemy's work concerning the various stages of the drawing up of the text. Thus the enumeration of the three *danae* along the river Hierasos comprised in the description of Moesia Inferior, fact corroborated also by the data of the Hunt papyrus, refers quite obviously to a time after the year 86 A.D<sup>1</sup>, when this province was founded during the Domitian-Trajan period. Now, as it was found on the spot, the fortified Dacian settlements on the left bank of the Siret cease to exist about the end of the 1<sup>st</sup> century of our era, moving onto the right bank where they assume a peaceful character. This event might be explained as being the outcome of an order issued by the Roman commander concerning the Dacians on the Siret by which they were forbidden the use of fortresses. This would represent one stage in the drawing up of the text. On the other hand, in Dacia — the eastern border of which is represented by the Siret — Ptolemy did not dwell upon the settlements on its right side



which have been "moved" in the 2<sup>nd</sup> century of our era. Therefore Dacia's description is older from archaeological reasons too, agreeing with the above mentioned stage in the drawing up of the text. Nevertheless the mention on Dacia's territory of certain localities having purely Roman names, such as Angustia, Praetoria Augusta a.s.o. points to another stage in the drawing up of the text, newer than the former and having its origin at the beginning of the 2<sup>nd</sup> century of our era at the earliest. This last stage belonging to Marinus or to Ptolemy himself shows that, although informed as regards some of the towns of the new province — Dacia, the author did not deign to verify the situation in detail, as he boasts in the preface to his geography. Had he done this, he would have become aware either of the disappearance of the *dauae* on the left bank of the Siret, or of the inclusion of the new settlements (which most probably were maintaining the names of the fortified towns in front of them) within the boundaries of the province of Dacia.

These obvious stages in the drawing up of the text — two, at least, in number — refer probably to two out of the three previously assumed stages the text of the Geography went through: Agrippa (amended possibly in the time of Domitian-Trajan), Marinus and Ptolemy. It will be interesting to see, in future, to what extent this observation is proved archaeologically in the other parts of the country, too.

If the finds expounded under the items a — c seem to us definitely established facts, the comparison of the text with the archaeological results allows also for the advancement of several hypotheses concerning the very identification of the settlements, fact which in our opinion is of lesser significance. Although at first sight the Piroboridava, Tamasi-dava, Zargidava group corresponds to the settlements of Bărboși, Poiana, Brad respectively, this fact enters upon a contradiction with the plain expression... "within the country", therefore at a considerable distance from the Danube. But in fact Bărboși is lying at a distance of 4 km only to the east of this water course, being situated on the bank facing Dinogetia in Dobrogea.

If, as we have seen, the archaeological discoveries agree with the Ptolemaic text, then it would prove as insufficiently grounded striving the placing of Piroboridava at Bărboși, even if the remnants of a Roman camp have been found here, fact which is in keeping with the information provided by the Hunt papyrus.

As a matter of fact the size of the Roman camp of Bărboși, being there from the 1<sup>st</sup> to the 3<sup>rd</sup> century of our era, is however too impressive (standing in contrast with the modest Getic settlement on the ruins of which it has been built) to justify the garrison of the small Roman detachment mentioned in the Hunt papyrus. On the other hand the text of Ptolemy's Geography referring to the situation of Dinogetia in the 1<sup>st</sup> and 2<sup>nd</sup> centuries of our era, does not contain any specification as to the bank on which it was situated. On the contrary, the specification that καὶ ἐπὶ τῷ Ἰεράσῳ ποταμῷ, ὅς κατὰ Δινογέτειαν ἐκτραπείς ἀπὸ

τοῦ Ἰστρῶν (III, 8, 2) has even determined C. Schuchhardt<sup>30</sup> to place Dinogetia at Bărboși. Later on R. Vulpe formulated the hypothesis of the existence of two Dinogetias: the first and older one which lasted until the 3<sup>rd</sup> century of our era at Bărboși, and the other one, founded at the end of the 3<sup>rd</sup> century of our era at Garvăn (at a distance of 12 km on the opposite bank)<sup>31</sup>, as a result of the moving of the fortified town Bărboși. This hypothesis was embraced by Gh. Ștefan and supported by strong archaeological arguments<sup>32</sup>. He has shown that the fortified town of Garvăn, on the right bank, came into being beginning, at the earliest, with the end of the 3<sup>rd</sup> century, exactly at the very time when the archaeological layer at Bărboși ceases to exist. All the discoveries at Garvăn prior to the 3<sup>rd</sup> century of our era concern but a modest rural settlement. We avail of the opportunity to call attention upon the fact that, undoubtedly, the whole area at the bend of the Danube made up Dinogetia's territory (the territory determined, of course, by the ford of the Danube fronting Dinogetia) and consequently the "removal" of the fortified town from one bank to the other was made *within* the same territory, the town maintaining, not without reason, its name.

It seems to us that, in conformity with Ptolemy's information, the older hypothesis according to which Piroboridava lay at Poiana is still in force. The non-discovery at Poiana of traces belonging to the group of Roman troopers mentioned in the Hunt papyrus can be explained either by their disappearance as a result of erosion (more than half of the great Getic settlement had this fate as it has been proved by the diggings), or because of the "shifting" of the settlement on the right bank lower down (it follows that these traces are to be searched there). It is also to be mentioned that the presence there of a small body of horsemen (probably under thirty) and for a short period of time, could not have left too obvious traces<sup>33</sup>.

Piroboridava remaining thus established at Poiana, the fortified town of Brad can be identified only with *Tamasidava*, following that *Zargidava* has to be searched further northward, may be within the area between Suceava and the town of Siret, where there are reported several small settlements the concentration of which is generally ascertained round a central *daua*. The recent discovery of an impressive old fortified

<sup>30</sup> *Wälle und Chausseen im südlichen und östlichen Dacien*, in *Archaeologisch-Epigraphische Mitteilungen aus Oesterreich*, IX, p. 226.

<sup>31</sup> *Le Vallum de la Moldavie inférieure et le "mur" d'Athanasie*, The Hague, 1957, p. 30, note 8; *Dacia*, N.S., I, 1957, p. 162, note 22; IV, 1961, p. 331, note 108.

<sup>32</sup> *Dinogetia — a problem of ancient topography*, *Dacia*, N.S., II, 1958, p. 317—329.

<sup>33</sup> It must be however mentioned that, unlike the other settlements in Moldavia, the settlement at Poiana displays — especially within the last two levels — an unusually great quantity of imported Roman material. Although the reason of this situation lay in its being nearer the Roman world, nevertheless the fact sets one thinking, especially if we take into account the rather poor (pre-Roman) Dacian settlement of Bărboși.

Dacian town (6<sup>th</sup> to 4<sup>th</sup> cent. B.C.) at Stăncești (Botoșani district)<sup>34</sup>, at a distance of fifteen km to the left of the Siret, can help us to presume on the continuity of the respective tribe's existence even after the 4<sup>th</sup> century B.C. somewhere in the neighbourhood. The wooded area in the respective region did not permit the archaeological researches, conducted with difficulty in such grounds, to say their last word upon the matter<sup>35</sup>.

Before bringing the present paper to an end we want to make a few remarks concerning the *dauae* in the sub-Carpathian area. From Ptolemy's maps it follows that on the west of the Siret and parallel to it are lying the localities *Angustia*, *Utidava* and *Petrodava*. *Angustia* would have been situated approximately in the direction of Piroboridava, and Petrodava and Utidava in that of Tamasidava. Since *Angustia* has a Roman name meaning "gorge", its site must be necessarily looked for round one of the East Carpathian gorges, and undoubtedly round the southernmost one. Then its localization at Brețcu on the Transylvanian slope of the Oituz pass, seems to be likely<sup>36</sup>. The Romans have settled at a distance of 40 km to the SW of the Dacian *oppidum* at Tg.-Ocna whose aboriginal name could possibly be Utidava (see below). This localization of *Angustia* indirectly pleads for the identification of Piroboridava. Piroboridava = Poiana is counterbalanced by the other pair *Angustia* = Brețcu whereas a relation of the kind Piroboridava = Bărboși would correspond to a pair *Angustia* = a place situated somewhere in the Vrancea or Buzău mountains, a fact which does not at all seem likely.

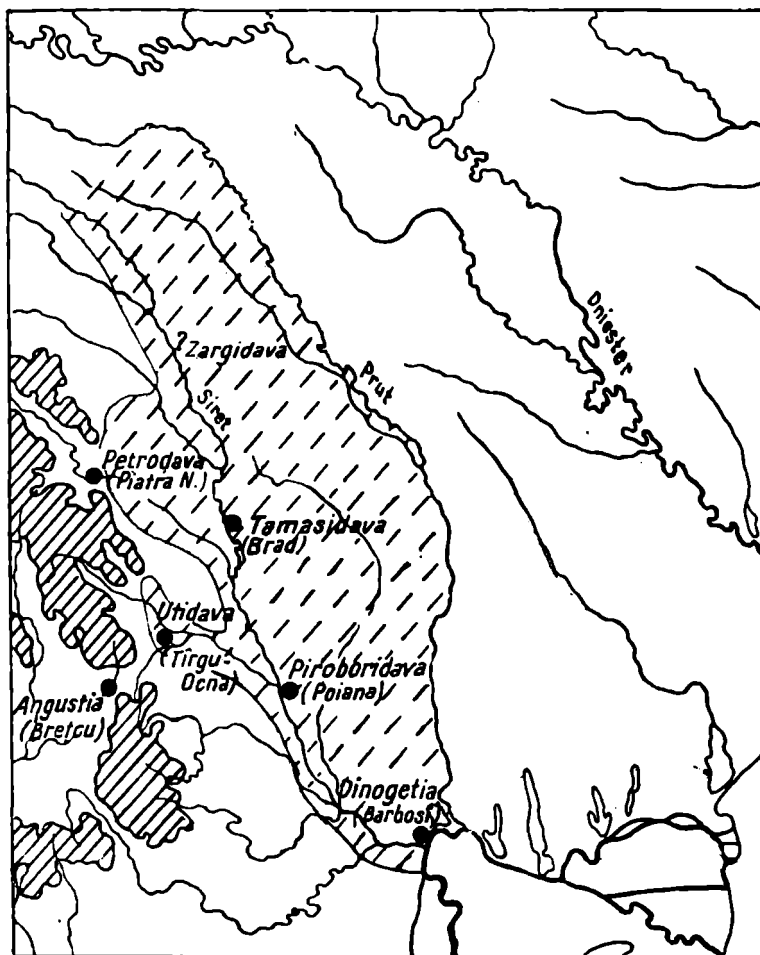
According to Ptolemy (III, 8, 4), *Utidava* the co-ordinates of which he gives as being 53°10' and 47°40' lies nearer to Petrodava (53°45' and 47°40') than to *Angustia* (52°15' and 47°15'). For all that, as we know these data cannot be regarded as absolute, we could allow for a modification of the relation between the three localities if a reason of a different order would make us do it. Once the sites attributed to *Angustia* (= Brețcu) and Petrodava (= Piatra-Neamț) accepted, one is confronted with the absurdity of finding a *daua* at the place specified by Ptolemy, that is the alpine area of the East Carpathians, to the West of Piatra-Neamț. Nevertheless, there lies a large Dacian settlement at Tisești near Tg.-Ocna between Piatra-Neamț and *Angustia* = Brețcu, nearer to the latter,

<sup>34</sup> Regular diggings made by A. Florescu beginning with 1960.

<sup>35</sup> G. Schütte in *op. cit.*, p. 85, states that Zargidava is a triplicate of Sargidava and Singidava placed by Ptolemy somewhere in the north of Transylvania. This opinion was refuted by V. Pârvan (*Getica*, p. 221). Our opinion is that the archaeological researches justify our crediting of the whole text and thus of all the three *dauae* as well. Any forced or modified interpretation being for the present gratuitous.

<sup>36</sup> V. Pârvan, *op. cit.*, p. 251 and especially 259, places it at the Ghimeș pass. R. Vulpe (in *Angustia*, cf. note 16 above) contests this opinion showing that no traces from this epoch were found within the Ghimeș area, and he places it at the Transylvanian end of the Oituz pass, at Brețcu, where a Roman camp has been identified. We think the second hypothesis more grounded also because the Oituz pass is the only one that really has the aspect of a narrow pass, which fact would justify the name of *Angustia*; also because it is shorter and more easily accessible and was used, as it is shown by settlements of all epochs, to a greater extent than the Ghimeș pass.

and overlooking the forking of the roads leading to the Oituz and Ghimeş mountain passes (see Fig. 1 — Moldavia as seen by Ptolemy and Fig. 2 — the identifications advanced by us).




 *The area where surface investigations have been made*

Fig. 2. Moldavia in the 1<sup>st</sup> century of our era.

We are inclined to identify this settlement with *Uhdava* also because of the similarity between the name of the Dacian town with the present one of Oituz (The Oituz Valley lying in the vicinity of the settlement), fact which might not be an entirely coincidental occurrence. The deriva-

tion of place-names from water courses is a commonplace event in toponymy. The linguistic relationship of *Utus* (present equivalent of Vid), a river in Moesia Inferior, with the Dacian *Uti-dava* has been formerly foreseen<sup>37</sup>. Analysed from the linguistic viewpoint this name has been related to the Indo-European root \*uto, \*utu — “water” (ὕδωρ)<sup>38</sup>. Since homonyms having a common root are far from excluding one another within the area of an ethnically homogeneous population, we are wholly entitled to assume that there existed a river *Utus* in the vicinity of *Utidava* as well. As in the case of the homonymous river in Moesia, the name of the river *Utus*, in Dacia, could have developed via an intermediate form \*u'tus or \*o'tus, which gave the Slav form of *Vid* (uid) in Bulgaria, preserving the form *Oit* — in the Carpathians (see also in Ptolemy *Geogr.*, III,10,4, the Thracian population Οἰτέντες from Moesia Inferior, may be somewhere in Dobrogea)<sup>39</sup>. Since it is an established fact that the present place-name of *Oituz* is made up of two distinct parts, *Oit* — and — *uz*, both having of course different etymologies (to the last element as well as to the name of *Uz*, a tributary of the Oituz, can be attributed a Cuman or Szekel origin)<sup>40</sup>, and in order to explain the first element (considered till now of unknown origin)<sup>41</sup> as the surviving form of a local name *Oit* derived from *Utus* and handed down to us by a population that added the element — *uz* to it.

Since the tilt of the line connecting Petrodava and Angustia (displaying NE-SW direction) runs almost parallel to that attributed by Ptolemy to the Siret, it follows that the two localities are likely to be connected by the East Carpathian chain of mountains, being subject to the same rule of forced “distortion” towards the East as it happened with the course of the Siret — a question that has already been touched upon. Petrodava is situated as against Tamasidava in the same way as Angustia is to Piroboridava provided Brad = Tamasidava and Petrodava = Piatra-Neamț. This identification made in the last century even by Gh. Asachi on the basis of the pure similarity between the two names was also stated by Schütte<sup>42</sup>. It corresponds also from the viewpoint of its situation within the west-central part of Moldavia<sup>43</sup>. The linguistic analogy *Petro-dava* — Piatra, which in any case cannot constitute a self-sustaining argument, could be, nevertheless, reconsidered in the new light of the archaeo-geographical researches. Since the word *Piatra* has in Rumanian exactly the same meaning as the Greek πέτρα (rock) and with the Latin *petra*, it does not seem to us an unconceivable thing that a Dacian word could have existed with a like form and meaning<sup>44</sup>. It is widely

<sup>37</sup> V. Pârvan, *Getica*, p. 259.

<sup>38</sup> Vl. Georgiev, *Българска етимология и ономастика*, Sofia, 1960, p. 34.

<sup>39</sup> Vl. Georgiev, *Leit*; idem, *Тракийският Език*, Sofia, 1957, p. 63.

<sup>40</sup> Cf. I. Iordan, *Toponimia Românească*, București, 1963, p. 280, quotes from the same area the Hungarian words Uz-Völgye, Ozum (Uzom).

<sup>41</sup> Al. Philippide, *Originea Românilor*, I, p. 728; I. Iordan, *op. cit.*, p. 280.

<sup>42</sup> *Op. cit.*, p. 98.

<sup>43</sup> V. Pârvan, *Getica*, p. 258.

<sup>44</sup> Vl. Georgiev, *op. cit.*, p. 62.

known that the physionomy of the Piatra-Neamț depression is characterized by that huge isolated rock, white and thinly wooded (locally called "Pietricica" — "Little Rock") which occasioned the mediaeval and present denomination of the town of Piatra-Neamț. It is therefore likely that the name of the Dacian *daua* has been occasioned by the same characteristic element. It seems quite possible that as the present name of *Piatra-Neamț* means the town with the rock from the Neamț district, in the same way its name in the antiquity must have meant the town with the rock (Petrodava). The discovery of an unusually strong Dacian *oppidum* makes this identification quite probable even especially if we take into account that of all the *dauae* in East Dacia, that at Piatra-Neamț is the only one displaying this characteristic topography.

It is obvious that the very probable localization of Petrodava at Piatra-Neamț exerts an influence over the whole of Moldavia's geographical sketch-map in the first and second centuries of our era, sketch-map which plainly shows the interdependence existing between the sites of the settlements. In the maps attached to the paper it is presented the most probable situation of the identified Dacian towns in Moldavia (Fig. 2).

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