THE WRITINGS OF THE ROMAN LAND SURVEYORS: TECHNICAL AND LEGAL ASPECTS

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Abstract

The basic object of study of this dissertation is those texts conventionally known as 'the writings of the Roman land surveyors'.

It deals in particular with the nature of the works of a body of authors (Frontinus and his later commentator, 'first' and 'second' Hyginus, Siculus Flaccus and Urbicus) which have come down to us, within the aforesaid collection of writings characterized by a diversified technical framework, through a peculiar manuscript tradition.

Their treatises are of a special importance because they do not simply illustrate various principles and aspects of the technique of land measurement connected with areas of territory which have been parcelled and allocated.

These authors, in fact, also describe those different kinds of markers which typify the boundary system used to enclose private/public areas or parcels of land. Such descriptions are connected by them with a discussion about different types of disputes which may arise either about the boundary line/strip or an area of land. The aim of the research is double.

On the one hand, it seeks to ascertain more precisely the interrelation between the writings (or part of the writings) of the above mentioned authors: what was the extent and character of the influence each treatise may have exerted on the other by means of the technical terminology and systematization of the subject (along with any development of the land surveying technique) they followed.

The first part of this study is, therefore, devoted to a close analysis of the way their works have been transmitted and all the most relevant passages which may lead not only to a better understanding of the nature of such works, but also to a more reliable chronology.

On the other hand, this investigation is aimed to ascertain what was the actual province of the Agrimensores in the procedure for settling private and public law cases concerning land disputes in Imperial Rome.

By commenting on all the most relevant epigraphical and documentary records dealing with this subject, along with those collections of laws concerning the 'action for regulating boundaries', it is possible to maintain not only that, according to the Roman law in force, the Agrimensores never held any office of arbitrators or judges to settle such disputes, but also that the jurists' and the Agrimensores' way of indicating the object of disputes about 'boundary' and 'site' was different, since their technical needs were different.
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Introduction

A study of the so-called 'writings of the Roman land surveyors', like any other analysis of a particular aspect of ancient society, unavoidably implies a reconsideration of earlier interpretations. This is particularly the case with an investigation on this subject. Much of the ground, in fact, is covered by conventional assumptions and terminology which have become dominant through the suggestions of some modern scholars who will be mentioned in the course of this work.

First of all, my research does not pretend to be a completely original interpretation of the problems which will be dealt with here, or a key to all the difficulties I have come across. It is not, in fact, a study which centres around the development of Roman centuriation. Therefore, it is not based on the results of archaeological surveys (centuriation systems, boundary markers and so on) and investigations by aerial photography of the areas where the remains of Roman land surveying are still visible. Nor is it a work in which the study of the manuscript tradition of the 'writings of the Roman land surveyors' plays a central role.

This does not mean that I do not recognise the value of the archaeological evidence, thanks to which the study of centuriation and other aspects of the legacy of the Agrimensores is constantly making further progress. Nor, on the other hand, does this mean that our understanding of the 'writings of the Roman land surveyors' has not been amplified after Lachmann's, Thulin's and other modern scholars' philological studies concerning the text of these technical manuals.

The truth is that these aspects are now so complex that they need to be discussed in separate works.

The starting point and guiding line of any approach to the subject is, in my view, still represented by Brugi's theory about the basic perspective characterizing the composition of the 'writings of the Roman land surveyors'. Almost a century ago, in his book entitled *Le dottrine giuridiche*

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degli Agrimenori Romani comparate a quelle del Digesto. Verona-Padua 1897 (repr. Rome of 1968), Brugi set out to demonstrate that different systems of surveying land, in Rome, did not necessarily correspond to different legal conditions.

My first aim is to update by new arguments Brugi's proposition: namely, that the Roman Agrimensores' peculiar concern was not to write about the relationship between the juridical condition of land ownership and the Roman system of surveying land, allocated to private individuals or to municipalities. This interpretation has usually been coupled with the misleading assumption that Roman surveyors took part, as a permanent body of arbitrator-judges (or 'advocates'), in the proceedings to settle disputes between two citizens or two towns (or a private individual and a municipality), concerning boundaries or the ownership of an area of territory.

In fact, in Chapter 4 we shall see that a mensor is not an arbiter or judge by virtue of being a mensor, but he may be: the two are distinct, though one person may in some moments be both.

Consequently, new research on this subject, whose questionable aspects are more numerous than the safe ones, has to start from careful consideration of the secure nature of the problems. It is important to have, first, a clear picture of what, in this matter, have to be regarded as well based conclusions and what are mere traditional opinions or philological assumptions; and on the other hand, of what is the nature and the importance of the crucial points still at issue.

For instance, the earliest extant manuscript of the Agrimensores (the Arcerianus, the two halves of which - B, of the late fifth and A, of the early sixth century - are in reality two distinct manuscripts), has long been considered to be the best compilation by far. Moreover, it has been suggested not only that an original nucleus of the Corpus Agrimenсорum was composed in an area of Gothic-Byzantine culture (Ravenna), but also that all the classes of the extant manuscripts are descendants of this common archetype, namely a compilation only some fifty years earlier than the earliest manuscript. Very recently Toneatto has doubted the possibility that all manuscripts transmitting such technical manuals may have had just one common archetype (or compilation). He is of the opinion that each compilation sprang from several different 'models'. In fact, the two halves of the Arcerianus are not complementary or springing from the same
compilation: they were, originally, two separate manuscripts containing only in some cases similar treatises\textsuperscript{3}.

This means that Lachmann's and Thulin's editions of the 'writings of the Roman land surveyors' are the result of their own philological choices which, although brilliant, do not necessarily mirror the actual disposition these writings might have had. In other words, it is not certain that we may be able to make a plain and undisputed restoration of the original framework of these writings.

Consequently, we must be very careful in drawing technical, juridical and historical information from the text of authors who belong to different periods. Each work and each author, within this collection of manuals, has their own character and history. Any hypothesis about these authors and the characteristics and framework of their writings has to start from ascertaining the relative chronology (when it is possible) of their works, the relationship (if any) each manual may have had with the other manuals of the collection, the way single authors (or parts of their work) have been used and, possibly, manipulated in the course of the time.

Without such preliminary investigation it is not worth engaging in any kind of discussion, or coming to any reasonable conclusion about what system of technical terminology each author followed; what, in general, may have been the development of the theoretical system of technical terminology connected with the science of surveying when two or more manuals are examined and compared.

But, despite the complexity of the problems posed by the study of this subject, we do not have to assume a negative and totally discouraged attitude. On the strength of the scarce, but firm information we have, it is possible to outline the development of the nature of a Roman surveyor's offices.

Land surveyors could be, in Rome, either free citizens, freedmen or slaves; there were also surveyors in the Roman army\textsuperscript{4}. Although inscriptions recording surveyors date back only to the late Republic, one may reasonably suspect that they took part in the land measurement connected with the settlement of early colonies (like Terracina, 329 BC) or the survey of land to be sold (as at Cures Sabini, about 290 BC). Surveyors were commonly called finitores/geometrae/mensores/metatores during the Republic; agrimensores/ geometrae/gromatici during the Empire, when the

\textsuperscript{3} See Toneatto1983; 1988 and 1992
\textsuperscript{4} See Sherk, 1974, pp. 544 ff.
science of land surveying (see D 50,13,1 pr. (Ulpian)) was included among «liberales artes».

Whereas any technical activity of a mensur was regarded as a «beneficium» by «the early jurists» (possibly, jurists of the late Republic), Ulpian informs us that in his own times surveyors usually received a «merces» (D 11,6,1, pr.). But the earliest evidence that «geometræ» were paid for their teaching activity (two hundred denarii for each pupil) is in Diocletian’s edictum de pretiis (7, 70: AD 301)⁵. Consequently, it is likely that it was a common practice, in the fourth century AD, to write technical manuals concerning the art of surveying which could be used, basically, for teaching purposes. The problem here is to ascertain when such written manuals on land surveying appeared for the first time. It is, in fact, unlikely that no work on this subject had been written before that of Frontinus (around the end of the first century AD, as will be presently shown). Cn. Tremellius Scrofa, one of the speakers of Varro’s Rerum rusticarum libri (in three books) who was regarded as «the Roman most skilled in agriculture» (I, 2, 10), gives a brief account of land measurement (I, 10, 1-2):

modos, quibus metirentur rura, alius alios constituit, nam in Hispania ulteriore metiuntur iugis, in Campania uersibus, apud nos in agro Romano ac Latino iugeris. lugum uocant, quod iuncti boues uno die exarare possint. Versum dicunt centum pedes quoquo uersum quadratum, iugerum, quod quadratos duos actus habeat. Actus quadratus, qui et latus est pedes CXX et longus totidem: is modus acnua Latine appellatur. Iugeri pars minima dicitur scripulum, id est decem pedes et longitudinem et latitudinem quadratum. ab hoc principio mensores non numquam dicunt in subsecium esse unciam agri aut sextantem, sic quid aliu, cum ad iugern peruenerunt, quod habet iugern scripula CCLXXXVII […]. Bina iugera quod a Romulo primum diuisa dicebantur uiritim, quae heredom sequeruntur, heredium appellarunt, haec postea centum centuria. Centuria est quadrata, in omnes quattuor partes ut habeat latera longa pedum ∞ ∞ CD. haec poro quattuor centuriae coniunctae ut sint in utramque partem binae, appellantur in agris diuisis uiritim publice saltus.

«Different people create different units for measuring land. In Further

Spain land is surveyed according to the iugum, in Campania the versus, with us here in the ager Romanus and Latinus the iugurum. Iugum is said to be (the amount of land) which a yoke of oxen can plough in a day; they call versus an area of 100 feet square; the iugurum an area containing two square actus. The square actus, which is an area 120 feet in each direction; this unit is called in Latin acnua. The smallest portion of a iugurum is called a scripulum, which is an area ten feet square. According to such rules, sometimes land surveyors say that an uncia, a sextans or the like is in subseciuum, since the iugurum contains 288 scripula. They called heredium (an area of) two iugera since this amount was said to have been first divided by Romulus to be allocated to each citizen and could be 'inherited'. A hundred of these plots then make up a centuria. A centuria is square in such a way as to have sides of 2400 feet in all four directions. Further, four such centuriae, joined in such a way that there are two in each direction, are called saltus in land which has been publicly divided and allocated.

Varro is quoted twice in Frontinus' work on surveying: at p. 6, 1-2 La = 2, 12-13 Th (etymology of ager arcifinius) and at p. 27, 13-14 La=10, 20-21 Th (origins of limites from the Etruscans). But more interesting, in the section of his text concerning the terminology of land measurement, is the passage (p. 30, 5-18 La = 13, 13-14, 5 Th) where Frontinus deals with general notions which are similar to those of Varro quoted above:

primum agri modum fecerunt quattuor limitibus clausum [figuram similem:], plerumque cent<en>um pedum in utraque parte (quod Greciae appellant, Osci et Umbri uorsum). nostri centenum et uicenum in utraque parte: cuius ex IIII unum latus, sicut diei XII horas, XII menses anni, XII decempedas esse uoluerunt. IV actibus conclusum locum primum appellatum dicunt fundum. Hi duo fundi iuncti iugurum definiunt. deinde haec duo iugera iuncta in unum quadratum agrum efficiunt, quod sint in omnes partes actus bini in hunc modum. quidam primum appellatum dicunt sortem et centes ducunt centuria.<m>

«First of all, they enclosed an area of land within four limites usually of one hundred feet in both directions (the Greeks call this a plethron, the Oscans and Umbrians a versus), but our people of 120 feet in each direction: they wanted each of the four sides to consist of twelve ten-foot measurements, just as there are twelve divisions in the day and twelve
months in the year. The area first enclosed by four actus they say was called a fundus. Two of these iugera joined together enclose (the area of) a iugerum. Then two of these fundi joined together make a square portion of land, since its dimensions in every direction always consists of two actus in this way. Some people say that the first unit (like this) was called sors ('allocation') and, multiplied one hundred times, a centuria».

Naturally, there are several differences between the two texts. Nevertheless, it is evident that both passages centre on similar concepts, which are illustrated in almost the same order. Now, it is worth noting that both Scrofa (see Varr., r.r. I, 2, 10) and Varro (see. Plin., N.H. VII, 176) were members of the commission of twenty people appointed for the distribution of the ager Campanus in 59 BC. Therefore, though it cannot be proved, one may well suspect that written compendia, concerning terms and aspects of the system of land surveying, already existed towards the end of the Republic. Prepared by experts on the basis of their own experience or written sources (see Varro, r.r., I, 1,1), they served a practical purpose. Scrofa's technical illustration, in Varro's book on agriculture, is given to show how to deal with the «measurement of the farm» («modus fundi»: r.r. I, 11, 1).

Moreover it is worth nothing that a similar section, where the nature of technical terms like iugera, versus, librae, centuriae, plinthides and customary regions where such units of land measurement are used is in (the so-called 'first) Hyginus' work on surveying (p. 121, 25-123, 10 La = 84, 27-86, 11 Th).

Indications are, unfortunately, too scarce to hazard any conjecture about the nature and purpose of such ordered sets of technical definitions about surveying on the land circulating before Frontinus' work on this subject. But the fact that it is not possible to set an earlier terminus a quo for this sort of technical exposition of means, possibly, that the traditional (oral) system to hand down this technical knowledge from one generation to another during the 'golden age' of Roman land surveying was on its way to becoming out of date.
Chapter 1

FRONTINUS' BOOK ON LAND SURVEYING

A The subject

The starting point for the study of the fragmentary work on land surveying connected with Frontinus' name is still represented by Niebuhr's remarks on the Roman Agrimensores\(^6\) and by Lachmann's edition of their existing writings in 1848-1852\(^7\). It is after these two fundamental contributions, in fact, that Frontinus started being considered as the author of the work on surveying, as well as of the *Stratagems* and *On the Aqueducts of Rome*. And it was also held that he wrote his book on surveying under Domitian and that a relevant section of this book was reused by a later writer on land surveying, Urbicus. Frontinus started being regarded as the earliest and one of the most erudite authors in the Corpus of the Roman land surveyors.

But, if it is beyond doubt that Frontinus' work is the first surviving example of this kind of technical literature, one still needs to discuss what was the origin, the (probable) framework and the purpose of his book. Apart from the different ordering of the text of Frontinus' extant fragments on surveying, suggested by C. Thulin in his (partial) edition of the Roman Agrimensores\(^8\), there has not been any major variation, in comparison with the results reached by the above mentioned scholars, in the interpretation of the fragments.

First of all, it seems therefore necessary to establish for what kind of purposes Frontinus wrote a book on land surveying and what kind of instruction he wanted to give to his readers\(^9\). It is Frontinus, in fact, that clearly refers to a close connection between the books he composed for the others and the practical experience he acquired by holding office. It is therefore obvious that any discussion of the nature and purposes of

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\(^6\) See Niebuhr, 1838, pp. 634-644.
\(^8\) See Thulin, 1913 (repr. Stuttgart, 1971; reviews of Thulin's edition are listed at p. III).
Frontinus' book on land surveying will also involve a discussion about the beginning of a particular type of technical literature dealing with land surveying. But no attempt will be made to deal with what might have been the 'selective criterion' of the 'Bearbeiter' who first epitomized the (fuller version of the) book of Frontinus on surveying, or the 'selective criteria' of the 'Bearbeiter' and copyists who transmitted it. It is enough to note that the extant fragments of Frontinus' work are, in fact, the result of a selection imposed by practical, bureaucratic or teaching purposes. Therefore, it was not the compilers' aim to preserve and to transmit such a book according to the interests we have. One thing, nevertheless, seems to be beyond doubt: Frontinus' book was later used by someone who could have changed its original character and framework.

After such premises one might well conclude that every kind of investigation can come to only a partial, if not deceptive, conclusion. One could try, however, to find a different way of approaching the extant fragments of Frontinus' book on surveying, starting from a more accurate analysis (closer than that suggested by Lachmann himself) of the rest of Frontinus' literary production which is far better preserved. Such an analysis might consequently enable us to answer two main questions: why did Frontinus compose his book on surveying under Domitian and what sort of book would one have written, in the second half of the first century AD, if one had put one's mind to such questions.

B The purpose and date of Frontinus' work on surveying

The chronology of Frontinus' literary production must obviously be related to his biographical data and political career. Despite the lack of references to his life in the ancient literary sources, it is certain that Frontinus was praetor urbanus in AD 70; consul suffectus in AD 73 or 74; legate in Britain from AD 74 to 77 (or 78); governor of the province of Asia in AD 84/85; curator aquarum in AD 97; consul suffectus again in AD 98 (with Trajan) and consul a third time, as ordinarius (again with Trajan, in AD 100)10. These offices and official charges, in particular the high number of consulates, suggest not only Frontinus' deep experience in both civil and

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10 On Frontinus' life and political career see Kappelmacher, 1917; PIR IV², Berlin, 1952-1966 (Iulius 322); Eck ,1982; Christ, 1989 (in these works may be found the principal bibliography).
military administration, but also his privileged social and professional position\(^{11}\). Of very high importance is what Frontinus himself says in the preface of his treatise *On the Aqueducts of Rome* (*de aquaeductu urbis Romae*), composed between AD 97 and 98\(^{12}\).

Two relevant passages are:

\[
\text{primum ac potissimum existimo, sicut in ceteris negotiis institueram, nosse quod suscepi (aq., 1)}
\]

«I regard as the first and most essential thing, a practice I have adopted in my other tasks, to know what I have busied myself with»;

\[
\text{quae ad universam rem pertinentia contrahere potui, more iam per multa mihi officia seruato, in ordinem et ultra hoc in Corpus deducta in hunc commentarium contuli [...]. (aq., 2, 2)}
\]

«All the material dealing with the general subject I was able to collect, according to the practice I followed in my many offices, I included in this sketch, having put it in order and also put it all together».

From the above quoted passages we therefore know it was Frontinus' custom to be acquainted in advance with the nature of the offices he held and, at the same time, to look for and to collect all the material dealing with the subject of such 'officia'. It follows, if the terms used by Frontinus are not mere synonyms indicating the same kind of tasks, that in all his undertakings it was his custom to achieve an adequate knowledge of what he was to do, and that on most of these occasions (maybe when offices of a public nature were assigned), he decided to give the structure of a sketch to the information he had been able to collect. As Frontinus himself declares (aq., 2, 3):

\[
in aliis autem libris, quos post experimenta et usum composui, succedentium res acta est; huius commentarii pertinebit fortassis et ad successorem utilitas, sed cum inter initia meae administrationis scriptus sit, in primis ad meam institutionem regulamque proficiet.
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«In those other works I composed after my practical experience, it was

the interest of my successors that was considered; this sketch (that is to say, 'On the Aqueducts'), may be useful to one of my successors but, since it has been written at the very beginning of my administration, it will serve especially for my own instruction and guidance.

The conclusion seems unavoidable, that every time Frontinus held an important office, he also composed a sort of guide for his successors in that office. That this is not a theoretical statement seems to be confirmed by a similar passage from the preface of Frontinus' *Stratagems*:

> nam cum hoc opus, sicut cetera, usus potius aliorum quam meae commendationis causa aggressus sim, adiuvari me [...] non argui credam.

> «Since this work, like my preceding ones, I undertook for the benefit of others rather than for my own reputation, I may believe I will be supported rather than criticized»

Now, whereas it is easy to connect the composition of *On the aqueducts of Rome* with Frontinus' office of curator aquarum and that of the *Stratagems* probably with his office of legatus Augusti in Britain, it remains to investigate after what kind of office, if any, Frontinus may have composed the book about surveying. First of all, it has to be excluded that there existed, in Frontinus' times, any public office connected with land surveying. Moreover, the inscriptions dealing with agrimensores and mensores during the Roman Empire seem to indicate that land surveyors were either freedmen or slaves or soldiers: in any case, the job was not part of a Roman political career. Neither the epigraphical records bearing Frontinus' name, nor the extant fragments of his book on surveying, nor even that little we know, from the ancient sources, about his life, make any direct or indirect reference to some special office such as the chairmanship of a committee of land surveyors. Now, as rightly observed by Hinrichs, there is an unquestionable difference between Frontinus and the rest of the

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13 See, in general, *Strategemata*, rec. R.I. Ireland, Leipzig, 1990; for an English translation, see previous footnote. On the basis of this passage Lachmann, 1852, suggested that Frontinus might have written his work on surveying before the *Stratagems*.
14 A province which, because of its four legions, had «die größte Truppenkonzentration im Imperium Romanum» (Eck, 1982, p. 53).
16 A full list of the quotations from ancient sources and epigraphical records concerning Frontinus' life in Kundereicz, 1973, pp. XVI-XVII.
Agrimensores whose works have come down to us in the Corpus of their writings. According to the German scholar, in fact, «während Frontin sein Werk als ein hochgestellter, den freien Mensoren übergeordneter Beamter verfaßte, sprechen die übrigen von 'professio nostra'»17.

Such a difference cannot be explained by the fact that Frontinus had a wide juristic knowledge and experience (possibly acquired during his praetorship) as a result of which, for instance, he had once been requested as an adviser in a legacy question by Pliny the Younger18. On the other hand, the provincial administrator's role in settling land disputes between private citizens and municipalities (sometimes with the aid of a mensor)19 does not represent a proof that the book on surveying was composed by Frontinus after his provincial governorship.

Now, a well known letter of Trajan to Pliny the Younger20 is commonly regarded as an indication that there was a scarcity of surveyors - although these are believed to be mensores aedificiorum (see previous footnote) - for Rome's and its suburbs' needs at the beginning of the second century AD. In the provinces reliable surveyors could be found, according to Trajan's advice to Pliny, «if you only will take the trouble to seek». But this text also does not prove that Frontinus' work on surveying was aimed to give to proconsuls and imperial legates (like Pliny the Younger, for instance) a sort of handbook about the subject, based on his «practical experience». It is also worth recalling that the first known examples of a book dealing with the duties of provincial governors are those of the third century AD21. Moreover, in the extant fragments of Frontinus' work on surveying, although Lusitania, «Hither Spain and many more provinces» are mentioned (see Front., agr.qual., pp. 4, 3-5, 2 La = 1, 17-2, 3 Th), neither the province of Asia, of which Frontinus was administrator, nor any legal judgment by a proconsul are referred to (not even in Urbicus who, according to Lachmann's conjecture, is supposed to have used a fuller version of Frontinus).

Going back to the political career of Frontinus, worthy of note is the remarkable gap between his office as proconsul, in AD 84/85, and that of

17 Hinrichs, 1974, p. 164.
18 Pun., epist., V, 1, 5 (= Kunderewicz, 1973, p. XVI nr. 4).
19 See, on surveyors' intervention in the settlement of 'administrative' boundary disputes, the full discussion in Chs. 4 and 5.
curator aquarum, in AD 97. Such a gap cannot be explained as the mere result of a political difference with the emperor; notably because, according to Niebuhr’s and Lachmann’s suggestion which will be discussed later, the passage of Urbicus, where Domitian’s policy about subseciua in Italy is praised, is supposed to come from Frontinus’ work. Domitian, be it noted, is also praised by Frontinus in the Stratagems.

On the other hand, it cannot be maintained that Frontinus, appointed by the senate to become a member of the commission charged to diminish public expenditure (publici sumptus) under Domitian, might have received a similar kind of charge, after which he composed a treatise dealing with land surveying. Such a suggestion is, in fact, only based on Frontinus’ own attitude, according to which every kind of charge given to him by the emperors is basically an officium, a veritable office. In addition, one also has to explain what might have been the occasion, during Domitian’s principate, which gave Frontinus the opportunity to acquire «practical experience» and to publish «all the material dealing with the general subject».

It is worth, now, focusing our attention on a passage of Urbicus, which may well be regarded as a sort of account of agrarian policy under the Flavian dynasty. As we have seen, both Niebuhr (1838, p. 621, n. 4) and Lachmann (1852, p. 101) were of the opinion that Urbicus relied to a great extent on Frontinus’ work. Urbicus’ report centres round the crisis of landed property in the Italic peninsula caused by Vespasian’s decision to confiscate subseciua, taken into their possession by the neighbouring landowners:

in his subsicius guidam iterum miserunt quibus agri adsignarentur, guidam et subsiciua coloni<s> concesserunt, ideoque semper hoc genus controversiae a rebus publicis exercentur. per longum enim tempus

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22 See Front., strat., I, 1, 8; II, 3, 23; II, 11, 7. For the supposed mention of Domitian in Frontinus’ book on surveying, see Urbicus passage quoted below in the text: it is a common opinion that Urbicus relied upon Frontinus’ work.

23 See Plin., paneg., 82, 2.

24 Dike, 1974, p. 41 thinks that «we may suspect he [Frontinus] had been a land commissioner». Eck, 1982, p. 53, is of the opinion that Frontinus was «Mitglieder einer Kommission, die Unklarheiten zwischen Privatleuten und dem Kaiser wegen okkupierten Staatslanden entscheiden sollte». Eck, 1985, p. 141 thinks that Frontinus «vermutlich erhielt von Vespasian oder vielleicht auch von Domitian einen amtlichen Auftrag im Zusammenhang der Revision der Besitzrechte auf ager publicus in Italien».

Frontinus, be it noted, regards any charge given by the emperors as a veritable office (see Front., aq., 1).
On these subseciva men were sometimes sent again, to have land allocated to them; others granted the subseciva to colonies. That is why res publicae are always engaged in this kind of dispute. In fact, neighbouring possessors over a long period, as if the chance of idle land had invited them, encroached on those empty areas and, over a long period, they fenced them in with impunity. Many commonwealths, although late in the day, sought to re-establish the measure of their subseciva: thus they brought in a substantial amount to the public tresaury.

Vespasian also demanded money from those colonies, whose subseciva had not been leased out. (He claimed that) it could not be possible that land not assigned to anybody could be of someone else than of the person who had the authority to allocate it. After the subseciva-land had been vended out, in fact, he brought in to the fiscus not a small amount of money. But, since he was touched by the complaining of the embassies, for every single possessor in Italy had been affected, he granted a stay, but did not change his policy. In the same way, the emperor Titus recovered some subseciva in Italy. Then, the great emperor Domitian moved to the concession involved and with just one edict relieved the fear of the whole of Italy.

It is worth noting that, according to Frontinus, a peculiar kind of title, called «ius subsiciuorum» characterized the «ager similis subsiciuorum condicioni extra clusus et non adsignatus» (in all likelihood, land outside a centuriated

25 See Urb., pp. 81, 13-82,4 La = 41, 7-26 Th. On Domitian's resolution about subseciva in Italy see L. Solidoro Maruotti, Studi sull'abbandono degli immobili nel diritto romano, Naples, 1989, pp. 241-249 (with earlier bibliography).
grid, but inside the boundary of a colony)\textsuperscript{26}. In this passage he observes that this category of land, if it has not been allocated either to the \textit{res publica populi Romani}, or to the colony, by whose boundaries such land is surrounded, or to a \textit{peregrina urbs}, or, finally, to sacred or religious places or \textit{to those belonging to the Roman people}, \textit{«iure subseciuiorum in eius qui adsignare potuerit remanet potestate»}, \textit{«on the basis of the law concerning subseciva it remains under the control of the person who had the authority to allocate it»}\textsuperscript{27}. Now, it is not unusual to find, in Frontinus' works, references to the law in force regulating a particular aspect of the subject he is illustrating. It is very common in the 'Aqueducts'; but also in the extant fragments of the work on surveying a speech is mentioned, delivered by the divine Augustus \textit{«about the status of the municipia»}\textsuperscript{28}.

It is worth noting also that (the so called 'first') Hyginus, while commenting upon the type of disputes occurring under the category of land covered by the \textit{'ius subseciuiorum'}, makes a short, but very interesting report on the Flavians' agrarian policy:

\begin{quote}
\textit{cum diius Vespasianus subseciui omnii, quae non uendidissent aut aliquibus personis concessa essent, sibi uindicasset, \textit{itemque diius Titus a patre coe[mi]ptum hunc reditum teneret, Domitianus [imp.] per totam Italiam subseciua possidentibus donauit, edictoque hoc notum uniuersis fecit, cuius edicti uerba, itemque constitutiones quaedam aliorum principum itemque diui Neruae, in uno libello contulimus.} (Hyg., \textit{gen.contr.}, p. 133, 9-16 La = 96, 21-97, 8 Th)
\end{quote}

\textit{«After the divine Vespasian had claimed for himself all the subseciva that the municipalities had not sold or which had not assigned to anybody, and the divine Titus, as well, followed the practice begun by his father, Domitian granted the subseciva to their possessors throughout the whole of Italy, and with this edict gave everybody notice of that. The text of this edict, as well as some constitutions of other emperors and of the divine Nerva himself, have been collected by me in one book»}.

Indubitably, there are some differences between the two passages quoted

\textsuperscript{26} See Front., \textit{agr.qual.}, p. 8, 1-6 La = 3, 6-12 Th (on these passages, see Hinrichs, 1974, pp. 131-136). Frontinus refers to \textit{«ius subseciuiorum»} at p. 8, 4-5 La = 2, 15 Th and at p. 21, 7-22, 4 La = 9, 3-8 Th (where it is connected with \textit{«loca relixta»}).

\textsuperscript{27} Front., \textit{agr.qual.}, p. 8, 5-6 La = 3, 11-12 Th.

\textsuperscript{28} Front., \textit{agr.qual.}, p. 18, 5-6 La = 7, 9-11 Th. Imperial records are mentioned by Frontinus at \textit{aq.}, 104; 106; 108; 125; 127; 129.
above. Hyginus, for instance, makes no mention of the consequences of Vespasian’s act of confiscating the *subsiciva*. Nevertheless, the two accounts are, for all practical purposes, the same. A comparison between the words used by Frontinus to explain what is «*the law concerning subsiciva*» and those Urbicus used to indicate the reasons Vespasian adduced to confiscate the *subseciva* illegally possessed or exploited seem also to show a certain similarity:

ager similis subsiciuorum condicioni extra clusus et non adsignatus [...] iure subsiciuorum in eius qui potuerit adsignare remanet potestate (Front., agr.qual., p. 8, 1-6 La = 3, 6-12 Th);

 [...] non enim fieri poterat, ut solum illud, quod nemini erat adsignatum, alterius esse posset quam qui potuerit adsignare (Urbic., p. 81, 24-26 La = 41, 17-19 Th).

Now, in the context of the same dispute about *subseciva*, Urbicus seems to be referring again to the text of an official decree when he illustrates what happened in Lusitania at Emerita, the Roman colony along the river Guadiana:

quoniam subsiciua quae quis occupauerat redimere cogebatur, iniquum iudicatum est, ut quisquam amnem publicum emeret aut sterilia quae alluebat: modus itaque flumni> est constitutus. hoc exempli causa reliquerendum existimaui. (p. 84, 4-8 La = 44, 17-21 Th)

«*Since people were forced to rent those subsiciva they had occupied, it was judged iniquitous that someone should get in return a public river or the non-productive areas it touched. So a boundary has been established for the river. I mentioned that to give an example*».

Unfortunately, the only reference to Lusitania in Frontinus’ extant fragments (see p. 22, 6-8 La = 9,10-12 Th) is too generic to assume that Urbicus drew his informations about Flavian policy concerning the *subseciva* from this very section of Frontinus’ work. Moreover, there is no conclusive argument to maintain that Urbicus’ illustration of the controversy dealing with *subseciva* is based on a fuller version of Frontinus’ text, which may have been later greatly epitomized29. It cannot, therefore, be excluded

29 It is, in fact, difficult to explain why a short fragment from Augustus’s speech *de statu municipiorum*, and not Frontinus’ discussion about Flavian agrarian policy survived in his
that Urbicus based such a report on more than one source.

On the other hand, there is no reason to doubt that (the so-called 'first') Hyginus' report on the Flavian emperors' policy concerning subseciva in Italy is based on the same source as that of Urbicus. It seems, therefore, more likely than not (and explanations will be offered in the course of this and the following chapter) that Hyginus' and Urbicus' source, as regards the ownership of subseciva in Italy, is Frontinus.

What is difficult to explain is why, in the extant fragments of Frontinus' book on surveying there is no trace of an account of Vespasian's and Domitian's ordinances concerning subseciva. Nevertheless, it is worth noting that Frontinus alludes twice to land where the «law relating to subseciva» was effective (p. 6, 3-4 La = 2,15 Th; p. 8, 1-9 La = 3, 6-12 Th; p. 22, 2-4 La = 9, 6-8 Th). He is also the only author, within the collection of writings of the Agrimensores, to explain what is the technical and legal nature of such a law. In (the so called 'first') Hyginus' work on surveying, for instance, 'ius subseciuorum' became the name of a dispute concerning subseciva (p. 124, 2; 132, 24 La = 87, 2; 96, 11 Th). One of the two categories of land which come under the «law relating to subseciva», namely «ager similis subsiciuorum condicioni extra clusus et non adsignatus», illustrated by Frontinus is, in the other texts of the Corpus Agrimenorum, a mere quotation of Frontinus30.

We are, therefore, led to think - though it cannot be proved - that (the so-called 'first') Hyginus drew directly from Frontinus (as seen, the only author certainly to deal with it) the technical concept of «ius subseciuorum», which is in fact closely connected with Hyginus' illustration of «disputes over subseciva». Now Hyginus, as already seen, was interested in collecting Imperial documents about land administration. It is therefore possible that he may have used Frontinus' paragraph alluding to Flavian agrarian policy in Italy rather than the text itself of Domitian's edict granting to long-standing cultivators the ownership of subseciva31.
Consequently, it would be no matter for surprise if Frontinus' text dealing with Vespasian's and Domitian's policy concerning subseciva was later neglected and finally discarded by excerptors of Frontinus' work because they could derive their information from (the so-called 'first) Hyginus' (who wrote under Trajan: see Chapter 2) collection of Imperial documents, among which Domitian's decision about subseciva. Since Hyginus refers to a separate book for his full discussion of the subseciva-question, it may also be that as early as the second century AD any detailed exposition about the Flavian emperors' administrative policy concerning subseciva was felt to be redundant in a work strictly dealing with the technicalities of surveying. Therefore, if it is likely that Hyginus' collection of Imperial documents facilitated such a process, the terminus a quo of it should be set in a period earlier than Urbicus' book «On land disputes».

It may be also noted that Urbicus' passage concerning Vespasian's and Domitian's decisions on subseciva explicitly refers to areas left over from the allocation of land in Italy. At the close of his account, in fact, Urbicus says that «Domitian relieved the fear of the whole of Italy». This point seems to be confirmed by (the so called 'first') Hyginus, who reports that «Domitian granted to the people possessing them the subsiciva throughout the whole of Italy and gave public notice of that by means of a decree» (see p. 133, 12-14 La = 97, 4-6 Th). Domitian's act of granting subseciva (whether only in Italy, or also in the provinces) is also in a passage from an anonymous technical short treatise, published in Lachmann's edition with the title «agrorum quae sit inspectio» («what should be inspection of land»), attributed to (the so called 'first') Hyginus by Thulin. Here we read that the subseciva:

\[
\text{cum uel<ut>communis iuris aut publici essent, possessionibus uicinis tunc Domitianus imp. profudit, hoc est ut laciniiis arcifinalem uel occupatoriam licentia<m> tribueret. (p. 284, 4-7 La = 78, 3-6 Th)}
\]

«Although subseciva belonged to communities or to the state, they were given away by the emperor Domitian to those landowners adjoining it, in such a way as to attribute the rights characteristic of ager arcifinius or ager occupatorius to laciniae (odd portions of land).»

\[\text{32 See Thulin, 1910; such a suggestion is rejected by Toneatto, 1984, pp. 1611-1612. According to Brugi, 1897, p. 283, the person who wrote this passage may have believed that Domitian's decision dealt with subseciva in Italy and the provinces.}\n\[\text{33 For the etymology of ager arcifinius/occupatorius, see Roby, 1883, pp. 95-97; 99-103;}\]
Siculus Flaccus, finally, briefly reports that Domitian gave this category of land to its «possessores» (p. 163, 13-14 La = 128, 1-2 Th). The only non-technical source alluding to Domitian’s decision about subseciva is Suetonius (Domit. 8, 3):

subsiciuia, quae duiisis per ueteranos agris carptim superfuerunt, ueteribus possessoribus ut usu capta concessit.

«(Domitian) granted scattered subseciva, which were still left after the division of land among veteran soldiers, to (their) old possessors, as if they had been acquired by prescription».

From these passages the conclusion seems unavoidable that the category of subseciva in Italy included that particular type of land, prepared (possibly during the period of the civil war at the end of the Republic) to be allocated to the veterans, but no longer used for any veteran settlement. It also seems likely that the Agrimensores paid close attention to subseciva in Italy, rather than to that in the provinces. Furthermore, there is no reason to doubt that Domitian’s measure also dealt with the category of land called «aer similis subsiciuorum condicione». As regards subseciva in Italy, the Imperial concession seems to be clearly limited to those people who could claim a long and continual occupation of such land, which probably lay right outside the centuriated grid of those colonies involved in Caesarian and triumviral settlements. It also seems to be clear that the technical aspect of this kind of dispute is, according to what the passages of the Agrimensores quoted earlier seem to suggest, less important than the juridical one.

The previous observations about the important role that subseciva may have played in Frontinus’ book seem to be strengthened by a passage from the work on surveying written by (the so called ‘first’) Hyginus. He refers to the diligence of a land surveyor of his own time who, during the settlement of a colony in Pannonia, separated the assigned allotments from the rest of the land which was not yet allocated (subseciva; see, on this passage, Chapter 2). Hyginus points out that it was an innovation to distinguish «loca subsiciuorum» from the actual allotments. It followed that «no dispute or controversy among the veterans could occur» (cf. p. 121, 7-24 = 84, 8-26 Th). We learn from (the so-called ‘second’) Hyginus that also the

composition of a «liber subsiciuorum omnium» (cf. p. 202, 5 La = 165, 4 Th) fell within the surveyor's tasks.

In the light of what has been observed so far, there does not seem to be any particular ground for supposing that Frontinus wrote his book on surveying because of an official charge, given to him by Domitian, to ascertain the extent, distribution and legal condition of subseciva in Italy.

The most important record of a dispute concerning this particular kind of land in Italy is represented by the well-known bronze tablet from Falerio, in Picenum. According to this document, Domitian confirmed the authority of Falerio, in AD 82, to possess those subseciva to which the neighbouring city of Firmum laid claim (see FIRA I², n. 75). Most interesting by far are lines 13-24:

```
et uetustas litis, quae post tot annos | retractatur a Firmanis aduersus I
Falerienses, uehementer me mouet, | cum possessorum securitati uel
milnus multi anni sufficere possint, | et diui Augusti, diligentissimi et in |
 dulgentissimi erga quartanos suos || principis, epistula, qua admonuuit | eos,
ut omnia subsiciua (sic) sua collige | rent et uenderent, quos tam salubri |
 admonitioni paruisse non dubito; | propter quae possessorum ius confirmo.
```

«The long duration of this complaint, which the people of Firmum try to lodge again, after so many years, against the inhabitants of Falerio, upsets me very much. This is not only because fewer years are enough for the security of those who possess such land, but also because of a letter of the divine Augustus, a sovereign who paid a very kind attention to the soldiers of his Fourth legion (, who became colonists of Firmum). In this letter he instructed them to reckon and to sell all the odd portions of land (subseciu) they owned. I am sure that they carried out his beneficial instructions: therefore, I confirm the rights of those who possess such land».

It is clear that Domitian's decision did not imply any surveying of those odd parcels of land, but was only intended to reconfirm the safety and title of the possessors of such land.

Now, there is no reason to assume that it was in Domitian's age that books were composed, like that of Frontinus, dealing for the first time with the condition of land in Italy (and, to a certain extent, provincial land), along with instructions about the 'art of surveying', and that the inspiring motive was indeed Vespasian's decision to confiscate subseciva. In the well-known
inscription from Orange, for instance, there appear publica (probably land belonging to this colony, *Firma Iulia Arausio Secundanorum*, founded about 35 BC by Octavian, which under the Flavians bore the title of colony of Roman right, *Flavia Tricastinorum* per annum a privata aliquid annos. But there is no concrete reason to place, as Hinrichs suggested, *subseciua* before publica.

Consequently, the most economical conclusion is that Frontinus' work on surveying was intended to give to his readers (landowners and magistrates in Italy and the colonies), whether competent or inexpert, all the basic information about categories and legal status of land in the Empire in a period when, as already suggested in the Introduction, such technical knowledge was probably circumscribed within a narrow circle of experts. Frontinus' writings, like those books *On Architecture* written by Vitruvius (see, e.g., I, 1, 18), gave his readers the opportunity to make a display of learning without having to face the technical and legal complexities of such a technique. The extant fragments of his work on surveying seem to indicate that it had two aims: the first, more general, is represented by his introduction dealing with categories of the land, illustrated by practical examples of colonies in Italy and in the provinces. The second purpose, connected with the first, but more specific, concerns chiefly the technical aspects of the *ars* and its *institutio* (for instance the definition of types of boundaries and surveying techniques).

As regards the date of Frontinus' book on surveying, we have seen that no element or new argument has emerged, during the foregoing discussion, to reject Niebuhr's and Lachmann's suggestion, namely that it may have been written under Domitian. Consequently, the only likely period is that between Frontinus' proconsulate in Asia (AD 84/85) and his work *On the Aqueducts of Rome*, that is to say, between AD 87 and 97.

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34 On this inscription see Flach, 1990, pp. 4-6. For the legal basis of the occupation of *subseciua*, see Nörr, 1968, p. 60. According to Brugi, 1897, p. 277 ff., there should be no difference between *subseciua*, *vacuae centuriae*, *loca relica* and *extra clusa*: this is public land which cannot be occupied by private individuals.
C. The transmission of Frontinus' extant fragments

As has been already emphasized, Frontinus' book on land surveying is the least well-preserved of his writings because of the circumstances of its transmission. The extant fragments belonging to his book, transmitted by a large number of manuscripts, have been collected and placed in a different order by Lachmann and Thulin in their edition of the Agrimensores' writings. The main difference between their editions, apart from the new manuscripts Thulin could use in addition to Lachmann's, relates to the (hypothetical) original framework and extent of Frontinus' book. Lachmann suggested it was in two books, Thulin in one book.

First, any part of Frontinus' work on surveying that has come down to us can be divided into two broad groups: excerpts transmitted by manuscripts under his name, and quotations from his work in two distinct late commentaries on Frontinus' De agrorum qualitate and De controversiis. As for the excerpts transmitted under Frontinus' name, Lachmann's and Thulin's most important manuscripts are:

(A) Arcerianus (Wolfenbüttel, Herzog-August-Bibl., Guelferb. 2403), beginning of the VIth century AD, ff. 1-83v;
(P) Palatinus (Vatic.lat. 1564), about 810-830 AD;
(G) Gudianus (Wolfenbüttel, HAB, Guelferb. 105, Gud.lat.), about 850-875 AD;
(F) Laurentianus (Firenze, Bibl. Medicea-Laur., Plut.29,32), about 800 AD, ff. 2-28;
(E) Erfurtensis (Wissenschaftliche Allgemeinbibl., Amplon. 362, 4), XIth century AD, ff. 73-96 (see previous footnote).

As for the quotations from Frontinus' work on surveying which have survived in late writings of the Corpus Agrimensorum, the most important is the treatise written by Urbicus (possibly in the fourth century AD: see Chapter 4), which is transmitted by A and

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35 For the philological aspects of the question, see F. Blume, 'Über die Handschriften und Ausgaben der Agrimensoren', in Lachmann, 1852, pp. 1-78; Bubnov, 1899, pp. 401-405; Thulin, 1911a and 1911b; Toneatto, 1983; Reeve, 1983; Toneatto, 1992.
(B) Arcerianus (Wolfenbüttel, HAB, Guelferb. 2403), end of the Vth, beginning of the VIth century AD, ff. 84-156.

The second commentary, composed by an unknown author (and attributed to Urbicus by the manuscript tradition) in a later age than Urbicus, but no later than the fifth or sixth centuries AD, is transmitted by P and G.

As seen, all the manuscripts containing the (extant fragments from the) writings of the Agrimensores, moreover, have been divided by the aforesaid scholars into three main compilations (or families): of the manuscripts listed above, A and B belong to the 'prima classis'; P and G to the 'secunda classis'; F and E are called 'codices mixti'.

C 1. Excerpts of Frontinus' work transmitted by manuscripts

The most relevant section of what has come down to us directly under Frontinus' name is in A, which is the later half of the Arcerianus, but the earliest among the manuscripts transmitting Frontinus' excerpts (see footnote 30). When A was written, a book about land surveying ascribed to Frontinus had already been circulating as an independent organic unity, as is easy to infer from its incipit and explicit:

A, f. 60: INC. | IVLI FRONTINI | DE AGRORVM QVALIDATÉ | FILICITER
(sic);
A, f. 81: IVLI FRONTONIS (sic) LIB. EXP. FELICITER.

The text of Frontinus transmitted by A can also be divided into four distinct sections, according to their contents:

'On the categories of land' (de agrorum qualitate: pp. 1-8 La = 1-3 Th, agrorum qualitates sunt tres—finitima linea cludatur);

'On land disputes' (de controversiis: pp. 9, 2-26, 2 La = 4-10, 18 Th, materiae controversiarum sunt—mouent disputationem);

'On boundaries' (de limitibus: sunt aliae limitum condiciones—perducere [pp. 26, 5-34, 13 La]; limitum prima origo—praefectura appellatur [pp. 10, 20-15, 4 Th]);

'On the art of surveying' (de arte mensoria: principium artis mensoriae—

36 A division of the manuscripts into two classes already in Niebuhr, 1838, p. 640. A picture of the different families and stemma codicum in Toneatto, 1983, pp. 28-29 and 50.
-recte cultellabitur: pp. 15, 6-19, 8 Th; this section is printed within the previous one 'on boundaries' in Lachmann's edition).

Lachmann split the material in A into two parts and assigned to the first book of Frontinus' work both the section 'On the categories of land' and that 'On land disputes'. The section concerning boundaries (including that 'On the art of surveying' in Thulin's edition) was considered to be part of the second book. This latter, according to the hypothesis of the German philologist, contained also passages Urbicus drew from the original (?) text of Frontinus' book.

Thulin's reconstruction of Frontinus' extant text is based only on those fragments transmitted under the latter's name. Although he did not accept Lachmann's suggestions about the possible framework of Frontinus' treatise, Thulin followed his arrangement as regards the first and second sections of Frontinus' work. They were followed by the section 'On boundaries', from which Thulin separated a fourth section, 'On the art of surveying'. Thulin also shifted some pieces of the text of the last two sections, changing the disposition according to which it was transmitted by A, which Lachmann followed.

According to Thulin's reconstruction of the text, the section concerning boundaries corresponds to pp. 27, 13-33, 10 of Lachmann's edition ("limitum prima origo [...] ubi proxima [...]"), with some differences in the reading of the text, contrary to the previous edition.

In Thulin's edition, the section 'On boundaries' was followed by that 'On the art of surveying', whose beginning corresponds to pp. 31, 13-34, 13 La ('principium artis mensoriae—res exegerit perducere') with only minor textual variants. As belonging to this section, Thulin displaced here a section referring to 'cultellatio' (pp. 26, 11-27, 12 La = 18, 12-19, 8 Th: 'cultellandi ratio quae sit—cultellabitur'), placed within the section 'On boundaries' in Lachmann's edition, since it corresponds to the subject of the fourth section, again with textual variations and corrections of Lachmann's text.

Now, while Lachmann's reconstruction of the framework of Frontinus' book on the basis of the excerpts transmitted by the manuscripts met with

37 It is worth noting that Lachmann, 1852, p. 112, although he was of the opinion the Frontinus' text could be divided into 'vier Stücke', finally he decided to divide it into only three sections.

38 For his edition of Frontinus' text, Thulin took into account the remarks of Mommsen, 1892, pp. 114-117 (=1908, pp. 119-122) and 1895, p. 278 n. 1 (=1909, p. 470 n. 1).
Mommsen's criticism (see previous footnote), Thulin's edition also has its defects. First of all, the Swedish scholar prefaced with headings each section into which he divided the text of Frontinus. This solution is completely arbitrary, since it is only at the very beginning of A that is transmitted a heading which explicitly refers to the contents of the text:

\textit{INCIPIT IVLI FRONTINI DE AGRORVM QVALITAT\text\ae~ FILICITER (sic)}\textsuperscript{39}.

It is worth noting that the use of titles to indicate different sections of the text can be seen in Frontinus' four books of \textit{Stratagems}. Moreover, at \textit{Strat. III, 1}, he explicitly affirms:

\textit{si priores libri responderunt titulis suis et lectorem hucusque cum attentione perduxerunt [...].}

«If the preceding books have corresponded to their headings and have led the attention of the reader up to this point».

Unlike the \textit{Stratagems}, no heading characterizes the text of \textit{On the Aqueducts of Rome}, whether given by Frontinus himself or by the copyists who, be it noted, split this treatise into two books (see Kunderewicz, 1973, \textit{apparatus criticus} at p. 25). Thulin's use of headings for each section is even harder to justify if one thinks he was aware of the fact that the heading at the very beginning of A could have been written by an excerptor. F, in fact, begins with a different heading, which indeed gives the impression it is the work of a copyist:

\textit{F, f. 18v: INCIPIT MENSURA RATIONABILIVM AGRORVM. ager est arcifinius [...]}. 

Therefore, if it had been the aim of the copyist of A to give a title to each of the four sections of Frontinus' text, he would have acted, for instance, like the copyist of P, who, before copying the section dealing with land disputes, wrote \textit{ITEM CONTROVERSIAE} as a sort of heading\textsuperscript{40}. Only in

\textsuperscript{39} A similar heading also in P, f. 11r: \textit{IVLI FRONTINI DE AGRORVM QVALITATE} (which perhaps comes from the beginning of Frontinus' text transmitted by A).

\textsuperscript{40} See p. 9, 1 La = 4,1 Th. In Hyg., \textit{contr. agr.}, p. 87, 2-3 Th, the expression \textit{item genera controversiarum} is rightly regarded as a gloss by Thulin. Moreover, the beginning itself of the anonymous commentary (\textit{\textquotesingle suscipimus qualitates agrorum tractandas [...]} \textsuperscript{\textquoteleft\textquoteleft}: p. 1, 6 ff. La = 51, 7 ff. Th) upon the section of Frontinus' text dealing with the 'Categories of land'
such a case could a title like «de agrorum qualitate» refer to a distinguishable section of the text of Frontinus. That it was not the aim of the copyist of A to give a heading to each section of Frontinus' text seems to be confirmed by the generic subscription at the end of A:

IVLI FRONTONIS (sic) LIB. EXP. FELICITER.

Consequently, one would incline to assume that the transcriber of A was not copying from an original already divided into sections, each of them with its own heading. Nor is there any element to suggest that the use of headings might imply the use of Frontinus' work as a teaching manual, and that such headings were added when this book was collected together with other writings about surveying the land. It is therefore possible that it was the writer of A that gave to the text of Frontinus he was copying the heading we now read at the very beginning of the Arcerianus. It was, in fact, very easy for him to place 'de agrorum qualitate' before a text starting with the sentence «agrorum qualitates sunt tres».

On the other hand, it is difficult to say whether it is the true title or simply a heading of Urbicus' book 'On land disputes' that we find in A, f. 161 (INC. AGENI [sic] VRBICI DE CONTROVERSIIS AGRORVM), since the beginning of his work is fragmentary. But even the beginning of the anonymous commentary on this section of Frontinus' book cannot be used as an argument to maintain that Frontinus' text ended by being thought divisible into distinct sections, each with its own heading, as in Thulin's edition (see previous footnote).

The only conclusion one may carefully come to is, possibly, that at a later stage than when the copyist of A assigned the title 'de agrorum qualitate' to the whole text of Frontinus, this latter started being considered as a short tractate, made up of different sections which could even be commented upon separately. To sum up, it is not possible to prove that the title of Frontinus' book in A has been transmitted correctly.

On the other hand, both Lachmann's and Thulin's use of headings for each section of Frontinus' text transmitted by A is arbitrary. In fact, on the basis of the scarce evidence we have, it cannot be excluded that the title at the top section of A is in some way based on what the writer of A found in
his original; therefore, it cannot be the title of the whole book of Frontinus on surveying.

C 2. Fragments of Frontinus' work on surveying in quotations by later authors of the Corpus Agrimensorum

Large portions of Frontinus' book appear to have been used in two commentaries, whose age and value are quite different.

C 2a.

A treatise dealing with a specific part of the art of surveying, namely different types of controversies concerning boundary stones, boundary strips or land ownership was written by Urbicus. The text of his work, intended (as will be seen in Chapter 3) as a teaching handbook, is transmitted by B and A: as seen, respectively the earlier and later half of the Arcerianus, which is the earliest manuscript of the 'first class' (or redaction). A very short section of Urbicus' text is transmitted also by a manuscript of the 'second class': P.

B and A overlap for what has been regarded by Lachmann and Thulin as the second part of Urbicus' work:

B, f. 1 to B, f. 38 = A, f. 163 to A, f. 179


The heading with authorship and incipit is preserved in A, f. 161; A, f. 179 transmitted authorship and explicit, whereas B, f. 38 has only an explicit without authorship.

The first part of Urbicus' work is preserved only by B, ff. 39-91. According to Lachmann and Thulin, the introduction to the whole treatise is represented by B, ff. 83-91, a section of Urbicus' text both scholars transposed to the very beginning of their edition of the work of this author (pp. 59, 4-62, 14 La = 20, 5-22, 33 Th). The first part of Urbicus' treatise is

41 On Urbicus' age (third-fourth century AD) see Brugi, 1897, pp. 84-85; De Salvo, 1979, p. 3 n. 2 (with earlier bibliography). It may be noted that the version of Urbicus' text Lachmann printed in his edition as a reconstruction of 'Book two' of Frontinus' work on land surveying will be not referred to here.

not only disorganised and incomplete, but has been also transmitted without any authorship, since in B, f. 39, in the place pertaining to the title, we read

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INCIPIT LIB //////
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where later the word "simplicius" has been added. The same rasura occurs at the end of this part, in B, f. 91: EXPI LIB ////// 43.

As pointed out by Lachmann and Mommsen44, an anonymous late writer, who pillaged the text of Urbicus and other writers of the Corpus Agrimensorum in order to compose a commentary on the first two sections of Frontinus' work on surveying as transmitted by A (de agrorum qualitate and de controversiis), attributed to Frontinus a statement he no doubt copied almost verbatim from the first part of Urbicus' book (preserved only in B, ff. 39-91). What is interesting to note is that Frontinus was not mentioned in Urbicus' text, nor Frontinus' name found, as already seen, either in the incipit or explicit of B, f.39 and B, f. 91 respectively. According to the anonymous writer's text:

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[...] in istis, ut ait Frontinus, uelud (sic) instantium argumentorum oportunitas (sic) controversialis aptatur. (p. 10, 19-20 La = 59, 10-11Th)
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«[...] with such boundary markers, as Frontinus says, the chance of any argument there may be, (useful) in a dispute, is used».

This passage is clearly construed out a statement from the first section of Urbicus' work, where he describes the technical nature of land disputes at their very beginning (p. 68, 6-8 La = 28, 12-13 Th):

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[...] in illam quoque uelut extantium amomentorum oportunitas aptatur.
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«[.] to it also the chance of any argument there may be is used».

The first passage shows indirectly that the first part of Urbicus' treatise - as will be seen, based to a large extent on Frontinus' text dealing with land disputes - was not attributed to 'Simplicius' (or 'Simplicius') but to Frontinus45

43 Thulin's suggestion (1911a, p. 19 and Tafel III; 1913 a, p. 20, apparatus criticus), namely that 'simplicius' is a cursive hand of the seventh-eight century AD has to be preferred to what Lachmann argued (1852, p. 120), namely that it is a handwriting of the ninth century. On these problems see, e.g., B. Bischoff, Paléografie de l'antiquité romaine et du Moyen Âge occidental, Paris, 1985, pp. 72-75.
44 See Lachmann, 1852, p. 120; Mommsen, 1895, pp. 278-279 (= 1909, p. 470).
45 See Mommsen, 1895, pp. 278-279 (= 1909, p. 470); Thulin, 1913 b, p. 119.
by a late compiler whose work is indeed almost contemporary with the earliest manuscript of the Roman Agrimensores (see further discussion).

As for the only fragment of Urbicus' work which has been preserved in the second class (of manuscripts) by P, whose beginning (P, f. 50r) is EX LIBRO FRONTINI SECUNDO, si termini [...] we see that again Urbicus' text is attributed to Frontinus (pp. 73, 38-74, 10 La = 32, 19-33, 11 Th). Moreover, Thulin is right when he suggests that the anonymous commentator of Frontinus used the first part of Urbicus' work, transmitted by B, in much the same condition as it has come down to us, and not by drawing it from a «vollständiger Agennius» (1913 d, pp. 113 ff.).

In the light of what has been observed, one ought to conclude that the name of Urbicus was replaced by that of Frontinus because of the close analogies between the latter's illustration of fifteen land disputes and the former's similar list, so that Urbicus' work was finally replaced by that of Frontinus in the Palatine family.

As we have seen, Lachmann suggested that Frontinus was the most important source Urbicus seems to have taken into consideration for his book. On the other hand, Grelle has recently criticized such a theory. He maintains that the source of the section of Urbicus' text, to which the short marginal note 'simplius' has been added by a copyist, is an unknown writer on land surveying belonging to the Flavian age (or even later than Frontinus). His main arguments are the technical and terminological differences between the text transmitted by B, ff. 39-91 (namely, Urbicus) and the text of Frontinus' work on surveying transmitted under his name by manuscripts.

Equally, it cannot be excluded that the anonymous commentator had at his disposal a text of Urbicus totally deprived of authorship, disorganised and mutilated, and that he attributed it to Frontinus because of the analogy between the text of Frontinus this compiler had at his elbow and that of Urbicus preserved in B, ff. 39-91. Nevertheless, it seems unwise to attribute

46 See Mommsen, 1895, pp. 277-279 (= 1909, pp. 469-470) and Thulin, 1911 d, p. 132, n.
47 Lachmann, 1852, pp. 112 ff.; Mommsen, 1895, pp. 278-279 (= 1909, p. 470); Thulin (1913 a, p. 20 apparatus criticus) called the source of Urbicus «optimus fonsa: on this question see Toneatto, 1983, p. 41, note 8.
48 Grelle, 1963, pp. 33-35. On the other hand, Grelle's suggestion (namely, that the main source of Urbicus cannot be Frontinus where the manuscript tradition alludes to 'Simplius') is based on a misinterpretation of Mommsen, 1895, pp. 278-279 (= 1909, p. 470). The German scholar, in fact, was of the opinion that only Urbicus' fragment preserved in P (pp. 73, 38-74, 10 La = 32, 18-33, 11 Th) can «unmöglich frontinisch sein».
to this anonymous commentator a certain technical knowledge and philological sharpness he did not have, nor was supposed to have for such works. But, in case the attribution of Urbicus' text to Frontinus is due to this anonymous compiler, it follows that the name of 'Simplicius' added to the heading of B, f. 39 cannot be regarded as an attempt of the early manuscript tradition to indicate that Urbicus' source, in the first part of his treatise, was not always Frontinus.

C 2 b.

Some passages drawn from Frontinus' work on surveying can be found also in the work of the anonymous late compiler which has been referred to in the previous paragraph. It is, basically, a commentary upon the first two sections of his writing: that 'On the categories of land' and that 'On land disputes' (the text of this short work was printed by Lachmann right below the corresponding sections of Frontinus text: pp. 1, 7-8, 10 La [= 51, 7-58, 13 Th]). This compilation is transmitted by P and its direct copy, G; both belong to the second class (or redaction) of manuscripts, which also collects extracts from the Theodosian Code and the Digest concerning the 'action for regulating boundaries'.

As for the part concerning «the categories of land», the author of this commentary seems to have used a text of Frontinus which is similar to that preserved in A. As for the section dealing with land disputes, he pillaged Frontinus, (the so-called 'first') Hyginus and Urbicus. It seems to be clear that the anonymous writer did not use any extra source, other than those we have, or any fuller version of the works of the afore-mentioned authors.

To explain why this work has been transmitted under the name of Urbicus, Thulin suggested that «den Namen des Agennius Urbicus hat der Kompilator seiner Schrift vorangestellt, weil sie mit dem Schluß des Agennius endete, dem in A B die Subskription AGENNI VRBICI LIB. EXP. folgt» (Thulin, 1913 b, pp. 116 ff.). But at p. 51, apparatus criticus, of his

49 See, e.g., Lachmann, 1852, pp. 41 ff.; Mommsen, 1895, pp. 276-277 (= 1909, pp. 467-468). For the description of P and G, see the bibliography quoted above, footnote 35.
50 See Mommsen's (1895, p. 279, n.2 and 3 (= 1909, p. 471, n. 2 and 3)) convincing criticism of what Lachmann suggested, namely that the Pseudo Urbicus may have used an earlier commentary on Frontinus' work about surveying, and that Pseudo Urbicus also used a fuller version of of Urbicus' text. Mommsen, on the other hand, admitted that the anonymous commentator «hat auch Stücke gehabt, die uns fehlen»: against this suggestion, see Thulin, 1913 b, pp. 113-120.
edition of the Agrimensores, Thulin suggested that the name of Urbicus was given to this commentary by copyists, possibly because it ends with a passage from Urbicus' text. The second suggestion, in the light of what will be later observed about the framework of Frontinus' writing, seems to be more likely. The explicit of the section commenting upon Frontinus' "agrorum qualitates", and the incipit of the section dealing with land disputes show that it was simply called commentum, without any authorship. It is worth noting that this commentary composed post AD 438 or 535 (the supposed dates of issue of the collections of laws the anonymous commentator seems to be aware of: see Thulin, 1913 b, p. 113), takes the place of Urbicus' work On Land Disputes, together with the analogous section from the book of (the so-called 'first') Hyginus on land surveying, in the manuscripts of the Palatine family.

To summarize: a) the text of Frontinus' work on surveying which is in A is the earliest and most complete of the three classes of manuscripts; b) Frontinus' text in the Palatine family survives through the quotations of the anonymous commentary; c) both the Arcerian and the Palatine family do not offer any ground for putting headings at the beginning of each of the four distinct sections into which Frontinus' text may be divided.

D The framework of Frontinus' book on surveying

In his edition of the Agrimensores, Lachmann divided into two books the extant fragments of Frontinus. He had two arguments. The first is that in two manuscripts, one of the 'mixed class', F, f. 25v (after the section dealing

51 See p. 9, 12-13 La = 58, 14-15 Th: EXPLICIT COMMENTVM DE AGRORVM QVALITATE. INCIP. DE CONTROVERSIIS.

The author of this commentary is referred to by Lachmann simply as "der Commentator". His opinion about the relationship between Urbicus and the anonymous writer (on this point, see Mommsen, 1895, p. 279 n. 2 (= 1909, pp. 469-470, n. 2)), or about what should have been the authorship and title of this commentary in his edition, was never rendered explicit.

52 See Mommsen, 1895, p. 278 (= 1909, p. 469); Thulin, 1913 b, p. 111. Toneatto, 1983, pp. 43-44, with note 88, assumes that it is not beyond doubt that the anonymous commentator's literary activity made these texts disappear; according to this scholar, in fact "pour la tradition palatinienne s'impose le concept d'une agrégation progressive d'opuscoles".

In passing, it is worth noting that this anonymous compiler illustrated his work, for didactic purposes, with plans of surveyed land, colonies and other landscapes. These illustrations are referred to in the manuscript tradition (P, ff. 22r-26v; see also G, f. 36-37) as "Liber diaziographus". Such a collection of diagrams (figg. 42-67 La = 41-65 Th) took the place, in the Palatine family, of the miniatures accompanying Frontinus' text transmitted by the Arcerianus: they were possibly discarded as out of date.
with the 'art of surveying': see above C 1), the other of the second class, P, f. 50r, that is, the only fragment of Urbicus in the 'second class' of manuscripts (see above, C 2 a), there are mentioned, respectively, a Iuli Frontini Siculi (sic) liber primus and a liber Frontini secundus53. Such a division into two books seems to be confirmed, this is the second argument, by a passage of Urbicus whose main source, as Lachmann suggested, is Frontinus:

uno enim libro instituimus artificem, alio de arte disputauimus [...] et de adsignationibus et partitionibus agrorum et de finitionibus terminorum <h>actenus [...] meminimus: superest nunc ut de controversiis despiciamus. (p. 64,11-18 La=25,3-10 Th)

«In one book we instructed the artifex, in another book we debated about the artis; so far we have recorded allotments, land divisions and delimitations of boundaries: it remains now to look at land disputes».

Therefore, Lachmann was of the opinion that the first book of Frontinus' work about land surveying was devoted to the «institutio des Künstlers». In Lachmann's edition, the 'first' book corresponds to the section 'On the categories of land' and 'On land disputes' of the text of Frontinus transmitted by the manuscripts (pp. 1-26: see above, C 1). In addition, Lachmann believed that the 'second book' dealt with the «Kunst des mensors».

In his edition, this book is the product of a conflation of Frontinus' text transmitted by the manuscripts (Lachmann's section 'On boundaries', the same as the section 'On boundaries' and 'On the art of surveying' in Thulin's edition: see above, C 1) and the text of Urbicus, deprived of what Lachmann thought were Urbicus' own words (pp. 26,5-58,22) (see Lachmann, 1852, pp. 112-118). Furthermore Lachmann, on the basis of the inscriptio of P, f. 50r (quoted above: it is the only fragment of Urbicus, be it noted, in the Palatine family) came to the conclusion that the section dealing with this subject was the beginning of the second book of Frontinus' work on land surveying. In the second book, according to Lachmann's

53 E, f. 25v: IVLI FRONTINI SICVLI (sic) EXPLICIT LIBER PRIMVS.
P, f 5Or: EX LIBRO FRONTINI SECVNDQ. To these manuscript may be added N (London, BL Add. 47670), f. 24r: INCIPI LIBER IVLI FRONTINI SICVLI (sic) DE MENSVRIS DIVERSIS AGRORVM; f. 35v: IVLI FRONTINI SICVLI (sic) LIBER PRIMVS EXPLICIT FELICITER (it is a fragment of Urbicus' text attributed, again, to Frontinus: see Urb., p. 90, 3-21 La = 50, 5-51,3 Th). On N see Folkerts, 1969, pp. 63-64.
opinion, Frontinus dealt again, but in detail, with the technical nature of the land disputes (Lachmann, 1852, p. 114).

In a short passage, Mommsen criticized both Lachmann's suggestions (1895, pp. 278-279 and note 1 (=1909, p. 470 and n. 1)). On the basis of Mommsen's criticism and by a different interpretation of Urbicus' passage alluding to the division of a work into books, Thulin suggested that Frontinus might have written two distinct treatises: «ein Handbuch für die Ausbildung der Agrimensores: *Institutio artificis (?)*» (which is printed at pp. 1, 3-19, 8 of his edition, divided into those four sections already mentioned: de agrorum qualitate; de controversiis; de limitibus; de arte mensoria (or de scientia metiundi): see above, C 1). The second treatise should be identified with the «alius liber de arte» Urbicus alludes to. In Thulin's mind, this was possibly «eine ausführlichere Behandlung der Meßkunst *De arte mensoria* in sechs Bücher, die inhaltlich in drei Gruppen zusammengeführt werden». According to Thulin's suggestion, of this second, more detailed treatise written by Frontinus only the book dealing with land disputes has come down to us. It was because this part was used as his main source by Urbicus in his work on the same subject54.

First of all, it must be said that «alius liber» usually means «another book» of a series, not 'the second' of two books, which is *alter*. Moreover, one cannot exclude the possibility that the references of the manuscript tradition to 'book one' and 'book two' of the work written by Frontinus, may simply be what the copyists of the manuscripts of the second class and those of the 'mixed' class added to their copies. It is, in fact, worth just reflecting on the following facts. As already seen, a passage from Urbicus' text about the technical nature of land disputes was explicitly attributed to Frontinus by the anonymous commentator. We cannot therefore exclude the possibility that parts of Urbicus text, when used by this anonymous compiler, were already circulating under Frontinus' and not Urbicus' name. What is indubitable, is that the only extant fragment from Urbicus' work in the Palatine family is attributed to Frontinus (see above, C 2 a) and that in G, f. 16 the anonymous commentary begins with the heading AGGENI VRBICI. suscepimus [...]. One would therefore incline to think that Frontinus' text circulating under his own name, when the 'Palatine' collection was first

54 See Thulin, 1913 b, pp. 131-133. A similar hypothesis already in Thulin, 1910, p. 193. It has to be noted that Thulin followed, contrary to Mommsen's opinion, Lachmann's suggestion that Frontinus wrote twice about land disputes: see Thulin, 1911 d, pp. 132-133 n.2.
established, was supposed to be the 'first book of Frontinus'. On the other hand, the 'second book of Frontinus' were possibly those parts of Urbicus' treatise 'On land disputes' used by this anonymous commentator and no longer acknowledged as Urbicus' own words because this commentary replaced his work. The wrong indications of the Palatine family may have finally influenced the copyist of F, since, at f. 25v he wrote IVLI FRONTINI SICVLI EXPLICIT LIBER PRIMVS. But, on the basis of the scarce elements we have, it is difficult to prove whether the anonymous commentator was responsible for such a division of Frontinus' work into two books.

In Urbicus' passage quoted above, that Lachmann and Thulin suggested is referring to the original framework of Frontinus' book on surveying, there is not only a clear reference to two distinct «libri» but also the subject of these 'books', as already pointed out by these scholars, is different: one book deals with «giving skill to the trainee» (instituere artificem); the other with the substance of the surveying technique (ars). Now, «institutio» and «instruere» are concepts not foreign to Frontinus. At aq., 2, 3, for instance, he states that his book on the aqueducts:

[...] in primis ad meam institutionem regulamque proficiet [...] «(...) it will be helpful especially for my own instruction and rule»;

at aq.,119,3 Frontinus assumes that a curator has to be instructed «scientia peritorum sed et proprio usu» («by means of the skill of experts but also by an appropriate systematic exercise»). In his book on surveying Frontinus alludes also to the ars mensoria and its «guiding principle», connected with the «practical experience» («principium artis mensoriae in agendi[s] positum est experimento»: p. 31, 12-13 La = 15, 6-7 Th). But, as far as one is able to judge from the extant fragments of his treatise, which refers to the condition of land in the Roman Empire along with general principles about surveying technique, it does not seem that Frontinus sought to write a work based on two separate books (or sections): one dealing explicitly with the «instructing a craftsman»; the other with the theoretical principles of the «science of surveying the land». In fact, the form in which his work has come down to us never shows a separation between general information for his readers and those tasks which only a land surveyor should undertake. In addition, the sections of Frontinus' text which seem to deal in slightly more detail with the substance of surveying technique (for instance, where
he expounds the way of measuring the area of a terrain characterized by an irregular perimeter) are presented as instructions to his readers. On the other hand, Urbicus' expression, «disputare de arte», seems to be indicating his aim of expounding his own view of the general, theoretical principles of the «science of land measurement». In other words, Urbicus' passage quoted above seems to be addressing other land surveyors (or young trainees) rather than, as in the case of Frontinus' work, all kind of people interested in such questions.

55 For Mommsen's suggestion about the possible framework of Frontinus' book on surveying (de limitibus; de aororum qualitate; de controversiis) see Mommsen, 1895, p. 278, n. 1 (= 1909, p. 470, n. 1); see also Brugi, 1897, pp. 54-56. Against Lachmann's division of Frontinus' text into two books, see Fuhrmann, 1960, pp. 99-100, n. 3.
Chapter 2

THE RELIQVIAE OF FRONTINUS’ BOOK ON LAND SURVEYING

A The categories of land

As seems to emerge from the second part of the previous chapter, Frontinus' book on land surveying seems to be a substantially continuous epitome\(^{56}\) of his original work. A (the later part of the Arcerianus, but the earliest of the manuscripts transmitting Frontinus' text) gives, as far as one is able to judge, the most complete version of such an epitome. Also those 'fragments' represented by what the anonymous commentator drew from Frontinus' text seem to be based on a text not different from that transmitted by A. It is therefore quite clear that a study of this work of Frontinus is necessarily conditioned, to a large extent, by the circumstances of its transmission. Before any observation or conclusion about the surviving reliquiae of Frontinus' treatise, two preliminary points may be made:

a) we have only an epitome of the text of Frontinus, which could be something very far from what this author might actually have intended to write;

b) neither the epitome transmitted by A, nor other 'fragments' of Frontinus' text (if we leave aside Urbicus' treatise On land disputes regarded by Lachmann as largely based on the framework of Frontinus' book on surveying) seem to give any conclusive indication of what was Frontinus' original systematization of the subject.

As for Frontinus' text transmitted by A, there is no conclusive reason to maintain that the arrangement of the subject follows that of the original (fuller) text rather than that of a text already abridged. Moreover, one cannot assume that one in particular of the (three according to Lachmann; four according to Thulin) sections into which Frontinus' text can be divided is either the central or merely the introductory part of his treatise.

What seems to be an easier task is the distinction between parts of Frontinus' text which may have been manipulated (for instance, those technical sections where he deals with land measuring and types of

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boundaries) and parts which are probably original. The latter class is possibly represented by passages not immediately relevant, in Frontinus' text transmitted by A, because unclear to the mind of excerptors and copyists.

Consequently, if in the course of this discussion separate passages or sections will be recognized as parts of the original framework of Frontinus' treatise, it will be also possible to find a basis to argue what kind of arrangement he gave his work.

Among the writings of the Roman Agrimensores, (the so-called 'first') Hyginus' text is, chronologically, the closest to that of Frontinus. In Hyginus' work which has come down to us, two references to the internal systematization of the subject can be found, the first at p. 123, 16-18 La = 86, 17-21 Th:

hae[c] sunt condiciones agrorum quas cognoscere potui, nunc de generibus controversiarum perscribam, quae solent in quaestione<

deduci.

«These are the categories of the land that I could discover. Now I may write a full account of the types of land disputes, which are frequently brought for investigation».

The second reference is at p. 133, 17-18 La = 97, 9-11 Th:

de iure territoriorum paene omnem percunctationem tractauimus, cum de condicionibus generatim perscriberemus.

«We made an almost full discussion about the 'law of territory', when we were illustrating in detail the categories of land».

These passages indicate that the arrangement of the main section of (the so called 'first') Hyginus' text transmitted by the manuscripts is similar to that which Lachmann and Thulin suggested for Frontinus' work on surveying: de limitibus, de condicionibus agrorum, de generibus controversiarum57.

Very interesting also is what Urbicus says in a passage from his treatise about land disputes:

57 (The so-called 'first') Hyginus is the only author among the Agrimensores who explicitly refers to the various chapters of his book, and not simply to text sections.
We may now start dealing with any kind of disputes occurring in any kind of land mentioned earlier.

Also in Urbicus' book, therefore, all various types of land disputes are illustrated only after different kinds of land on which a controversy may occur have been illustrated. This seems to be confirmed also by the 'deductive', so to speak, beginning of Urbicus' book. It starts, in fact, from the description of the earth's shape, where he mentions the ager populi Romani, cuius controversias generaliter exequi proposuimus (p. 62,12-14 La=22,32-33), «whose land disputes we have decided to expose in a general way»)

Because of the lack of any inner reference in the text of Frontinus which has come down to us, important elements can be discovered only by means of an accurate analysis of the 'reliquiae' of his book on surveying.

This investigation is aimed, first of all, to ascertain whether Frontinus' book was provided with any general preliminary part dealing with the various types of land of his own time connected, as in (the so called 'first') Hyginus' and Urbicus' handbooks, with the description of the controversies which may occur on such land. In the second place, it is worth checking to what extent (the so called 'first') Hyginus and Urbicus were influenced by the (original) framework of Frontinus' handbook. Thirdly, to what extent has Urbicus' work been influenced by that of Frontinus and did the latter hold a special position among the Agrimensores of the Empire, whose writings have come down to us?

The text of Frontinus' epitome, as transmitted by A and by his anonymous commentator, begins with a well-known description of three types of land:

agrorum qualitates sunt tres: una agri diuisi et adsignati, altera mensura per (perea A) extremitatem (extremitates P) comprensae, arcifini (arcofini A), qui nulla mensura continetur (contenetur A).

ager ergo diuisus adsignatus est coloniarum. Hic habet condicioes duas (duas sscr. A): unam qua (que A) plerumque limitibus continetur, alteram qua (que A) per proximos possessionum riores adsignatum (assignata est

58 See also p. 63, 23-26 La = 24, 13-16 Th. See also further discussion in Chapter 2.
There are three categories of land: the first (is that) of land divided and allotted; the second (is that) of the land contained in a survey of the outer edge; the third (is that) of the land which is not contained in a survey [ager arcifinius]. The land which has been divided and allotted is (that) of the colonies. Such land has two (technical) features. The first is that, generally⁵⁹, this land is contained within limites; the other is that the land is allocated according to the closest straight line boundaries [rigores] of the adjoining properties, as it is in Campania, at Suessa Aurunca. Any land which has been bounded lengthwise according to this kind of survey is called 'by strigae'; any bounded breadthwise, 'by scamna'. Therefore, land which has been surveyed the way here illustrated⁶⁰, is bounded by decimani.

⁵⁹ Mommsen, 1892, p. 85 n. 4 (= 1908, p. 90 n.4) suggests to delete plerumque.
⁶⁰ According to Hinrichs, 1974, «hac similitudine» should be deleted; but it refers, like the
and kardines. Land by strigae and scavna has been divided and allocated according to long established custom, as here illustrated, in the way in which, in the provinces, arua publica (public arable land) is cultivated.

It is the 'land contained in a survey' [ager mensura comprehensus] when its complete area has been assigned to a community as, for instance, in Lusitania, to the Salmanticenses or, as in Hither Spain to the community of Palentia and in many (other) provinces the land subject to taxation has been granted, by surveying its outer boundary, to commonwealths on the basis of the entire area.

Land belonging to private individuals is surveyed according to the same system. In several places the surveyors, although they have established its outer boundary by survey, recorded this land on the map in the form of centuriated land.

Arcifinius is land which is not contained in any survey. It is bounded, according to an ageold practice, by rivers, ditches, hills, roads, trees planted at an earlier time [arbores ante missae], watersheds and if by any chance places could be officially acquired by a landowner earlier. In fact, as Varro says, ager arcifinius has been given its name from the idea of 'driving away the enemy' [arceo]. Afterwards, this land started to acquire boundary markers, because of the occurrence of legal controversies, in those places where it comes to an end. In this type of land rights relating to subseciva have no place».

It may be noted, firstly, that the technical terms contineo/comprehendo is used by Frontinus seven times. Since it does not seem to be a consequence of the copyists' choices, it follows that it was Frontinus' aim to make it clear to his readers that land contained in a survey has to be kept distinguished from that provided only with boundary markers «in those places where it ends».

Secondly, it is worth noting that (the so-called 'first') Hyginus (p. 115, 21 La = 78, 24 Th; 123, 16 La = 86, 17 Th) and Siculus Flaccus (p. 134, 16 La = 98, 8 Th and passim), unlike Frontinus, use the term condicio to underline what is the distinguishing juridical and administrative characteristic of agri uiritim diuiisi et adsignati (land allocated to individuals), agri quaestorii and, finally, agri uectigales. According to Hyginus and Siculus Flaccus, in fact, each of these three types of land is characterized by its own map (forma)

following «in hac similitudine», to the diagrams accompanying the Latin text.
and *lex agrī*, which prescribes what kind of title one can claim on these *agri*.

But, in the passage quoted above, Frontinus seems to be leaving out of consideration any particular kind of map (connected with a *lex agrī*), but to focus his attention on cases when an area of territory is, or is not, provided with a *mensura*⁶¹.

It follows that Frontinus seems to be deeply interested in illustrating which is the land provided with a survey, rather than what kind of survey may call his readers' attention to the juridical categories of land in the early Roman Empire. As already seen, he uses a technical term, *qualitas*, for the three categories of land he illustrates; whereas *condicio*, in his terminology, simply refers to the technical system of surveying which may characterize either type of land surveying which typifies the first *qualitas* (or category of land) he mentions. In other words, *condicio* does not refer to the legal status of this land. Nipsus, a Roman surveyor of uncertain date, seems to have followed Frontinus' terminology when he affirms that *non una species agrorum adsignatorum est* (p. 293, 8-9 La), «land which has been allocated has not just one type».

It is, therefore, only by the use or lack of any kind of survey that one is made able, in Frontinus' view, to understand what kind of land has been recorded on a map or any other kind of written document.

Consequently, if the previous remarks are correct, one cannot regard, contrary to Rudorff's, Mommsen's and Weber's suggestion, Frontinus' categories of land as the basic system to distinguish the legal and administrative condition of landed property in the Roman Empire⁶².

If this is true, it follows that Frontinus probably paid very great attention to the different practical applications of «mensura». In particular, land the perimeter of which is surrounded by measured lines is opposed to land which is not contained by any survey, that is to say, *ager arcifinius* (see p. 1, 5 and 5, 6 La = 1, 5 and 2, 8 Th)⁶³.

Such land, in fact, is characterized by boundary markers placed «where it comes to an end» and not where the lines of the survey or the centuriated grid converge; it is not contained by *lines*, but by 'natural' or 'artificial'

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⁶¹ For the technical nature of *mensura*, see Balb., p. 94, 9-10 La; for the rational measurement of land, see pp. 98-99 La. See also Front., *agr:qual.*, p. 31, 12 ff. La = 15,7 ff. Th.
⁶² See Rudorff, in Lachmann, 1852, p. 284; Weber, 1891, pp. 12-13; Mommsen, 1892, pp. 79-90 (= 1908, pp. 85-95). Also Brugi, 1897, pp. 101-108, does not pay any attention to the technical difference between *condicio* and *qualitas* in the corpus Agrimensorum.
⁶³ See Mommsen, 1892, pp. 86-87 (= 1908, p. 92).
elements of the landscape.

It is also worth noting that, contrary to «ager diuisus adsignatus» and «ager mensura per extremitatem comprehensus», for the third qualitas Frontinus speaks of «agri arcifinii» (see p. 12, 4; 13, 3; 24, 4 La = 5, 6; 5, 12-13; 10, 5 Th). One might incline to think that the third type of land, in Frontinus' view, cannot be reduced to a general kind of land but is, so to speak, made up of all sorts of single agri arcifinii.

Mommsen suggested (1892, pp. 86-88 (=1908, pp. 91-92)) that ager arcifinius in Frontinus' passage corresponds to ager publicus. But what seems to be beyond doubt is only that Frontinus' third category of land does not seem to be under the jurisdiction of any municipality, either in Italy or in the provinces. This is why, possibly, Frontinus states that in the ager arcifinius, unlike (probably) the two previous categories, «rights relating to subseciva have no place».

In a later passage Frontinus says that agri arcifinii, although characterized by no mensura, have to be thought of as contained by a curving line, called flexus (p. 12, 4-5 La = 5, 6-7 Th). Balbus, a Roman surveyor (probably) of the second century AD (see Chapter 6), uses the same terminology:

flexus, quidquid secundum locorum naturam curatur, ut in agris arcifinii solet. (p. 98, 8-9 La)

«'Windings' (are) whatever (outer boundary) curves according to the nature of the places, as happens in the agri arcifinii»;

flexuosa linea est multiformis, uelut aruorum aut iugorum aut fluminum; in quorum similitudinem et arcifiniorum agrorum extremitas finitur. (p. 99, 6-9 La)

«A curving line is multiform, as (it is that) of the arable land, of the slopes or rivers; the outer boundary of the agri arcifinii is delimited like these».

In the light of what has been observed so far, it seems that Frontinus' reference to boundary markers, placed in «agri arcifinii» because controversies between neighbours began to occur, and to a sort of system to determine the outer boundary of such land was aimed to connect the general illustration of the categories of land, which opens his book on surveying, with his discussion about land disputes.
Now, it is also worth examining what is the use of the term *qualitas* in the other Agrimensores.

*Qualitas* is used twice by Siculus Flaccus:

(in case the trees fencing the properties of two neighbours are similar)

\[\text{differentiae [ae] qualitatum indicio erunt}. \] (p. 144, 11 La = 108, 10-11 Th)

«The differences of the type of land will be the proof»;

\[\text{ita et ex ipsius loci qualitate alicuiud colli gi potest. si enim non sit a ger saxu osus [...]}. \] (p 149, 16-17 La = 113, 17-18 Th)

«In this way also from the peculiar aspect of the place itself something may be understood, for instance, whether the land is rocky».

The term *qualitas* is also used by the author of the short treatise, to which Lachmann, the first editor, gave the title *agrorum quae sit inspectio* (see Chapter 1):

\[\text{nam de qualitatibus (aequalitatibus La.), antiquitati<s>, possessionibus, territori<s>, terminibus, signis et similibus considerandum est [...]}. \] (p. 283, 7-9 La = 77, 3-5 Th)

«And then one has to pay attention to the distinctive nature, age, titles, territories, boundaries, markers of land and the like [...]»;

\[\text{qualitas in has species diuiditur, ut extremitati<s> concludentibus aut quadrata sit aut circa flexa aut cuneata aut triangularis aut modo curuis anfracta in flexuram, modum in rectum dirigentibus lineis porrecta, modo artiore[m] latitudine[m] longior, modo minore[m] longitudine[m] prolixior, quorum plera<s>que mensuris comprehenduntur.} \] (p. 283, 12-17 La = 77, 8-14 Th)

«The distinctive nature (of the land) can be classified according to the following types: if, for instance, when its outer boundaries are consistent, it is square, or curved all around, or wedge-shaped, or triangular, or now twisted into a curve because of its turning, now longer by a shorter breadth, now more extended by a shorter length. Most of such (types) are contained in a survey».

The term *qualitas* is used twice also by Urbicus:
Therefore, since we referred to land disputes, now we shall discuss how many parts and kinds of ownership they can be classified into, or also what kinds of forming parts they have;

et ita [ae]qualitatem diuersam diximus solo applicat, ut plerumque euenit <ut> ex prato siluae aliquid adiungatur aut ex silua fine distincto adplicetur ad pratum, et similiter per alias agrorum qualitates.

((the disjunctive outcome of a dispute is when the determination of the boundary splits the soil of one or other of the contending parties) and hence connects different categories of land to dissimilar types of terrain, as very often happens when a portion of meadow is attached to a wood, or a part of a wood, when its confines have been marked, is attached to a meadow. And in the same way over the other categories of land».

Finally, qualitas is used also by the anonymous commentator upon Frontinus' book on surveying and by Balbus. The former uses this term three times:

Can we possibly regard the whole world or a whole province as (having) the intrinsic quality of a single (parcel of) land, which is divided?;

As soon as the characteristic nature of (single) areas has become known;

In fact, when (Frontinus) illustrates only the intrinsic qualities, or rather measures, of an area (of land).

Qualitas and condicio are mentioned together by Balbus as a part of the agrimensor's knowledge:
occupatus, species qualitates condiciones modos et numeros excussi. (p. 93, 13-15 La)

«And therefore I inquired, as far as I was able, busying myself with that, into concepts, peculiar nature, categories, proportions and measures of what deals with our professio».

From these passages it is clear that qualitas, in most of the authors mentioned before, is not a technical term stricto sensu. They use this term to indicate, in general, the distinguishing nature of the objects they are talking about. Only the author of the short exposition entitled agrorum quae sit inspectio seems to be of the opinion that qualitas of a land is explicitly connected with the geometrical nature of its boundary lines.

* * *

Now, it is true that qualitas, which is only in the 'first section' of Frontinus' treatise, does not refer to any specific aspect of the 'science of land measurement'. Nevertheless, it is clear that such a term, in Frontinus' terminology, is used by him to call his readers' attention to what kind of survey has been used to enclose land, and is therefore characteristic of an area of territory or, as in the case of the ager arcifinius, is not. As we have seen, Frontinus' anonymous commentator, in fact, seems to be referring to superficiales qualitates he found in his main source as if they were the equivalent of mensurae.

It follows, if the previous remarks are true, that in Frontinus' view any discussion about legal aspects of categories of land, in contrast to the section dealing with land disputes, was not immediately relevant. One may suggest that any kind of firm conclusion is impossible because of the present condition of Frontinus' work on surveying, a résumé rather than a complete text. Nevertheless, it seems more likely than not to suppose that the excerptors' skill was not so developed as to change completely the contents of large sections of Frontinus' work.

On the other hand, it is worth noting that the term condicio is used by Frontinus several times. In addition to the passage quoted earlier (pp. 1,3-6, 4 La = 1, 3-2, 15 Th), where condicio is used twice, we find the same term also at p. 8, 1 La = 3, 6 Th:

est et ager similis subsiciuorum condicioni [...].

«There is also a category of land which has the same sort of character
as the *subsiciva*;

at p. 9, 3-6 La = 4, 3-5 Th:

> sed quoniam in his quoque partibus singulae controversiae diuersas habent condiciones, proprie sunt nominandae.

«*since even in these parts (scil. finis/locus) individual controversies have a different character, each one of these must be properly defined*»;

at p. 11, 3 La = 4, 20 Th:

> de rigore controversia est finitimae condicionis (finitimae condicionis scil. La) [...] 

«*A controversy about a rigor (a straight line boundary) has a nature which is near to that of the (dispute about) finis*»;

at p. 16, 5-6 La = 6, 15-16 Th:

> de alluione [...] controversia multas habet (habent La) condiciones.

«*A dispute about alluvial land has many conditions*»;

at p. 18, 1-2 La = 7, 5-6 Th:

> de iure territorii controversia [...] habet autem condiciones duas, unam urbani soli, alteram agrestis

«*A dispute about the law of the territory [...] has two conditions: one (when it relates to) the land of urban centres; the other to land in the countryside*»;

at p. 21,4-6 La = 8,20-9,2 Th:

> nam et coloniarum aut municipiorum similis est condicio, quotiens loca, quae rei publicae data adsingta fuerint, ab aliis obtinebuntur, ut subsiciua concessa.

«*Similar is the position of colonies or municipia every time that other people assume ownership of areas which have been given and allocated to the res publica, as if they were subsiciva granted to them*»;

and, finally, at p. 26, 5-6 La = 14, 22-23 Th:

> sunt et aliae limitum condiciones, quae ad solum non pertinent
There are other categories of *limites*, which do not deal with land.

The term 'condicio', in all these passages, has a broad meaning. In fact, also in the first and sixth piece from Frontinus' epitome such a term is vague: it does not seem to be referring to the legal conditions of the land in the Roman Empire, but is still about land measurement. It is therefore difficult to agree with Mommsen, when he points out that «vielmehr geht er (Frontinus) aus von der Verschiedenheit des Bodeneigenthums und nimmt nur bei dessen Entheilung Rücksicht auf die mensurischen Acte»

In fact, there is no element to suggest that in any section of his work on surveying Frontinus talks about or alludes to the connection between systems of land surveying and conditions of land ownership. On the other hand, there are indications that he did not follow such a technical criterion for classifying land.

For instance, when illustrating the *qualitas* of the «ager mensura (per extremitatem) comprehensus», Frontinus specifies that «land belonging to private individuals is surveyed according to the same system». One has therefore to come to the conclusion, as already convincingly argued by Brugi (1897, p.105), that in Frontinus' view public land does not differ from private land, as far as the surveying system connected with the second land-category is concerned. This is, in fact, a consequence of his system of classifying the land: an arrangement which basically takes into account the way an area of territory has been surveyed.

When commenting upon the system of surveying land by *strigae* and *scamna*, in relation to the first category, that of the colonial land which has been «divided and allocated», Frontinus mentions Suessa Aurunca. Soon after he goes on to say that also «public arable land (*arua publica*)» in the provinces is divided and allocated in the same way, «according to long established custom». It is plain that Suessa Aurunca is an example any of Frontinus' readers could understand. One has therefore to explain why Frontinus, in his discussion, also refers to provincial practice (without mentioning any colony, be it noted).

According to Weber (1891, pp. 27-29), Frontinus (p. 3, 6-4, 2 La = 1, 14-16 Th) refers to public land in the provinces, which is not *ager optimo iure privatus*, subject to taxation. He bases his argument on a passage of (the

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64 Mommsen, 1892, p. 82 (= 1908, p. 88).
65 On Suessa Aurunca and its settlement according to the *Libri coloniarum*, see Pais, 1923, pp. 245-246.
so-called 'second') Hyginus, according to which provincial land subject to a vectigal should be surveyed by strigae and scamna (p. 204, 16 ff. La = 167, 17 ff. Th).

According to Mommsen (1892, p. 86 = 1908, p. 92), Frontinus alludes to provincial land surveyed by strigae and scamna «weil es damals ager publicus in Italien im wesentlichen nicht mehr gab». As already seen, Mommsen also suggested, without proving it, that Frontinus' aper arcifinius may be identified with the aper publicus belonging to the Roman people. Consequently, following Mommsen's idea, we should assume that Frontinus deliberately failed to engage in any discussion about aper publicus, although he had two opportunities to do so.

On the other hand, it is worth emphasizing that Frontinus' reference to the Roman people's capacity as possessor of public land is explicit at p. 8,2; 4-5 La= 3, 7-8; 10 Th. It may also be noted that he seems to consider as similar the Roman people's, or a colony's or a municipality's right of possessing «public areas». This is the only kind of land, in Frontinus' exposition, which seems to be close to the nature of aper publicus:

de locis publicis siue populi Romani siue coloniarum municipiorumue controversia est, quotiens ea loca, quae neque adsignata neque uendita fuerint <um>quam, aliquis possederit; ut alueum fluminis ueterem populi Romani [...] aut siluas, quas ad populum Romanum multis locis pertinere ex ueteribus instrumentis cognoscamus, ut ex proximo in Sabinis in monte Mutela. (p. 20, 7-21, 3 La = 8, 12-20 Th)

«A controversy dealing with public areas belonging either to the Roman people, or a colony, or a municipality occurs when someone possesses these areas, which have never been allocated or sold. It is the case of an old river bed belonging to the Roman people [...] or those woods which in many areas we know from ancient records belong to the Roman people, for example, nearby in the Sabine region at mount Mutela».

This passage does not give any direct or indirect indication that in Frontinus' mind arua publica in prouinciis alludes to provincial land which belongs, as aper publicus, to the Roman people, and not simply to land belonging to a colony or a municipality.

On the contrary, it may be shown that Frontinus was indubitably able to indicate more precisely, if he needed to, who was entitled to 'possess'
«arua publica» in the provinces or «ager arcifinius».

As already noted, in Frontinus' section dealing with the first category of the land parcelled and allocated (either by limites, or by strigae and scamna), there is no reference to any colony in the provinces. Of course, Frontinus' silence may be due to the conditions of the text which has come down to us. But, although it cannot be proved, it may be due to the fact that, in his mind, there was no need to differentiate between Italy and the provinces as regards the system of surveying land by means of limites or strigae and scamna. The reason may be that both ways of surveying land, from his technical angle, compose one system, on which was based the practice of land measurement Rome used in Italy and in the provinces.

If the previous observation is right, it follows that what may be regarded as the main trait of Frontinus' work on surveying is to point out the relation, in practical experience, between the two fundamental components of the 'art of land measurement': 'Grenzfeststellung' and 'Bodenteilung' (on these concepts, see Mommsen, 1892, p. 79 (= 1908, p. 85)).

The second passage which is commonly interpreted as referring to a particular kind of provincial land on which a tax was levied (ager stipendiarius or tributarius) is the a qer mensura conprehensus:

ager est mensura conprehensus, cuius modus uniuersus ciuitati est adsignatus, sicut in Lusitania Salmanticensibus aut Hispania citeriore Palantinis et in conpluribus provinciis tributarium solum per uniuersitatem populis est definitum (translated above).

At the very beginning of this fragment, dealing with his second category of land, Frontinus states that «land contained in a survey» is that «whose entire area has been assigned to a civitas». Soon after, by means of sicut, used also earlier to introduce the example of Suessa Aurunca, Frontinus mentions Salmantica in Lusitania and Palantia in Hither Spain. Only in one other case does Frontinus use the verb definire (p. 30, 14 La = 13, 20-14, 1 Th):

hi duo fundi iuncti iugerum definiunt.
«These two fundi joined together make (the area of) a iugerum».

66 See Weber, 1891, pp. 43-45; Mommsen, 1892, p. 88 (= 1908, p. 93).
The term 'uniuersitas' occurs twice in Frontinus' epitome:

huic enim uniuersitati (the portions of an allocation) limes finem non facit, etiam si publico itineri seruiat.

«A dividing strip (limes) does not represent (in a centuriated grid) a boundary for the whole area of such an allocation, even if it serves a public right of way» (p. 14, 5-6 La = 5, 21-22 Th);

solum autem quodcumque coloniae est assignatum, id uniuersum pertica appellatur: quidquid huic uniuersitati adspicitum est ex alterius ciuitatis fine [...] praefectura appellatur.

«But whatever land has been allocated to a colony is, in its entirety, called pertica: whatever is added to this entire area of land from the territory of another municipality is called praefectura».

These examples, where Frontinus seems to use a very vague technical terminology, do not help to make clearer his words about «ager mensura comprehensus». But they seem to indicate that Frontinus' terminology cannot be considered, from a technical angle, as a specific and systematic one. In particular, it is far from being safe and undisputed, as already seen, that Frontinus uses a specific technical terminology drawn from the Roman administrative system.

What seems to be clear is that «ager mensura comprehensus» is a technical concept which concerns provincial land, the perimeter of which has been surveyed, allocated to a ciuitas or a populus. These may be either provincial municipalities already settled, or communities where no municipal organization seems to have been created. In both cases, probably, the system to which Frontinus refers was used in connection with the procedure to determine definitely territorial possessions in order to avoid boundary disputes (see Chapter 5).

If the previous remarks are correct, the most economical explanation is that Frontinus was not deeply interested in connecting what were the technical aspects (practical and theoretical) of land measurement with the system of land administration in the Roman Empire. He simply lists practical examples which are the most representative of the land categories he is illustrating. Both the first and the second land-category, in fact, describe the operations of either land division or boundary settlement connected with the settlement of municipal organizations in Italy and in the provinces. We
have, therefore, to come to the conclusion that Frontinus' exposition followed a precise order: it is only under the first two categories that all land characterized by a survey, in Italy and in the provinces, may fall.

Frontinus' description of the third land category, «ager arcifinis», ends with the short remark «in his agris nullum ius subsiciuorum interuenit». It means that only in «land with no measured boundary (ager arcifinus)» «rights relating to subseciva have no place». We may therefore deduce that «ius subsiciuorum» has a place only in the first two land categories illustrated by Frontinus.

There follows Frontinus' technical explanation of what is a subsecivum and what is «ager similis subsiciuorum condicioni extra clusus et non adsignatus» 67.

According to Frontinus' text which has come down to us, subsecivum is

\[
\text{quod a subsecante linea nomen acceptit [subsecium], subsiciuorum genera sunt duo: unum, quod in extremis adsignatorum agrorum finibus centuria expteri non potuit; aliud genus subsiciuorum, quod in mediis adsignationibus et integris centuriis interuenit. quidquid enim inter IIII limites minus quam intra clusum est (quam—est secl. Mommsen) si (si secl. Thulin) fuerit adsignatum, in hac remanet appellacione, ideo quod is modus, qui adsignationi superest, linea cludatur et subsecetur, nam et reliquirum mensurarum actu quidquid inter normalem lineam et extremitatem interest subsiciuun appellamus. (p. 6, 5-7, 8 La = 2, 16-3, 5 Th)}
\]

«An odd portion of land (subsecivum) is whatever derived its name from the line (of the survey) cutting it out. There are two kinds of subseciva: one, when on the outer boundaries of land (divided into plots and) marked as individual property a centuria was not able to be completed. The second type of subsecivum is which occurs in the very middle of allocated lands and within completed centuriae. For, whatever parcel of land between four limites has a smaller area than that (of the plot) which is enclosed (in these limites), even if it has been allocated, retains the name subsiciuum, because the area which has been left over from the allocation is marked off and cut out by a line. In addition, in the process of other measurements, we call subsecivum whatever land lies between right-angled lines and the outer

67 Frontinus' explanation of what «ager extra clusus» is (p. 8, 7-9 La = 3, 13-15 Th) is regarded as a gloss by Mommsen, 1892, p. 84, n. 2 (= 1908, p. 90, n. 2).

68 Hinrichs' suggestion (1974, pp. 131-132) of three types of subsecivum is on a weak ground.
The peculiar characteristic of "ager similis subsiciuorum condicioni extra clusus et non adsignatus" ("land similar to subsecivum, not enclosed and not allocated") is the "law relating to subsecivum", to which this land is subject. Frontinus specifies that

"If such land has not been granted to the res publica of the Roman people or to that of the colony by whose boundary it is indeed surrounded, or to the res publica of a native city, or to sacred and religious places, or to those which belong to the Roman people, by the law relating to subsecivum it remains under the control of the person who had the right to allocate it".

Frontinus refers again to both types of land in the section of his treatise which is devoted to land disputes:

"A controversy about subsecivum arises when a portion or the whole centuria has not been allocated, but someone possesses it. In addition, if the nearest landowner or someone else occupies any land from the edge of the assigned area, this also falls under the category of disputes dealing with subsecivum";

"A controversy about loci relictis and extraclusis controversia est in agris adsignatis. Relicta autem loca sunt, quae siue locorum iniquitate siue arbitrio conditoris [relictâ] limites non acceperunt. Hæc sunt iuris subsiciuorum. Extraclusa loca sunt æque iuris subsiciuorum, quae ultra limites et intra finitimam lineam erint; finitima autem linea aut mensuralis est aut aliqua observatio aut terminorum ordine seruatur. Multis enim locis adsignationi agrorum inmanitas superfuit, sicut in Lusitania finibus Augustinorum." (p. 21, 7-22, 54)
La=9,3-12 Th)

«A dispute about areas which have been left out and excluded from the centuriation occurs in allocated lands. Areas which have been left out are those which because of the roughness of the terrain or the decision of the founder did not receive limites. These areas come under the law relating to subseciva. Excluded areas, which also come under the law relating to subseciva, are situated beyond the limites, but inside the outer boundary line (of the whole centuriated area). This boundary line is either measured or marked out by some perceivable points or a line of boundary marks. Indeed, in many regions a large amount of land was left over from the allocation of plots, for instance, in Lusitania in the territory of the colonists of Augusta (Emerita)».

It may be noted, first, that Frontinus actually treats again, in a different section (not necessarily the second book, as suggested by Lachmann 1852, p. 114) of his work, some of the technical subjects he deals with in his general introduction to the «categories of the land». Moreover, both subseciva and «land similar to subsecivum, not enclosed and not allocated» are, in Frontinus' view, to be regarded as a kind of land closely connected with areas which have been centuriated. Therefore, although Frontinus says that «ager similis subsiciuorum condicioni» is still «under the control of the person who had the right to allocate it» (in all likelihood, the emperor), there is no evidence to maintain that such land is what survives of the ager publicus populi Romani.

We may therefore suspect, although it cannot be proved, that the opening section (about the «categories of land») in Frontinus' book on surveying was intended to illustrate to his readers which is the land where controversies may occur and what are the «legee agrorum» (for instance, «ius subsiciourum») marking the legal condition of areas not characterized by any 'Bodenteilung'. It does not seem to be a simple consequence of the manuscript tradition that the general category of «ager similis subsiciuorum condicioni extra clusus et non adsignatus» is replaced by «loca relictia et extra clusa» when Frontinus refers to the concrete cases of «areas» (loca, not «ager») where a dispute connected with this kind of land may occur.

As seen, Frontinus' discussion about the technical nature of subsecivum and that of «ager similis subsiciuorum condicioni» follows his allusion to «ius subsiciourum» on «ager arcifinius». Because of such a logical
succession of technical arguments, there is no reason to doubt that this probably was the original arrangement of Frontinus' book on surveying.

B Frontinus' list of land disputes

Both Frontinus and (the so-called 'first') Hyginus devoted a section of their work on surveying to the treatment of what kind of land disputes may arise from land. Contrary to the former's list of (fifteen types of) controversies, that of the latter is limited to only six controversiae, listed and illustrated in alphabetical order.

Much closer to Frontinus' than to Hyginus' framework is Urbicus' treatise about the technical nature and substance of land disputes, and, of course, the anonymous commentary upon Frontinus' text dealing with controversiae69.

Now, Hyginus' description of (six types of) land disputes is indubitably connected with his earlier discussion about the peculiarities of land in the Roman empire. The controversia de iure territorii, in fact, is illustrated by Hyginus (contr.agr., p. 133, 17 La = 97, 10-11 Th) «as we have been illustrating in full detail the conditions of the land», not in the section of his work dealing with land disputes. In his view, therefore, a detailed account of the main land disputes of his own times is a sort of logical supplement to the previous section dealing with the technical and legal conditions of land which has been sold (agri quaestorii); of land divided and allocated (agri diuisi et adsignati); of land subject to a rent (agri uectigales).

Urbicus' discussion also of individual land disputes is prefaced by his explaining, probably following a previous source, what were the condiciones possidendi («conditions of possession») in Italy and in the provinces and why they were different.

The most important purpose of a study dealing with the nature of the Agrimensores' land disputes and the way Frontinus approached them is, first of all, to check whether Lachmann's suggestion about Urbicus' source is still likely. As already seen, he was of the opinion that many passages from Urbicus' work «On land disputes» can be used to fill out the extracts from corresponding sections of Frontinus' epitome transmitted by the manuscripts. Such a study has to take into account to what extent Frontinus

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69 See Hyg., gen.contr., p. 123, 16- 134, 13 La = 86, 20-98,5 Th. For Urbicus (p. 59, 4-90, 21 La = 20, 5-51, 3 Th) and Ps. Urbicus (p. 9, 14-26, 25 La = 58, 17-70, 34 Th), see Chapter 3. In general, see Brugi, 1897, pp. 193-219; Hinrichs, 1974, pp. 95-99; 171- 234.
may have influenced the Roman Agrimensores who wrote after him; how his text was used by them and transmitted.

The section of Frontinus' work on surveying which may better help to answer this question is that devoted to land disputes. As seen in the previous chapter, we may suppose there is a probable connection between Frontinus' description of the categories of land (qualitates) and the following illustration of land disputes. Such a connection is explicit in the works of (the so-called 'first') Hyginus and Urbicus.

First of all, it may be noted that Urbicus' (and Frontinus' anonymous commentator's) systematization of land disputes is based, to a large extent, on the number and names of the controversies which are found in Frontinus' epitome.

One has, therefore, to conclude that this section of Frontinus' work on surveying was regarded as the most exhaustive, although it cannot be proved whether he was the inventor of such a list, or whether he drew it from earlier literature. Consequently, one may also suspect that Frontinus' illustration of land disputes, although the original text was indubitably shortened, has come down to us without any substantial alteration in its framework because it was considered as a standard list. This seems to be the basic consideration in order to come to further conclusions, chiefly based on the order and substance of Frontinus' text.

A preliminary, broad introduction to the subject introduces Frontinus' discussion about the technical character of fifteen different types of land disputes as in the case of his categories of land. After a general statement about the materiae (causes and substance) of disputes arising from land, Frontinus lists fifteen types of controversiae, of which he later gives a detailed picture. A sixteenth dispute, «de arborum fructibus» (p. 25, 1-26, 2 La= 10, 14-18 Th), neither in Frontinus' basic list of disputes nor in Urbicus' (or Frontinus' anonymous commentator's) text, was possibly misplaced by an excerptor of Frontinus' text.

Frontinus' 'introduction' to the technical nature of each controversy runs as follows:

materiae controversiarum sunt duae, finis et locus, harum alterutra continetur quidquid ex agro disconuenit, sed quoniam in his quoque partibus singulae controversiae diversas habent condiciones, proprie sunt

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70 On these aspects, see Brugi, 1897, pp. 193-194.
The essential matters of land disputes are two: the boundary and the site. Any disagreement arising from land is confined to one of these. But since even in these parts (scil. finis/locus) individual controversies have a different character, each one of these must be properly defined. As far as I have been able to master, there are fifteen types of dispute, concerning: the position of boundary markers, straight line boundaries (rigores), (other) boundaries, site, area, land ownership, land possession, alluvial land, law of territory, subseciuis, public areas, areas not enclosed (in a grid), sacred and religious areas, control of rain water, rights of way.

As Brugi rightly remarked (1897, pp. 193-205), it is clear that Frontinus' source, in this section, cannot be a list determined by the law in force. Nor does Frontinus seem to have dealt again with the same subject in any section of the text on surveying which has come down to us.

Frontinus' attention is focused again on the main technical, rather than legal, aspects of land disputes. As we have seen in the passage quoted above, each controversia is connected to one or other substance: finis or locus. Therefore, although the term ius is used eleven times in this section (let alone the glosses), Frontinus' aim does not seem to be a discussion about the relationship between the technical nature of a dispute and the type of procedure one has to follow to settle it. In fact, as rightly underlined by Brugi (1897, p. 205), none of the Agrimensores who wrote about land disputes, when he refers to a matter dealing with «ius ordinarium» («the law in force»), goes into further details, if this, and not the intervention of a surveyor, is the only remedy to settle a disagreement.

In contrast to Urbicus, as will be seen, Frontinus' discussion of the basic points of difference between individual disputes does not start from a strictly technical terminology. This seems to corroborate the suggestion that also the section about land disputes was written by Frontinus for a large number of readers: those who were experts and those who were not aware even of the «two essential matters of land disputes». That is why Frontinus
states that «each one of these (disputes) must be properly defined».

In other words, Frontinus' list of controversiae was not intended to be, in the first place, a full collection of technical and legal advice for land surveyors only. The term mensor, mentioned twice (p. 10, 4 La = 4, 15 Th; p. 24, 3 La = 10, 3 Th) in this section, seems to be the person whose technical intervention was needed to implement, through his direct technical inspection, the legal terms by which a particular disagreement ought to be settled. But he is definitely not the person Frontinus' discussion about controversiae was explicitly written for, like the illustration of land disputes written by (the so-called 'first') Hyginus and Urbicus (and, to a certain extent, Siculus Flaccus).

Basically, land surveyors could easily learn, from Frontinus' work, in which cases their technical skill was necessary to determine a land dispute. Landowners and magistrates also, for instance, could gain knowledge of when it was necessary to go to law or consult a surveyor, or when disagreements about public areas were, as a necessary consequence, within the authority of local or state magistrates.

On the basis of a distinction between 'civil' proceedings (when land surveyors took part in them) and procedures by means of the ius ordinarium, Brugi suggested (1897, p. 203) that there were land disputes with a more evident 'technical' aspect (such as «de positione terminorum», «de rigore», «de fine», «de modo», «de subsecuis», «de locis relictis et extraclusis»), and those with a largely 'legal' character, when the surveyor's skill was needed only on rare occasions.

Now, it is true that Frontinus never specifies, although in some cases it can be understood, which controversiae chiefly occurred between two private individuals or two municipalities or also between private individuals and commonwealths. Nevertheless, in Frontinus' list of controversiae a different kind of distinction can perhaps be made: disputes which he seems to have connected to disagreements between private individuals on the one hand; disputes bearing a 'public' character on the other hand. In fact, there seem to be classifiable under the same group disputes concerning: «the position of boundary markers»; «straight line boundaries (rigores)»; «other boundaries (fines)»; «site»; «area»; «land ownership (proprietas)»; «land possession (possessio)»; «alluvial land»; «control of rain water»; «rights of way». As far as one is able to judge from what survives of Frontinus' text, these seem to be disputes commonly arising between adjacent private
estates, although one of the litigating parties may well be a town.

Land disputes in Frontinus' list where one or both the parties at law should have been in all likelihood represented by a municipality seem to be disagreements about «law of territory»; «subsectiva»; «public areas»; «areas not enclosed (in a grid)»; «sacred and religious areas».

Such a division of Frontinus' list into these two groups can be justified by his use of a different kind of illustration when he alludes to disputes concerning «law of territory», «subsectiva», «public areas» and «areas not enclosed». Unlike Urbicus, Frontinus' text which has come down to us is not characterized by any theoretical disquisition concerning the main technicalities of these disputes.

In other words, he does not illustrate what kind of fixed and distinctive traits these controversies usually have every time they occur. In fact, Frontinus' text transmitted by the manuscripts is, basically, a collection of concise statements alluding to when and where these disputes may occur. In general, he refers - as specific examples - to towns or sites in Italy and in the provinces. It is not possible to prove that what he originally intended for the reader was a 'technical' exposition, undoubtedly based on first-hand research, through the medium of concrete examples: in other words, that the section Frontinus devoted to fifteen types of land disputes had the same framework as we now have.

But it is clear that, in Frontinus' mind, number and character of land disputes depended entirely on the concrete cases he gathered and only at a later stage may such examples have been converted by derivative writers into the general rules of this technical matter. For instance, what survives of Frontinus' controveresia de locis relictis et extraclusis is not a technical explanation of how such disagreements may arise, but a mere reference to where they may occur. This may well be due to the way Frontinus' text has been copied and transmitted. Nevertheless, this is also the only passage where Frontinus alludes to a particular land subdivision (namely loca relict a et extraclusa, inside a centuriated grid) he has not dealt with when he

72 In Frontinus' text transmitted by the manuscripts there are references to four of the eleven Augustan regions. In addition to the sites already mentioned (Suessa Aununca, Asculum and Interamna Praetutianorum; the Sabine region), to which may be added Frontinus' references to Capua and the ager Campanus (p. 29, 4-5 La = 12, 8-9 Th); Fanum Fortunae in Umbria (p. 30, 2 La = 13, 10 Th); Cremona (p. 30, 19 La = 14, 6 Th). As regards sites in the provinces, Frontinus mentions (as we have seen) Palantium, Salmantica and Emerita. His allusion to ager Vratis in Gallia (p. 29, 1 La = 12, 16-13, 1 Th) may be interpolated: ager Vratisus is mentioned, in the so-called second Liber coloniarum (p. 282, 11 La), as belonging to provincia Calabria (see Pais, 1923, p. 163).
commented upon the «categories of the land»: this is so despite a manifest reference, in the text, to «rights relating to subseciva» he had actually already illustrated. According to the rules of logic, in fact, one would expect to find in the first section, concerning «categories of land», Frontinus' explanation of what loca relicta et extraclusa are. Moreover, it is only on the analogy of the previous land dispute, regarding «public areas», in Frontinus' list that one can work out how a «dispute concerning areas not enclosed» was settled.

As for the last two land disputes of Frontinus' list, namely de aqua pluuia arcenda/de aquae pluuiiae transitu and de itineribus, Frontinus specifies that their resolution is possible by means of the «law in force (ius ordinarium)», as well as by the intervention of a land surveyor. Nevertheless, contrary to what we read in the passages which deal with the first six disputes of Frontinus' list, there is no allusion to the way such surveying skills may have been used to settle these disputes. Also a dispute «about sacred and religious areas», according to Frontinus, may be settled either by means of ius ordinarium or instrumenta or cautiones (= foundation documents and guarantees).

Of the fifteen land disputes listed by Frontinus, the fourteenth one, «controversia de aqua pluuia arcenda73», is later described by Frontinus as a disagreement de aquae pluuiiae transitu», «concerning the passage of rain-water» (the same terminology occurs in Frontinus' anonymous commentator, p. 23, 29 La = 69, 1 Th). In Urbicus' list of disputes (p. 88, 18 ff. La = 48, 26 ff.Th), which follows Frontinus' framework, we find only «de aqua pluuiiae arcenda controversia». Such a minor inconsistency is, possibly, only a consequence of the transmission of Frontinus' text.

In this, unlike the title of D 39, 3 concerning actio aquae pluuiiae arcendae, we find only a general allusion to what may be the object of these controversies. According to Frontinus (p. 23, 7-24, 2 La = 9, 21-10, 2 Th), similar disputes have to be settled according to ius ordinarium, when

\[
\text{collectus pluuialis aquae transuersum secans finem in alterius fundum influit et disconuenit.}
\]

«A quantity of rain-water gathered together, 'cutting across' a boundary,

73 On this subject see, in general, F. Sitzia, Ricerche in tema di 'actio aquae pluuiiae arcendae', Milan, 1977 (with earlier bibliograph). For the references, in the writings of the Agrimensores, to the use of ditches to mark the boundary between two adjoining estates, see Brugi, 1897, pp. 386-390.
floods into someone else's estate and causes inconvenience» (on sulci transversi see, e.g., D 39, 3, 24, 1 (Alfenus)).

In Frontinus' text there is no distinction between cases when floods are caused by natural or artificial reasons (as in the Digest, where the legal discussion always centres round the damages caused by opera). Nor does Frontinus specify on what kind of land such a dispute may occur; the actio aequae pluiae arcendae, according to D 39, 3, 23, 1 (Paul) (see also D, 44, 7, 5, 1), may in fact concern also provincial aeger vectigalis. But Frontinus clearly states (p. 24, 2-3 La = 10, 2-3 Th) that

si per ordinationem finis ipsius agitur, exiguit mensoris interuentum [...].

«If the dispute occurs because of the direction of the boundary itself, the intervention of a land surveyor is required».

The conclusion seems unavoidable that also in this case Frontinus is interested in the technical, rather than the legal, aspects of a particular problem connected with the offices of a surveyor or the scope of the science of land measurement. As far as disputes about finis and locus are concerned, the only two of Frontinus' list which have a marked technical character and are directly connected with the technical and legal competence of a land surveyor, see Chapter 4.

In the section of Frontinus' work on surveying concerning land disputes there are two explicit references to provincial land. The first one is in the passage concerning disputes «about land ownership»:

est et pascuorum proprietas pertinens ad fundos, sed in commune; propter quod ea compascua multis locis in Italia communia appellantur, quibusdam provinciis pro indiuiiso. (p. 15, 5-7 La = 6, 7-10 Th)

«There is also the ownership in pasture-land, pertaining to farms but held in common. Therefore, in many areas of Italy this pasture land is referred to as 'common land' (communia), in some provinces as land 'not divided and allocated' (pro indiuiiso)»;

multis enim locis adsignationi agrorum inmanitas superfuit, sicut in Lusitania finibus Augustinorum. (p. 22, 6-8 La = 9, 10-12 Th)

«Indeed in many regions a large amount of land was left over from the
allocation of the plots, for instance in Lusitania, in the territory of the colonists of Augusta (Emerita)

Again, in neither of these passages is there the slightest allusion to the legal conditions of provincial land in Frontinus' time.

On the other hand, other examples of land disputes concern only and explicitly Italy: Campania (p. 15, 1 ff. La = 6, 4 ff. Th); Picenum (p. 18, 10 ff. La = 7, 13 ff. Th); the territory of the Sabines (p. 21, 3 La = 8, 19-20 Th). Leaving aside Frontinus' reference to Campania, in the context of controversia de proprietate, it is worth noting that his allusion to Picenum, the territory of the Sabines and the Roman colony of Emerita can be all found in the second part of this section, concerning controversies of a 'public' nature (p. 17, 1-23, 6 La = 7, 1-9, 20 Th):

De iure territorii controversia est de his quae ad ipsam urbem pertinent [siue quod intra pomerium eius urbis erit, quod a priuatis operibus optineri non oportebit. eum dico locum quem nec ordo nullo iure a publico poterit amouere]. habet autem condiciones duas, unam urbani soli, alteram agrestis, quod in tutelam fuerit adsignatum urbaneae; [urbani quod operibus publicis datum fuerit aut destinatum]. huius soli ius (quamuis habita <o>racione diius Augustus de statu municipiorum tractauerit), in proximas urbes peruenire dicitur quorum (quoniam La) ex uoluntate conditoris maxima pars finium coloniae est adtributa aliaqu portio<ne> (La cum Rudorff) moenium extremae perticae adsignatione inclusa; sicut in Piceno fertur Interammatium Praetuttianorum quandam oppidi partem Asculanorum fine circundari. [quod si ad haec reuertamur, hoc conciliabulum fuisse fert et postea in municipii ius relatum]. nam non omnia antiqua municipia habent suum priuilegium. [quidquid enim ad coloniae municipiue priuilegium pertinet, territorii iuris appelant. sed si rationem appellationis huius tractemus, territorium est quidquid hostis terrendi causa constitutum est].

De subsctluis controversia est, quotiens aliqua pars centuriae siue tota non est adsignata et possidetur. aut quidquid de extreme perticae possessor proximus aliusue detinebit, ad subscliuorum controversiam pertinebit.

De locis publicis siue populi Romani siue coloniarum municipiorumue controversia est, quotiens ea loca, quae neque adsignata neque uendita
fuerint <um>quam, aliquis possederit; ut aluueum fluminis ueterem populi Romanij, quem uis aquae interposita insula exclusae proximi possessoris finibus reliquerit; aut siluas, quas ad populum Romanum multis locis pertinere ex ueteribus instrumentis cognoscimus, proximo in Sabinis in monte Mutela,nam et coloniarum aut municipiorum similis est condicio, quotiens ea loca, quae rei publicae adsignata fuerint, ab aliis obtinebuntur, ut subsicua concessa.

De locis relictis et extraclusis controversia est in agris adsignatis. relictac autem loca sunt, quae siue locorum iniquitate siue siue arbitrio conditoris [relict] limites non acceperunt, haec sunt iuris subsiciuorum quae ultra limites et intra finitimam lineam erint; finitima autem linea aut mensuralis est aut aliqua observazione aut terminorum ordine seruatur, multis enim locos adsignationi agrorum immanitas superfuit, sicut in Lusitania finibus Augustinorum.

De locis sacris et religiosis controversiae plurimae nascuntur, quae iure ordinario finiuntur nisi de locorum eorum modo a quir; ut lucorum publicorum in montibus aut aedium, quibus secundum instrumentum fines restituuntur; similiter locorum religiosorum, quibus secundum cautions modus est restituendus. habent enim et moesilea iuris sui hortorum modos circumiacentes aut praescriptum agri finem.

«A dispute about territorial jurisdiction concerns areas belonging to the town itself [or whatever is inside the town's pomerium, which cannot be appropriated by any private structure; I mean an area which even the council itself cannot detach from what is public by means of any law]. (Such a dispute) has two conditions: one (when it relates to) the land within the municipalities; the other, to land in the countryside, which was allocated to support the urban fabric; [the category of 'land in the town' is whatever has been granted or destined for public structures]. Although the divine Augustus, in a speech delivered about the status of municipia, dealt with the legal conditions of this land, the jurisdiction over such a kind of land is said to appertain to those nearest towns the greatest part of whose territory, according to the founder's will, was allocated to the colony and with some part of the walls included in the allocation of the furthest area of the (entire) territory (pertica) (which is granted to this colony). For instance, a part of the town of Interamna Praetuttianorum (Teramo), in Picenum, is said to be surrounded by the territory of Asculum. [Indeed, if we come back to this
matter, this is said to have been a conciliabulum and later given the status of municiøium]. Not all the old municipia have their own special rights. [Hence, whatever concerns a colony or municipium's prerogative, they call it (prerogative of) the law of territory. On the other hand, if we discuss about the reason for this name, territory is whatever (area of land) has been designated in order to frighten the enemies].

A controversy about subseciva arises when a portion of the whole centuria has not been allocated, but someone possesses it. Moreover, if the nearest landowner or someone else occupies any land from the edge of the assigned area, this also falls under the category of disputes dealing with subseciva.

A controversy dealing with public areas belonging either to the Roman people, or a colony, or a municipium occurs when someone possesses these areas, which have never been allocated or sold. It is the case of an old river bed belonging to the Roman people, which the water flow, interrupted by an island obstructing (it), has given (dry) to the land of an adjoining owner. Or the case of those woods which in many places we know from ancient records belong to the Roman people, for example, nearby in the territory of the Sabines at mount Mutela. Indeed, similar is the position of colonies and municipia every time that other people assume ownership of areas which have been given and allocated to the res publica, as if they were subseciva granted to them.

A dispute about areas which have been left out and excluded from the centuriation occurs in allocated lands. Areas which have been left out are those which because of the roughness of the terrain or the decision of the founder did not receive limites. These areas come under the law relating to subseciva. Excluded areas, which also come under the law relating to subseciva, are those which lie beyond the limites, but inside the outer boundary line (of the centuriated grid). This boundary line is either measured or marked out by some conventional point or a line of boundary stones. Indeed in many regions a large amount of land was left over from the allocation of plots, for instance in Lusitania in the territory of the colonists of Augusta (Emerita).

Very many controversies arise about sacred and religious places. These are settled according to the procedure prescribed by the law in force (ius ordinarium), unless the dispute also concerns the area of this kind of places: for instance, the area of public groves on mountains, or of the
temples to which land is being restored according to foundation documents; similarly, in the case of religious places whose area has to be restored according to guaranty stipulations. Indeed, also graves have gardens surrounding them which are characterized by a peculiar status, or a designated area of land.

As in the case of a «controversia de locis relictis et extra clausis», there is no allusion, in Frontinus' text which has come down to us, to the causes of a dispute about ius territorii. As far as we are able to judge from what we have of the text, these controversies presumably arose because there was a dispute as to whether an area of land in question had actually been allocated to an adjoining town. The whole passage dealing with this dispute seems to have suffered from various attempts aimed, probably, to make its meaning clearer.

There are three different suggestions to clarify the central part of this passage.

According to Lachmann (p. 18, 7-10), Frontinus' text should run as follows:

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huius soli ius [...] in proximas urbes peruenire dicitur, quoniam ex uoluntate conditoris maxima pars finium coloniae est adtributa, aliqua portio<ne> moenium extremae perticae adsignatione inclusa.
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Mommsen (1892, p. 117 = 1908, p. 121) was of the opinion that Rudorff's Aenderung quoniam für quarum verdunkelt den Gedanken insofern, als dann was als Ausnahme vorgetragen wird, als allgemeine Regel erscheint». He therefore read:

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huius soli ius [...] in proximas urbes peruenire dicitur, quarum ex uoluntate conditoris maxima pars finium coloniae est, adtributa aliqua portio<ne> moenium extremae perticae adsignatione inclusa.
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Similar, but with a different punctuation, is Frontinus' text in Thulin's edition (p. 7, 11-13):

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huius soli ius [...] in proximas urbes peruenire dicitur, quarum ex uoluntate conditoris maxima pars finium coloniae est adtributa, aliqua portio moenium extremae perticae adsignatione inclusa.
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It is worth noting, first of all, that ius territorii (this is the third kind of ius in Frontinus' text, in addition to ius subsiciuorum and ius ordinarium), not a
controversia de iure territorii, has two conditions. Naturally, as far as the starting point of these disputes is concerned, the second conditions, that of the land in the countryside «allocated to support the urban fabric», is the most important.

Now, the speech of Augustus «about the status of municipia» mentioned by Frontinus was probably intended to regulate either what made such disputes arise or the procedure to decide them. This speech was possibly delivered when Augustus put into effect the division of Italy into regions (cf. Plin., N.H. III, 46: between 12 and 2 BC according to Nicolet, 1991, p. 93). In any case, it belongs after 27 BC, the year Octavian was given the title of Augustus. According to Mommsen (1892, pp. 116-117 = 1908, p. 121), the substance of Augustus' speech was «die Wichtigkeit namentlich der Jurisdicitionsgrenzen» (from Frontinus' text seems to depend Hyg., cond.agr., p. 120, 5-6 La = 83, 5-6 Th).

Mommsen also suggested that here «handelt Frontinus von [...] dem für die Unterhaltung dieser Gebäude bestimmten Ländereien des Gebiets». If it is not a consequence of the way Frontinus' text has been transmitted, the object of Augustus' speech, Frontinus' reference to Interamnia Praetutianorum (Teramo) and his statement closing (?) this section («non omnia antiqua municipia habent suum privilegium»), lead us to think that possibly Frontinus' attention was focused on the conditions of municipia in Italy.

Cicero refers in his letters to two municipia in Italy, Atella and Arpinum, whose most important income was their ager vectigalis in Gallia (ad fam. XIII, 7, 1; XIII, 11, 1). But, in Frontinus' text, the towns (mainly municipia?) The second Liber coloniarum, p. 232, 6-8 La, seems to refer to a colony, Caudium: see Pais, 1923, pp. 214-215) to which land in the countryside is allocated must be «proximae», «nearest», to these areas. This may corroborate the previous suggestion, namely that such administrative guidelines have to be connected with Augustus' speech: a part of the process aimed to reorganize small communities in Italy, probably after the triumviral settlements. This suggestion seems to be confirmed by the so-called first Liber coloniarum (p. 220, 8-11 La):

74 This fragment is also in Imperatoris Caesaris Augusti Operum Fragmenta, (ed. E. Malcovati), Turin, 1965, p. 79, n. XXIII (based on Thulin's edition of Frontinus' text).
75 As far as the territory of Ascoli and Teramo in antiquity are concerned, see Laffi, 1975, pp. XL-XLII; Migliorati, 1976, pp. 241-244; 245, n. 14.
Colonia Veios [...], ager eius militibus est adsignatus ex lege lulia, postea deficientibus his ad urbanam ciuitatem associandos censuerat diuus Augustus [...]

Colony of Veii (...); its territory was assigned to soldiers according to a lex lulia. Later, since the number of these (colonists) became less, the divine Augustus resolved that they had to be connected with the body of citizens of the urban centre.

Nevertheless, the use of «quamuis» in Frontinus' text seems to indicate that Augustus' proposition was not completely effective. Alternatively, one might suggest that Frontinus' remarks are about the 'common law', so to speak, concerning such land, despite Augustus' attempt at fixing new directions on this subject. In this case one inclines to think that, when Frontinus wrote on these problems, the instructions given by Augustus were no longer considered relevant.

The possible consequence of land put under control of the «nearest towns» seem to be two:

a) most of their territory, according to the will of the founder of the colony, was allocated to the colony; b) some parts of their walls were included in the boundary line of the territory allocated to that colony.

If the previous interpretation is right, it follows that Thulin's reading of the central part of this passage has to be preferred to that of Mommsen.

It may be noted, finally, that (the so-called 'second') Hyginus not only refers to the same kind of land among those a surveyor has to record on a map. He also uses words which are similar to those in Frontinus' passage listed earlier (p. 197, 20-198, 2 La = 160, 22-161, 3 Th):

aeque territorio siguid erit adsignatum, id ad ipsam urbem pertinebit nec uenire aut abalienari a publico licebit. id DATVM IN TVTELAM TERRITORIO adscribemus, sicut siluas et pascua publica.

Similarly, whatsoever (area) shall have been allocated to the territory (of a town), it will belong to the town itself. Therefore, such land cannot be sold or deducted from what belongs to the community. We shall inscribe it (in a map) as 'allocated to the territory for supporting', like forests and public pasture land.

A controversia de subsiciuis concerns any portion of a centuria, or a
whole *centuria*, in the middle of a grid, which has not been allocated yet. It is worth noting that, according to Frontinus', similar disputes occur also when «any land from the edge of the assigned area (pertica)» is illegally possessed. It is likely that Frontinus, by this second example, is still alluding to centuriated land. In fact, if land with no *limites*, beyond the centuriated grid «but inside the outer boundary line», is illegally occupied, a dispute «about areas which have been left out and excluded from the centuriation» arises. This interpretation seems to be strengthened by what Frontinus says about odd portions of land on the edge of the assigned area which have to be regarded as *centuriae*:

> nam et omnes in subsiciuis extremae centuriae, quae non sunt quadratae, in eadem permanent appellatione. (p. 30, 21-22 La = 14, 7-10 Th)

> «Indeed, also all the *centuriae* on the edge (of a centuriated grid) within (the area of the) *subsecia*, which do not conform to a regular square shape, are nevertheless still called *centuriae*».

It is also worth quoting a passage of (the so-called 'first') Hyginus (p. 121, 7-24 La = 84, 8-26 Th). It concerns the division and distribution of land to veteran soldiers in *Pannonia*<sup>76</sup> under the reign of *Traianus Augustus Germanicus* (therefore, between AD 98 and 101; it is also the *terminus post quem* to date Hyginus' work):

> namque antiqui plurimum uidebantur praestitisse, quod extremis in finibus divisionis non plenis centuriis modum formis adscripterunt, paret autem quantum hoc plus sit, quod [...] singularum adscriptionum longitudinem inscriperint (sc. quidam euocatus Augusti), subsiciuorumque quae in ceteris regionibus loca ab adscriptioni discem non possunt, <posse> (ins. La) effecerit diligentia et labore suo, unde nulla quaestio est, quia, ut supra dixit, adscriptione extremaque linea demonstrat.

> «Indeed, on this account it seemed that our ancestors had done more than enough: they recorded on the maps the area, in the (point where the line marks the) outer boundary of the settlement, not by whole *centuriae*. It

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<sup>76</sup> According to F. Grelle, *L'autonomia cittadina fra Traiano e Adriano*, Naples, 1972, p. 31, the only possible veteran settlement Hyginus seems to be alluding to is that of *Poetovium*.  

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is, nevertheless, self-evident how much better is this (system), since he (an evocatus of the Augustus) recorded on map the length of each allocation. Moreover, by means of his care and effort, he brought about that the areas of the subseciva, which in other regions cannot be distinguished from the land which has been allocated, could be recognized there.

Therefore no dispute arises because, as I said before, also by means of the outer line, he clearly marked out (the perimether of any single) allocation.

This passage seems to confirm that the edge of the assigned area, according to both systems of surveying to which Hyginus alludes, was basically characterized by a division of the land into centuriae77. What is important, is that the earlier system (presumably that known to Hyginus) differs from the second one, used (for the first time?) in Pannonia at the beginning of the second century AD, only because single allotments were more clearly measured out where they bordered land left over as subseciva on the edge of the centuriated grid.

«Public areas belonging either to the Roman people, or a colony, or a municipium» have a peculiar characteristic. According to Frontinus, this is land which has never been allocated or sold. Frontinus' text is limited to two examples: the old river bed «belonging to the Roman people»; the forests «in the territory of the Sabines at Mount Mutela», besides those still existing «in many places». Only ancient records («uetera instrumenta») testify that the Roman people possesses these woods. It does not seem to be a simple coincidence that such documents are mentioned again in connection with the «public groves on mountains», object of disputes about «sacred and religious places».

This seems to be the only kind of land, in Frontinus' book on surveying, which can be in all likelihood regarded as alluding indirectly to the remains of the ager publicus populi Romani in Italy in the early Empire.

It is worth focussing our attention on Frontinus' words «nam et coloniarum aut municipiorum similis est condicio». It is likely that, by means of «et» and «similis», Frontinus is pointing out that colonies (probably also municipia)

77 Unfortunately, neither the fragments of three cadaster in the marble forma from Orange, nor the small fragment (see P. Sáez Fernández, 1990) of a bronze map of a centuriated territory crossed by the river Guadiana, in the territory of ancient Lacimurga (between Baetica and Lusitania) can help to verify the details of Frontinus' and Hyginus' technical explanations.
and the Roman people, as far as the ownership of «loca publica quae rei publicae data adsignata fuerint [...] ut subseciua concessa» is concerned, have the same legal position. In fact, a dispute occurring when someone occupies this particular kind of land is classed by Frontinus as a controversy concerning «public areas»: it is not a simple case of a «dispute over subseciua».

Consequently, one may infer there were three classes of land (ager mensura comprehensus, ager similis subseciuarum condicioni and subseciua concessa) which could be allocated to a municipality by means of the adsignatio-procedure. Such a procedure, therefore, could not only bring under the control of a town some areas of land. It seems also to be part of an administrative system which was intended to entrust to these municipalities an independent jurisdiction over this particular kind of land.

What is unsaid, in Frontinus' passage, is whether the jurisdiction of colonies (or municipia) was also over, for instance, the forests belonging to the Roman people if these lay by chance within the territory belonging to such communities. Now, there is a substantial difference between subsiciua concessa (as loca publica) and «loca relictæ et extraclusa» on the one hand, and between these areas and the «public areas belonging to the Roman people» on the other hand. In contrast to subsiciua concessa, to whose technical nature there is no reference in Frontinus' text, loca relictæ et extraclusa seem to be land which lies within the territory of the community, to which these areas are allocated by means of the ius subseciuarum (a similar technical explanation in Ps.Hyg., const.lim., p. 198, 17-199, 10 La = 161, 19-162, 10 Th). Therefore, since the distinctive quality of loca publica populi Romani is that they have «never been allocated or sold» it follows that these areas are not to be regarded as land which can come under the control of a community.

On the other hand, on the basis of Frontinus' terminology we ought to make a further distinction between land, such as ager similis subseciuarum condicioni, which can be allocated to the res publica populi Romani by «the law relating to subseciua» and loca publica populi Romani, which have been at all times in such a technical/juridical position. This peculiar condition (at least in Italy, according to Frontinus' words) is, in fact, certified by uetera instrumenta.

Now, (the so called 'second') Hyginus informs us that land surveyors have

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78 On this particular question, see Grelle, 1964.
also to draw up an updated list of all subseciva (subsecivorum omnium liber). In particular,

[...] si coloniae (scil. subseciva) concessa fuerint, CONCESSA COLONIAE in aere inscribemus. (p. 202, 5-203, 6 La = 165, 4-9 Th)

«If subseciva shall have been allocated to a colony, we shall enter them on the map as 'granted to the colony' ».

Naturally, there is no evidence that what is described by Hyginus was a common practice which Frontinus either must have known, or explicitly alluded to in his book on surveying. It nevertheless seems to be very likely that the difference between (what survives of) ager publicus and land which may become ager publicus by means of the adsignatio-procedure are: ius subsiciorum, location (inside or outside the centuriated grid) and (only possibly) the type of documents where these areas were recorded.

As seen, in Frontinus' view also an alueus fluminis uetus populi Romani cannot be in possession of anybody even if it becomes dry. There is no reason to connect this statement with (what survives of) his proposition concerning disputes «about alluvial land» (p. 16, 5-6 La = 6, 15-16 Th), namely that:

de alluione fit controuersia fluminum infestatione. haec autem (Schulten) multas habet condiciones. (hinc fundi multas habent condiciones, La)

«A dispute about alluvial land occurs because of the damages (caused) by rivers. Such a dispute has many characters (hence, fundi have many peculiar natures, La)».

It is clear that Frontinus, when referring to the alueus derelictus of a river belonging to the Roman people, is not dealing with cases of acquisition of ownership by means of «ius alluusionis» («law relating to alluvial land»), as it is in D 41, 1, 12, pr. (Callistratus) and 41, 1, 16 (Florentinus), in (the so-called 'first') Hyginus (p. 124, 3-125, 18 La = 87, 4-88,18 Th) and Siculus Flaccus (p. 150, 24-151, 5 La = 114, 25-115, 5 Th)79.

As far as the most important epigraphical texts recording disputes «about

79 Important remarks on this matter in Brugi, 1897, pp. 391-430; Sargenti, 1957 and 1965; Maddalena, 1970, pp. 5-37.
sacred and religious places» are concerned, see Chapter 580.

As regards a controversia de arborum fructibus (p. 25, 1-26, 2 La = 10, 14-18 Th), it may be noted that Frontinus does not allude to the interdictum de glande legenda (see D 47, 7, 6, 2; see also 43, 27 and 43, 88), which covered litigation occurring when trees dropped their fruits on one or the other adjoining estate. Therefore, since he does not refer to ius ordinarium, we may incline to think that Frontinus included this kind of disagreement in his list of land disputes because it still deals with boundaries:

[..] de arborum fructibus (scil. controversia), earum quae in fine sunt siue intra [..]

« (a dispute) about the produce of fruit trees, these which stand right on the boundary or inside (it)».

Conclusions

First of all, one may observe that four out of fifteen land disputes, namely de fine, de loco, de modo and de itineribus, contain explicit references to the same kind of land Frontinus has already mentioned and described in the section dealing with agrorum qualitates. Two disputes (namely, de subsiciuis and de locis relictis et extraclusis) refer to technical terms (subsecivum and ius subsiciuorum); although indirectly, they may be connected to the first section of Frontinus’ work on surveying. Without what he explains in the first section mentioned above, the technical peculiarities of these disputes cannot be fully understood. Now, the clue to the possible nature of Frontinus’ work on surveying lies in the passage where he states that ager arcifinus started to acquire boundary markers, because of the occurrence of legal controversies, in the places where it comes to an end. There should be no doubt, therefore, that Frontinus’ illustration of the three great classes of land and the types of land disputes was intended to show his readers that both aspects of land measurement were characterized by a mutual relationship.

80 There exists a well-known epigraphical example of a dispute about areas of land surrounding some graves in CIL X, 3334 = ILS 8391 = FIRA III, 86: see C. St. Tumulescu, ‘Sur la Sententia Senecionis de sepulchris’, TR 44, (1976), pp. 147-152.

For a dispute concerning the legal status of a funerary garden in Egypt toward the end of the first century AD (SEG 18, 1960, 846), see Arangio Ruiz, 1974, pp. 655-672.
If this interpretation is likely, I suggest, in a very speculative way, the following interpretation, which fits with what has been already observed: Frontinus' work on surveying can be broadly divided into two parts, each made up of two distinct sections. The first section of each part is, from a technical point of view, general: it serves as an introduction to the second section. Therefore, if this suggestion can be accepted, the two sections concerning "agrorum qualitates" and "controversiae" form the first part.

The second part of Frontinus' book consists of a first section which contains a general, theoretical discussion about limites. It is followed by the fourth and last section, where Frontinus gives instructions, illustrated by examples of a practical kind, intended to show how areas of territory should be surveyed in the proper way. Therefore, if not the framework of Frontinus' work, at least his method of combining the technicalities of land surveying with practical examples in all likelihood influenced later writers of handbooks on surveying.
Chapter 3

URBICUS' BOOK ON LAND DISPUTES

A. Introduction

As has been seen, the analysis of Frontinus' list of land disputes has, as a necessary consequence, a study of the work Urbicus wrote on the same subject. In order to do that, it is necessary to go through three main problems: a) the manuscript tradition of Urbicus' handbook; b) what sources he may have used (that is to say, whether the most important one was Frontinus, according to Lachmann's suggestion); c) Urbicus' chronology (see Chapter 4).

It has been already emphasized (see Chapter 1, C 2 a) that most of Urbicus' text which has come down to us has been transmitted by the earlier and later halves of the Arcerianus (namely, B and A), a manuscript of the so-called 'first class'. In the 'second class' (or redaction), that of the Palatine family, is preserved only a very short fragment of the original text of Urbicus (in P 50r), corresponding to pp. 73, 38-74, 10 La = 32, 18-33, 11 Th.

Some passages of Urbicus' text are quoted by Frontinus' anonymous commentator, whose work has been transmitted only by manuscripts of the 'second class' (Palatine): P and G. These extracts may be used to verify whether Urbicus' text in B and A has been transmitted correctly (naturally, despite the anonymous commentator's and the manuscript tradition's manipulations).

In the first place, one must note that Urbicus' treatise has not been transmitted in a systematic order. Because of the disorganization of the text, caused by the misplacement of some leaves, the framework of Urbicus' treatise, like that of Frontinus, is a text composed by modern philologists.

81 G, ff. 27-28 (pp. 15, 16-16,17 La = 63, 6-29 Th), which corresponds to Urbicus' text at p. 79, 13-80, 7 La = 39, 8-40, 7 Th;
G, f. 29 (p. 17, 22-28 La = 64, 25-30 Th), which corresponds to Urbicus at p. 50, 20-23; 52, 11-13 La = 43, 4-8; 44, 22-23 Th;
P, f. 18v (= G f. 32) (p. 21, 14-18; 22, 17-23 La = 67, 7-11; 68, 3-8 Th), which corresponds to Urbicus' text at p. 86, 8-12; 87, 4-8 La; 47, 1-5; 47, 16-22 Th;
P, ff. 20r-20v (= G f. 35) (p. 25, 14 ff. La = 69, 30 ff. Th) which corresponds to Urbicus' text at p. 69, 3-18; 19-21 La = 29, 7-14; 22-24 Th.
Lachmann's and Thulin's editions of Urbicus' text, contrary to their arrangement of Frontinus' extant fragments, are very much alike. No title of the original work has been preserved; the beginning and the end of it are both lost, whereas the extant text is characterized by several gaps.

Urbicus' text transmitted by manuscripts can be divided into two broad sections. The first one is from B, f. 1 to B, f. 38 (pp. 77, 20-90, 21 La = 37, 13-51, 3 Th): this part and A, f. 163 to A, f. 179 overlap. The second part of Urbicus' text has been transmitted only by B in the following sections:

B, ff. 39-43 («non praetermittimus-inperiti»): pp. 62, 16-64, 1 La = 23, 3-24, 23 Th;
B, ff. 43-59 («secundum locorum-profecta»): pp. 71, 18-77, 18 La = 30, 14-37, 10 Th;
B, ff. 59-71 («prius quam-transcendunt»): pp. 65, 14-70, 9 La = 26, 6-30, 10 Th;
B, ff. 71-75 («idoneas volunt-admittit»): pp. 64, 1-65, 12 La = 24, 13-26, 2 Th (B, ff. 71-74 in Thulin's edition);
B, ff. 71-91 («aduersantur-ager est finiruris»): pp. 59, 4-67, 15 La = 20, 5-23, 1 Th.

The incipit of the work is only in A, f. 161. Since it seems to tally with the contents of Urbicus' work, it may be its original title:

INC. AGENI (sic) VRBICI DE CONTROVERSIIS AGRORVM
(the explicit is at A, f. 179, AGENI (sic) VRBICI LIB. EXP.).

B, f. 39 contains an incipit:

INCIPIIT LIB. //// (explicit in B, f 91: EXP LIB //////).

As already seen (Chapter 1, C 2 a), an anonymous hand added simplicius to the incipit of B 39. There is no reason to assume that an excerptor, through this gloss, intended to indicate the real authorship of the paragraph he was copying.

Headings are also preserved in J (apographon Jenense, beginning of the XVIth century), a manuscript of the so-called 'first class' (or 'redaction'). One of its leaves, number 54 (= B, ff. 39-91), contains the incipit (LIBER AGENI [sic] VRBICI") and explicit (EXP. LIBER AGENI). It is also worthy

of note that only in B, ff. 1-39 and its corresponding section of A (A, ff. 163-179), is each controversy Urbicus deals with, the beginning of which has been preserved, prefaced by a sort of heading.\(^{83}\)

Lachmann's edition of Urbicus' text does not substantially differ from that of Thulin. But, contrary to the latter, Lachmann reckoned, as a part of Urbicus' text transmitted by B and A, also some quotations from Urbicus' work in the text of Frontinus' anonymous commentator. Now, Frontinus' anonymous commentator seems to have often altered the passages he selected from Urbicus' text. But, according to Lachmann's suggestion, this is because Frontinus' commentator had at his elbow a version of Urbicus' text which was fuller than that we have in B and A; it was a later anonymous copyist that arbitrarily shortened Urbicus' text which has come down to us in B and A (see Lachmann 1852, pp. 129-131).

Consequently, on the basis of Lachmann's suggestion, we may conclude that at the time of Frontinus' anonymous commentator, as far as Urbicus' work on land disputes is concerned, the tradition represented by P was better than that in A and B.

By means of a careful examination of these passages, Thulin criticized Lachmann's theory.\(^{84}\) Thulin also suggested that a section of Urbicus' work, regarded as the conclusion of the treatise in both editions (see pp. 89, 25-90, 21 La = 49, 26-51, 3 Th), should be attached to the section where Urbicus illustrates the technical nature of land disputes (after the lacuna at p. 65, 12 La = 26, 2 Th: see the apparatus criticus at p. 26 of Thulin's edition; on these aspects, see below).

The main gaps in Urbicus' text are eight. In general, these gaps and the large paragraphs into which Urbicus' text is divided in B partly coincide.\(^{85}\)

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\(^{83}\) See, for instance, the apparatus criticus at p. 78 (for line 28) La = 39, 1 Th; p. 80, 20 La = 40, 17 Th; p. 81, 3 La = 40, 24 Th; p. 82, 7 La = 42, 3 Th; p. 84, 11 La = 44, 24 Th; p. 85, 19 La = 46, 11 Th; p. 86, 26 La = 47, 9 Th; p. 87, 9 La = 47, 23 Th; p. 88, 18 La = 48, 26 Th; p. 89, 10 La = 49, 12 Th.

\(^{84}\) See Thulin, 1913 b, pp. 113-120. Similar remarks already in Mommsen, 1895, p. 279, n. 3 = 1909, p. 471, n. 3.

\(^{85}\) These gaps correspond to the following pages of Lachmann's and Thulin's edition of Urbicus' text:

p. 62, 15 La = 23, 1 Th; 65, 13 La = 26, 3 Th; p. 67, 10 La = 27, 27 Th; p. 70, 9 La = 30, 11 Th; p. 72, 22 La = 31, 27 Th; p. 74, 11 La = 33, 12 Th; p. 76, 18 La = 35, 27 Th; p. 77, 19 La = 37, 11 Th.
The central object of Urbicus' treatise is to illustrate \textit{genera, status} and \textit{effectus} of land disputes. The first thing one may note is that Urbicus' technical terminology, although based on that of Frontinus, is in some degree different. Now, the only authors whose works Urbicus seems to be aware of, as pointed out by Thulin, are Frontinus and (the 'first') Hyginus. But Urbicus, contrary to Frontinus' anonymous commentator (the only author within our collection who follows this method) never gives the name of any of his sources. On the other hand, Frontinus' text is clearly in places the direct source of Urbicus, being almost literally cited. Furthermore, as Lachmann himself admitted\footnote{Bibliography on Urbicus: see above, footnote 41.}, it seems likely that Urbicus is not the first 'Bearbeiter' of Frontinus' work on surveying.

Therefore, the central question is whether Urbicus wrote his treatise on land disputes referring to some other authorities on this subject, in addition to Frontinus, or whether Frontinus' book on surveying was his main authority.

As we have seen, according to Lachmann, Urbicus' text can be regarded as a complement to Frontinus' extant fragments. Therefore, if we follow Lachmann, first we have to demonstrate that Urbicus did find, in Frontinus' work, all the technical and theoretical information he needed to write his treatise on land disputes. Nevertheless, as already noted, there are some peculiarities in Urbicus' text which apparently do not seem to have anything to do with Frontinus' text (or, more truly, with what has come down to us under Frontinus' name).

Secondly, one has to ascertain whether what Urbicus has drawn from Frontinus' work belongs to the integral version of Frontinus' text; or whether Urbicus had at his elbow an abridged edition of it, perhaps not different from Frontinus' text which has come down to us in A. In this case, if we integrate the extant fragments of Frontinus' work on surveying by means of Urbicus' text, as suggested by Lachmann, what follows is definitely something different from the original text of Frontinus.

Now, if from the analysis of Urbicus' work on land disputes we draw the
conclusion that he used a text of Frontinus similar to that preserved in A, it
may also be possible that:

a) Frontinus' work on surveying used by Urbicus was shortened well
before Urbicus' age; b) Urbicus, consequently, had to gather the
technicalities of land surveying he considered necessary, but could not find
in Frontinus' work, from additional sources; c) if these sources date back to
the first century AD, from the analysis of their fragments in Urbicus' text it
may be possible to gain more ideas about the technical nature of Frontinus'
book on surveying; d) if these sources do not necessarily date back to the
first century AD, the information they give may be used to date Urbicus'
work; e) if Urbicus appears to have attached more importance to Frontinus'
work than to his other sources, one may try to speculate what was the
technical relevance of Frontinus for the later Agrimensores.

* * *

Urbicus' system of explaining the technicalities of land surveying is
peculiar. In fact, his exposition starts from general laws to arrive at the
concrete example. This is clear from the section (B, ff. 83-91) of the extant
text of Urbicus regarded as the introduction to individual types of land di-
sputes. This section, preserved only in B, seems to have been based on
two distinct digressions. The first one deals with the nature of an ager, its
geographical location (firstly within the globe; secondly, within the land
belonging to the Roman Empire) and, finally, how many kinds of ownership
characterize such land. The second digression is a long and elaborate
delineation of the basic theoretical nature of land disputes. The following
passage can be regarded as the point where both digressions start:

quoniam itaque de controversiis meminimus agrorum, hae quot partibus
dividantur et in quot genera possessionum aut quas habebant qualitates,
tractemus.

Quom autem quaerendum uideatur, quid sit ager et ubi sit, ad ordinem
mundi partesque revocarum. (p. 61, 7-11 La = 22, 3-7 Th)

«Therefore, since I have referred to land disputes, I am going now to
expound what is the number of the parts into which they can be divided and
into how many types of ownership, or what are their peculiarities. Indeed,
for it seems to be right to investigate what land is and where it is located, I
return to the framework and parts of the globe». 

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This seems to be a broad outline of the framework of Urbicus' treatise: a) essential parts (partes) of land disputes; b) how many are the types of (land) ownership disagreements have to do with; c) what are the peculiarities of land disputes.

Urbicus' statement is followed by a description of the main regions of the globe, a part of which is represented by the ager Romanus. Now, his description of the land masses of the earth, divided by the Oceans into four regions (one is the habitable area, the Oikoumene with its opposite, the Antioikoumene) seems to follow a Stoic source (stoici are explicitly mentioned by him in this context: see p. 61, 12-14 La = 22, 32-33 Th). Urbicus' theory seems to follow the doctrine of Krates of Mallos. According to Strabo (I, 24), Krates was of the opinion that 'Ethiopians' lived in two separate zones of the southern hemisphere, which was cut off from the north by the southern ocean.

On the other hand, Urbicus affirms that the land masses are three: Europa, Libya (= Africa) and Asia (p. 62,7-8 La = 22,27-28 Th). Such a perspective follows traditional doctrine (from the first to the first to the seventh century AD): see Plin., N.H., III, 3; Oros., adv.pag., I, 2, 1; Isid., nat. rer., 48, 2. It seems therefore likely that Urbicus' division of the earth into four zones was influenced by Frontinus' theory of the four parts of the orbis terrarum according to the disciplina Etrusca (p. 27, 13-28, 4 La = 10, 20-11, 8 Th). It is worth noting that the same contradiction is found in the early medieval treatise of Gisemundus (ninth century AD), a work on surveying supposedly written on the basis of the earlier technical literature.

The following section of Urbicus deals with the disagreements which may occur on ager imperii Romani (p. 62, 12-14 La = 22, 32-33 Th). Unfortunately, the text here is mutilated because of a gap: B, f. 91 ends with the words «ager est † finiruris ...».

Lachmann and Thulin attached to this section Urbicus' text preserved in B, ff. 39-91, to the incipit of which, as seen, the word simplicius has been

89 See Toneatto, 1982, p. 251; on Gisemundus see also Toneatto, 1992, p. 34.
added. The beginning of B, f. 39, after the gap, reads:

... *non praetermittimus nominata sententia condicionibus possessionum* (p. 67, 17-18 La = 23, 3-4 Th).

In his edition of Urbicus, Thulin suggested emending this passage as follows

... *non praetermittimus nominata consentientia condicionibus possessionum*

(and referred, in the apparatus criticus, to Huschke's emendation, «*nomina conuenientia*» mentioned, without any attempt at emendation, also in the apparatus criticus of Lachmann's edition). Now, if the arrangement of Urbicus' text suggested by Lachmann and followed by Thulin is the most likely, it follows that the lacuna between «... *ager est* + *finiruris*» at the end of B 91, and the first part of B 39 (the well-known fragment dealing with *condiciones possidendii* in Italy and the provinces) possibly contained Urbicus' explanation of what, from a technical point of view, *ager* is. Since, as we have seen, he seems to follow a 'deductive' system in his exposition of the subjects, one is led to think that possibly Urbicus, after his geographical introduction, goes on to explain the character and categories of land in the Roman Empire.

We cannot, therefore, exclude the possibility (by analogy with Frontinus' and Hyginus' works on surveying) that Urbicus dealt, in this section, with the technical nature of both centuriated land and land which is not surveyed. If this is right, it follows that Urbicus, in the context of «*a dispute about straight line boundaries* (*de rigore*)», simply resumed his earlier explanation of fundamental terms connected with types of land measurement and categories of land:

*referfent in quo agro agatur, si limitatus est, aut ordo limitis ordinati desideratur aut subbrunciui aut linearis aut interiectiui rigoris incessus. at si in agro arcifinio si[n]t, qui nulla mensura continetur sed finitur aut montibus aut uiiis aut aquarum diuergiis aut notabilibus locorum naturis aut arboribus, quas finium causa agricolaie relinquunt et ante missas appellant, aut fossis aut quodam culturae discrimine ...* (p. 72,14-21 La = 31,19-26 Th)
What is important, is the type of land at issue: whether it is within limites, or whether a regulated system of limites or even the straight course of a line is lacking, be it a 'subruncivus', 'linearis' or 'interiectivus' rigor. And in case a dispute occurs on land which is not contained in any survey (ager arcifinius) but may be bounded either by hills, or roads, or watersheds or particular elements of the landscape or trees some farmers leave to serve as boundary markers and call 'planted at an earlier time' or ditches or some difference in cultivation ...

There is no evidence that Urbicus explained the nature of genera possessionum (one of the three main subjects of his writing) in a section now lost because of the gap at the beginning of B 39, and not in the text preserved in B 39-41. But, as far as we are able to judge from what we have of Urbicus' text, it seems likely that Urbicus' explanation of genera possessionum («types of possessions») connected with land disputes has to be identified with the passage where he deals with condiciones possessionum possidendi (in Italy and the provinces) at the very beginning of B 39. Urbicus, in fact, uses the present, not the past tense («non praetermittimus»), to underline that he does not overlook the names congruent with (? corresponding to ?) the conditions of possessing land (condiciones possessionum). Although genera possessionum is not the exact equivalent of condiciones possessionum, it seems likely that Urbicus' technical discussion about genera condiciones possessionum and their nomina (names/types) is represented by B 39-41. It is also worthy of note that, in his work concerning the character of land disputes, Urbicus alludes to an earlier work where he had already treated the technicalities connected with the 'art of surveying':

alius (scil. libro) de arte disputatimus, cuius tripartitionem <s>ex libris, ut puto, satis commodae sumus executi (cuius-executi scil. La) [...] et de

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90 On limites subrunciiui (basically, an eight-foot road in centuriation schemes), see Hyg., de lim., p. 111, 14-15 La = 71, 8-9 Th. Ps Hyg., const.lim., p. 168, 13-14; 169, 4-9 La = 133, 15-16; 134, 5-10 Th informs us that linearii limites are called «subrunciiui» in Italy, where they serve as public roads («tiuneri publico servunt»). On the other hand, si (scil. linearii) finitimi interuient, latitudinem secundum legem Mamiliam accipient («in case they lie between (two lands) as a boundary, the width they get is according to the Lex Mamilia»). Since Urbicus refers to rigor linearis, not to linearius limes, it does not seems likely that his source here was Ps. Hyginus.
In another work I debated about the *ars*, the tripartite nature of which I have treated - in my opinion well enough - in six books and I have referred, having so far considered the order of the art of surveying, allotments, land divisions and indications of limits by boundary markers.

It is therefore natural to suppose that the introduction of Urbicus' treatise on land disputes and his earlier work on the 'art of surveying' were characterized by different purposes. The aim of his writing about *controversiae* was not to explain what land belonged to a particular class, whose distinctive nature and technical name is determined by the system which may have been used (or may not) to survey and to bound that land. The passage we are now going to discuss seems to suggest that Urbicus intended to show the connection between the names of the existing categories of land and the technical/legal nature of the right of control over such land private individuals or towns may have.

In other words, by indicating the names of those private individuals or communities held to have full factual control over land, Urbicus wanted to make known what might be one of the contending parties when a land dispute occurs. That is why the object of study of this section of Urbicus' work on land disputes is not the relationship between *forma* and *lex agrī*. What he obviously had in his mind was also to inform his readers that there may be in Italy classes of land connected with types of land ownership which are different from those in the provinces:

*prima enim condicio possidendi haec est ac (B, La; extat Th) per Italiam; ubi nullus a[iu]ger est tributarius, sed aut colonicus aut municipalis, aut alicuius castelli aut conciliabuli, aut saltus privati. At si ad provincias respiciamus, habent agros colonicos (B, La; colonici Th) iiusdem (La; guidem B, Th) iuris, habent et colonicos [stipendiarii] (secl. La; habent-stipendiarii secl. Th) qui sunt in[com]munes, habent[em] et colonicos stipendiarios, habent autem provinciae et municipales agros aut ciuitatium peregrinarum.*

*Et stipendiarios (guidem dicimus uel tributarios add. La), qui nexum non habent neque possidendo ab alio quaeri possunt, possidentur tamen a
Indeed, the first condition of land ownership is like this one in Italy, where land is not tribute-paying, but belongs either to a colony, to a municipium, to a castellum or to a private ranch (saltus). But, if we examine the provinces, provincial soil comprises colonial land with the very same legal condition (as the soil in Italy), colonial land which is tax-free and colonial land which is stipendiary. Moreover, provincial soil comprises land belonging to municipia or to native towns. Now, (we call 'tributary' or) 'stipendiary' land the soil on which there is no right of control: therefore, it cannot be aquired by anybody else through occupation. Nevertheless, private individuals hold such land, but on the basis of a different legal condition. This land is also sold, but such deeds cannot be lawful. In fact, (private individuals) have been allowed to own this land as if to take its fruits, but on condition that they pay tribute. Nevertheless, private individuals lodge complaints against their neighbours about the boundaries (of the land they hold), quite as if (they were boundaries) of private estates. It is therefore in the interest of the citizens that the boundaries of these lands have to be kept plain and undisputed; hence, everybody has the knowledge either that he has (just) to cultivate (land) or that a possessor is the person who possesses land. In fact, people give rise to the very same disputes as those usually occurring on private and tax-free land. Nevertheless, as far as this kind of possession is concerned, we shall check whether people are entitled to avail themselves of the 'right of prohibiting' (interdictum) -that is, to start a legal action by 'interdicting'.

The terminology here used by Urbicus clearly shows that this passage has been written from a legal viewpoint. According to his systematization, in Italy the right and the fact of control over an area of territory are closely

91 For the bibliography on this passage, see above, footnote 41.
connected. Such right of control belongs either to colonies, municipia, castella or conciliaula; saltus have to be regarded as land belonging to private individuals, different from the allotments into which the territory of a colony may be divided. Consequently, in Urbicus' mind these are the only categories of land in Italy about which disagreements may occur. Naturally, as already underlined, colonies, municipia, castella, conciliaula or private individuals represent the contending parties in proceedings to settle land disputes in Italy.

On the other hand, with respect to provincial soil, Urbicus mentions three distinct (two if we follow Thulin's edition) types of colonial land, land belonging to municipia and, finally, land of the native cities. Now, as far as the right of the individual in agris stipendiarii is concerned, Urbicus states that, in principle, we ought to distinguish between the right and the fact of control over such land. Nevertheless, the phrase describing private ownership of such land in terms of direct enjoyment of it («fructus tollendi causa») - although limited by a rent («praestandi tributi condicio») - is probably meant to make known to his readers that the usufructuary may be held to have full factual control over this kind of land.

What I suspect, although I cannot prove it, is that Urbicus is not interested in any technical discussion about the doctrine that dominium in provincial soil was vested in the Roman people or in Caesar. When he refers to provincial land as tribute-paying, it is only because he very probably had knowledge that an action for regulating boundaries (actio finium regundorum) may rise on agri vectigales (land on lease) and between usufructuaries (see D 10, 1, 4, 9 (Paulus); see also D 47, 7, 5, 2 (Paul)).

That is why he alludes to the possible availability of interdicta on agris stipendiarii. Hence, one inclines to think that the aim of Urbicus' exposition is, to a great extent (if not completely), deviating from its model. In the light of what has been observed about Frontinus' categories of land connected with his list of land disputes, there is no reason to think that he might have been the source of Urbicus' passage about condiciones possidendii. More likely, Frontinus' influence on Urbicus is limited only to the idea that a general introduction concerning the condition of land in the Empire is an essential part of a treatise which deals with the technicalities of land surveying. Urbicus, as will be seen, wrote a didactic treatise for people who had to possess the right technical -but also legal- knowledge to settle land disputes.

92 On these problems see T. Frank, "Dominium in solo provinciali" and "ager publicus", JRS 17 (1927), pp. 141-161; Jones, 1941 (=1960); Grelle, 1990.
disputes (see Chapter 4), so that the reader did not have to consult two separate manuals.

It is therefore reasonable to assume that the basic indications he needed, concerning «condiciones possessionum» - legal conditions of ownership in Italic and provincial land- in the Roman empire, may come from an authoritative and widely known textbook of a constitutional lawyer. If the previous suggestions are likely, we cannot exclude the possibility that one of the sources of Urbicus' introduction was Gaius. From him Urbicus might have drawn the distinction between stipendiaria and tributaria praedia in the provinces (Gaius, II, 21), and the concept that there is no nexum on provincial soil (II, 27) but only ususfructus (II, 31-32).

There are further passages where Urbicus alludes to the difference between what seems to be the character of the law (concerning land) in force in Italy and that in the provinces:

multa enim et uaria incidunt, quae ad ius ordinarium pertinent, per provinciarum diuersitatem, nam cum in Italia ad aquam pluviam arcendam controversia[m] non minima concitetur, diuerse in Africa ex eadem re tractatur. (p. 63, 14-18 La = 24, 4-8 Th)

«Indeed, many and different cases, which are covered by the law in force, occur in the variety of provinces. In fact, whereas in Italy a dispute 'about the control of rain-water', to which people may give rise, is very important, in Africa they follow a different procedure when dealing with the same subject»;

inter res p. et priuatos non facile tales in Italia controversiae mouentur, sed frequenter in provinciis, praecipue in Africa [...]. (p. 84, 29-31 La = 45, 16-18 Th)

«Commonly, such disputes (concerning the law of territory) between res publicae and private individuals do not occur in Italy: but they are frequent in the provinces, especially in Africa (...)»;

hoc facilius in provinciis seruatur: in Italia autem densitas possessorum multum inprobe facit [...]. (p. 97, 19-20 La = 48, 7-10 Th)

«In the provinces these instructions (concerning the custody of holy places) can be followed with less troubles; but the very many land owners in Italy often act contrary to the law (...)»;
in Italia aut quibusdam prouinciis (aut-prouinciis sec. La) non exigua est
injuria, si in alienum agrum aquam inmittas; in prouincia autem Africa, si
transire non patiaris. (p. 88, 26-28 La = 49, 5-8 Th)

«In Italy or in some provinces, it is a real offence if you drain water into
someone else's land. On the contrary, in the province of Africa it is an
offence if you do not let water get through».

From a legal/technical viewpoint, it is evident that the quality and
relevance of Urbicus' remarks in these passages is not to be compared with
the section, quoted earlier, where he deals with land ownership in Italy and
the provinces. These four passages seem to be Urbicus' own remarks\(^9^3\)
added to support, in other parts of his treatise, the perspective he has
drawn from one of his sources when he wrote the introductory section to
land disputes: a precise distinction, as far as types of land and ownership
are concerned, between Italy and provinces.

But Urbicus does not seem to be fully aware of the main practical
discrimination between the two types of real property he has drawn from his
source. In his view, also different conditions/procedures, according to the
law in force, to settle land disputes should be regarded as a clear evidence
of the practical discrimination between Italic and provincial soil. In a
nutshell, these four passages were meant to corroborate the theory Urbicus
found in his source, but probably could not understand because this
particularity (difference between ownership of Italic soil and provincial soil)
had already fallen into disuse.

According to Lachmann, the text transmitted by B, ff. 35-38 (= A, ff. 178-
179) should be regarded as the final part of Urbicus' work which has come
down to us in the manuscripts:

\[\text{satis, ut puto, dilucide genera controversiarum exposui: nam et}
\text{simplicius enarrare condiciones earum existimaui, quo facilius ad}
\text{intellectum peruenirent. nunc quemadmodum singulae tractari debeant.}
\text{persequendum est.} \] (p. 89, 25-29 La = 49, 26-50, 1 Th)

«I have outlined, in my opinion clearly enough, the types of land
disputes. And I have also resolved to illustrate their nature in an easier way
in order that you can understand this aspect more straightforwardly. Now I

\(^9^3\) According to Levy, 1951, pp.117-118, these passages may be regarded as rules «the
jurists fail to report»: he assumes that Urbicus' source, here, was Frontinus.
have to expound the way you should deal with each dispute.

Consequently, in Lachmann's edition this paragraph represents the transition to a second part, now lost, of Urbicus' treatise: a part which relates to the way his readers should deal with each dispute. In his edition of Urbicus' text Thulin followed the same arrangement. But he also suggested (see 1913, p. 26, apparatus criticus) that B 35-38 has probably to be attached to the end of B 74, that is, before the main section of Urbicus' extant text, concerning the character of each controversy. In this way, according to Thulin, the order of Urbicus' exposition becomes more logical because the terminology squares with the subject of his exposition.

Urbicus alludes three times to the order according to which he will discuss the nature of land disputes. As seen, according to B 88 (p. 61, 7-9 La = 22, 3-5 Th), he intends to comment first on genera possessionum and then on partes and qualitates of land disputes. In B 43 (p. 63, 26 La = 24, 13-16 Th), which follows his discussion about genera possessionum, Urbicus states:

in omnibus his tamen agris superius nominatis quot genera controversiarum exerceantur, tractare incipiamus. nam et qualia sint et quot status habeant generales, diligenter intueri debemus.

Now I begin to deal with the types of land disputes which may occur in all the lands previously mentioned. Indeed, we have to examine meticulously what they might be and how many characteristic ranks they might have.

This last passage confirms that Urbicus' exposition concerning names of land and classes of ownership on such land was intended to be an introduction, as it is in Frontinus' work, to the types of disagreement which have to do with such land. It is also evident from these two passages that Urbicus, as pointed out by Thulin, dealt with genera controversiarum at an earlier stage of his work, before - not after - he has treated the technicalities of each land dispute. Consequently, the arrangement of Urbicus' text suggested by Thulin, according to which B 36-38 (= A 178-179) precedes Urbicus' discussion about each land dispute and is not a section closing the extant parts of his work, seems more likely than Lachmann's systematization. It is therefore very likely that only Urbicus'
discussion about "genera controversiarum" is lost, not the whole second part of Urbicus' treatise. It may be also noted that Lachmann's systematization of Urbicus' work is based on the assumption that it was a much longer text than the text which has come down to us. On the other hand, if Thulin's suggestions are likely, it is possible to suppose that Urbicus' treatise as we have it did not suffer from any substantial loss of material in the course of its transmission.

Now, it is likely that on several occasions also Urbicus, like other writers on land surveying, made use of his personal experience when he gives instructive examples concerning some technical aspects of a land dispute. It is therefore difficult to separate information Urbicus could have gathered from his own experiments from what he drew from earlier or contemporary technical literature on the same subject. Urbicus' main aim, as will be seen in the following discussion of his list of land disputes, seems to be to write an updated compilation concerning technical and legal aspects. From what Urbicus says at p. 64, 8-11 La = 25, 1-3 Th, it emerges that he refers to his treatise in terms of an elaboration on, rather than a passive restatement of, other works on the same subject:

quamquam non ignorem, in<ter> professores inmodice controversiarum quae<stione>m frequenter agitata<m>, necessariam studii exercitationem huius quoque partis existimaui.

"Although I know that many times among the experts aspects of land disputes have been discussed more than enough, I considered it necessary to apply my mind to studying this peculiar aspect (of land surveying)."

Urbicus, therefore, intended to write an informative manual on land disputes with some pretence at completeness and systematization. This seems to be clear from what he says at B, f. 59, p. 65, 14-18 La = 26, 6-10 Th:

priusquam de transcendentia controversiarum tractare incipiam, status earum exponendos existimo, quoniam in priore[m] parte[m] libri sequentium rerumordo absolute de his disputari inhibuit, reddendum itaque hic locum tam necessariis partibus existimau.

"I think that I have to illustrate the 'conditions' (status) of land disputes
before I start discussing about their transcendentiae ⁹⁴. In fact, the order of the topics which came next, in the first section of this book, has prevented me from discussing any of these aspects. Therefore, I think that now I have to give way to elements which are so essential».

This passage, where Urbicus says that he intends to discuss first the nature of «status» («conditions») and then the nature of «transcendentiae» («progresses») of land disputes, is in the last part of B, f. 59. The whole paragraph, preserved in B, ff. 59-(first half of) 71 (pp. 65, 14-70, 9 La = 26, 6-30, 10 Th), was originally attached to the section where Urbicus explains the nature of controversia de modo. It has been later attached by Lachmann (followed by Thulin) to (the second half of) B ff. 71-74, where Urbicus writes about the character and importance of geometry within the «honestae artes». In a mutilated context, status generalis adsumptiuus, status initialis, status materialis and status effectiuus are mentioned in B, ff. 70-(first half of) 71 (= P, f. 20r), which is the end of this paragraph (p. 69, 17-70, 9 La = 29, 20-30, 10 Th). Each land dispute is characterized, according to Urbicus' systematization, by its own status. But there is no reference, in B, ff. 59-71, to status of land disputes before the section preserved by B, ff. 70-(first half of) 71, where Urbicus simply connects status with land disputes. As already seen, according to Thulin's suggestion there are good reason to suppose that B, ff. 71-74 was followed by B, ff. 35-38, to which paragraph B, ff. 59-71 may be attached.

Therefore, the simple solution may be that in the course of the transmission of Urbicus' text we have lost his expositions concerning both genera and status of land disputes. It is nevertheless possible to assume that the loss of these expositions has not, as a necessary consequence, left a large gap in Urbicus' text which has come down to us. As seen, Urbicus alludes to status generales of land disputes in B, f. 42 (p. 63, 25 La = 24, 15 Th); simply to status of land disputes in B, f. 59 (p. 65, 15 La = 26, 7 Th). In the latter passage, Urbicus says that «in the first part» of his book on land disputes, «the order of the topics which came next prevented» him from expounding the technical nature of the status of land disputes. Consequently, in this very section of his work Urbicus is going to comment

⁹⁴ «Transcendentia», in Urbicus' technical terminology, indicates that the nature or the argument of a land dispute has changed; it is, therefore, difficult to find a word which can give the actual technical meaning, although it has been translated as «progress». It is also worth noting that Urbicus is the only writer, in the corpus Agrimensorum, who uses this term.
upon this topic before treating transcendentiae. Since at the very end of B, f. 64 (p. 67, 19 La = 28, 2 Th) Urbicus starts dealing with «transcendentiae» of land disputes, it follows that his discussion about status took place at the very beginning of B, f. 64, where already Lachmann (followed by Thulin) suggested there may be a lacuna (p. 67, 10 La = 27, 26 Th).

Lachmann suggested also that in priorem parte libri in Urbicus' passage may be an indirect reference to the first of the two books of Frontinus' work on surveying. But it seems scarcely probable that «der Verfasser des Simplicius» - one of Urbicus' sources - drew this phrase from Frontinus' text, to mean in priore libro, and that it was later manipulated in the way we now have it by a third copyist (see Lachmann, 1852, pp. 113-115). As seen, Urbicus regarded status and transcendentiae as necessariae partes, «essential elements» of land disputes: neither term is in Frontinus' text which has come down to us. There is therefore no reason why we may not assume that Urbicus is alluding to the framework of his own treatise, and not to the framework of the handbooks of his sources.

To sum up, so far there seem to be two points which will be relevant for the present and the following discussion about Urbicus' list of land disputes:

a) Urbicus' treatise seems to have been intended as a new handbook; b) it is not Urbicus who was originally responsible for some inconsistencies in the sequence of the paragraphs where he determines the order of what he is going to deal with; these inconsistencies have to do with the way Urbicus' text has been transmitted.

There are, on the other hand, statements of Urbicus' work on land disputes which are based on Frontinus' technical terminology:

omne genus controversiarum ex quadam materiali bipertitione generatur. constat autem haec bipertitio aut in fine aut in loco [...]. (p. 65, 19-21 La = 26, 11-13 Th)

«Every type of dispute is produced by a material, so to speak, bipartition. Such a bipartition is made up of either finis or locus»;

similar to

Front., cortr. agr., p. 9,2 La = 4,3-2 Th:

materiae controversiarum sunt duae, finis et locus.
In a later passage, Urbicus' technical exposition of the same concepts is more detailed:

Legitimi materiales status controversiarum hi duo uidentur ex[i]stare. de fine aut de loco: reliqua controversiae, quaecumque sunt, ex hac materia orientur et aut ordine[m] mensurarum aut partibus iuris ad status generales priuatost reuoca<n>tur. (p. 66, 5-9 La = 26, 22-26 Th)

«The regular material conditions of land disputes seem to be these two ones: (a condition) concerning 'finis' and (a condition) concerning 'locus'. The other land disputes, whatever they may be, derive from these substantial parts: (all land disputes) are (therefore) connected with their distinctive 'general conditions' either by means of the system of regular measures or through the principles of the law».

Urbicus' doctrine is clearly influenced by Frontinus' statement (p. 9, 3 La = 4, 3-4 Th)

Harum (scil. materiae controversiarum) alterutra continetur quidquid ex agro disconuenit.

Like Frontinus, Urbicus states that the basic causes of all land disputes, finis and locus, are two. But in Urbicus' new systematization of the technical terminology, finis/locus are transformed into «legitimi materiales status» of land disputes. Since he refers to «ordo mensurarum» and «partes iuris», Urbicus seems to follow Frontinus' distinction between land disputes which are settled by means of the 'art of land surveying' and those decided through a legal procedure.

Now, in the extant fragments of Frontinus there is nothing similar to Urbicus' distinction between land disputes characterized by «legitimi materiales status» («regular material conditions»), that is, finis and locus (drawn from Frontinus' treatise), and those characterized by their peculiar «status generales» («general conditions»). The following passage seems to allude to a further subdivision which Urbicus introduced into his treatise. Soon after commenting upon finis and locus, he goes on to say:

Constat autem haec bipertitio aut in fine aut in loco, non sine illa controversia quae de positione terminorum praescibitur. Quem admodum unum extra positum est, quo separato a cetero numero duo primum
This bipartition is made up of either finis or locus, as well as of that kind of disagreement, which is introductory, about the position of boundary markers. As number one, which has a separate position so that, first of all, number two can be counted only when the unit is separated from the rest of the numbers, so within the number of land disputes the position of 'controversia de positione terminorum' corresponds to that of number one. Although such a dispute is the origin, so to speak, of all disagreements, it seems that it cannot on any account be added to which are the real disputes. In fact, separately it is the preliminary dispute. Therefore, if its nature of dispute is brought to bear upon land (its nature changes:) it is no longer a dispute about the position of boundary markers, but it develops into either a dispute about finis or locus.

* * *

As we have seen, in Frontinus' theoretical systematization a controversy about the position of boundary markers (de positione terminorum) is simply the first in his list of fifteen different cases of land disputes, not connected with either of his two materiae controversiarum, finis or locus. But in Urbicus' view, a controversia de positione terminorum becomes a theoretical category which basically serves as the starting point of the procedure to settle disputes concerning either the boundary line (finis) or the area (locus):

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   de positione terminorum
     /     \
   finis    locus
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By regarding a controversia de positione terminorum as a theoretical, rather than a practical kind of dispute, possibly Urbicus intended to make a
compromise between the former technical tradition (Frontinus' list) and a new technical trend. Nevertheless, it seems that Urbicus' view has been influenced by that of Frontinus. Commenting upon the technical nature of a «controversia de positione terminorurn», Frontinus affirms (p. 10, 4-11, 2 La = 4, 15-19 Th):

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de horum (scil. terminorum) positione (ordinatione La) cum constitit mensore, si secundum proximi temporis possessionem non conueniunt, diversas attiguis possessoribus faciunt controversias, et ab integro alius forte de loco alius de fine litigat.
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«When the surveyor is clear about the position of these markers, if (these neighbours) do not agree about the most recent occupation of the land, they give rise to different controversies with the possessors of adjoining parcels of land and lodge again a claim, one with regard to the site, another with regard to the boundary».

Therefore, already in Frontinus' list of land disputes, a «controversia de positione terminorurn» seems to bear the character of a particular technical investigation which is intended, in the contending parties' view, either to settle the dispute by mutual agreement before they go to law, or to ascertain whether it is a disagreement about finis or locus. In this preliminary stage the intervention of a land surveyor, who examined the «most recent occupation of the land», was very important. This may be the reason why in Urbicus' systematization a «dispute about the position of boundary markers» seems to be regarded as the starting point of any kind of disagreement between two neighbours (on these aspects, see Chapter 4).

The following section of Urbicus' treatise deals with the technical nature of a finis. According to him, what discriminates a finis from a rigor, a straight line boundary, is species, «likeness». A finis is characterized by a single line on the soil; a rigor by several lines. It is worthy of note that Urbicus, in this passage, recommends his readers not to follow what the Lex Mamillia seems to prescribe about the width of a boundary strip between two adjoining estates. In fact, according to Urbicus' words, «legal scholars still have different opinions about this law»: in particular, whether it specified that a boundary strip was of five or of ten feet (five feet on each side of the boundary line). He seems to agree with the iuris periti who came to the
conclusion that the Lex Mamilia alludes to a boundary strip of five feet:

uidefnitur tamen his. quinque pedum esse latitudinem. ita ut
dupondium et semisse una quaeque pars agri finem pertainere patiatur.
(p. 66, 11-21 La = 27, 1-11 Th)

«(Legal scholars) are of the opinion that it is a five-foot strip, so that both sides may let the boundary strip of an area of land extend for two and a half feet».

Urbicus supports this interpretation by arguing that any long cut in the ground, intended to be a boundary line, must be considered together with the two portions of land it produces (p. 66, 22-67, 10 La = 27, 12-26 Th). Since the end of this section, along with Urbicus' explanation of what was the second legitimus status materialis of land disputes, locus, is lost, Lachmann (followed by Thulin) has rightly suggested a gap (p. 67, 10 La = 27, 27 Th). It may be argued that it has not to be a wide gap since, as Urbicus himself adfirms, only his disputatio de fine was intended to be subtilior.

In both editions this paragraph is followed by Urbicus' discussion about the meaning and importance of status generales (general conditions) of land disputes. This exposition seems to be consistent with the order he has earlier planned to follow (see p. 65, 14-18 La = 26, 6-10 Th). In Urbicus' terminology «status generales» of land disputes are, from a technical angle, different from «legitimi status materiales» (finis/locus). The former class seems to represent what makes land disputes start according to the correct legal-technical procedure.

According to Urbicus, this is the uera propositio (true statement) of a dispute; it occurs only if a land dispute follows its own status generalis, not a different one. This is the fundamental condition in order that a dispute has its transcendentia (progress) from incorrectness to correctness, whereas the contrary happens every time a dispute is connected with a different kind of status. Therefore, besides its own status generalis, a land dispute in agreement with a correct procedure must be characterized also by the right kind of transcendentia. This is made possible if a dispute progresses from a non-grounded into a firm statement (ex non stante propositione in [te]stante<m>), while a dispute progresses ex re stant<e> i<n> non stante<m> if the question is debated through uanae
demonstrationes, «groundless proofs» (p. 67, 16-68, 15 La = 27, 28-28, 21; on these aspects, see Chapter 4).

On the other hand, land disputes have their own «effects» (effectus). They are six: effectus coniunctiuus, disiunctiuus, spectiuus, expositiuus, subiectiuus, recuperatiuus. A seventh effect, effectus quasi recuperatiuus, is, basically, analogous with an effectus recuperatiuus (p. 68, 16-69, 16 La = 28, 22-29, 19 Th)\(^\text95\). From a technical point of view, effectus are, basically, the object of the settlement of a land dispute.

Finally Urbicus explains that, if the «effect» of land disputes changes, their status may be connected with a different kind of transcendentia:

per hos effectus omnium controversiarum status inuicem habent transcendentiae aut necessarias aut queuntes aut nequeuntes, saepe interibiles. (p. 69, 17-19 La = 29, 20-22 Th)

«Throughout these 'effects', status (conditions) of all land disputes have in succession their own transcendentiae, which are either necessary or potential, or unnecessary, often insubstantial».

As we have seen, Urbicus' illustration of the status of land disputes is lost. What is clear, is that he makes a careful distinction between legitiim materiales status - finis/locus - and status generales privati of land disputes. Now, the names of the «conditions» (status) of land disputes are mentioned in B 70-(beginning of) 71 (this paragraph is incomplete: see p. 69, 19 -70, 9 La = 29, 20-30, 10 Th) and in the section of Urbicus' treatise, attached by Lachmann and Thulin to this paragraph, dealing with the technical nature of fifteen types of land disputes. It is not worth examining Urbicus' explanation of when and how such changes determine either transcendentiae necessariae, queuntes/nequeuntes or interibiles. What appears to be clear is that, in general, transcendentiae are always interibiles (insubstantial) when the right status of a dispute changes into another one without any technical reason. Since Urbicus mentions also a transcendentia non necessaria (twice: p. 69, 27 La = 30, 1-2 Th; 70, 7 La = 30, 8 Th), it seems that his text at p. 69, 17-19 La = 29, 20-22 Th should be emended as follows:

\(^95\) In Thulin's edition, p. 28, 24, (effectus) «subjectiuus» is omitted (see p. 68, 18-18 of Lachmann's edition). But the right number of «effects» (six) is in Thulin, 1913 b, p. 117 (where, by mistake, one of the five «conditions» of land disputes, «status inicetiuus», is omitted).
According to Urbicus' systematization, the status which characterize land disputes are five:

1) **status adsumptius generalis**: controversia de positione terminorum
2) **status initialis**: controversia de rigore
3) **status materialis**: controversia de fine
   - controversia de loco
4) **status effectuus**: controversia de modo
   - de proprietate
   - de possessione
   - de subsiciuis
   - de alluizione
5) **status injectuus**: controversia de iure territorii
   - de locis publicis
   - de locis relictis et extra clusis
   - de locis sacris et religiosis
   - de aqua pluia arcenda
   - de itineribus.

More details about the character and technical function of these «status» (as «general conditions» of land disputes) are found in the section where Urbicus expounds the nature of each controversia.

In general, as already said, in the first, general part of his treatise Urbicus seems to follow a fairly coherent order of exposition: first of all, the nature of **status materiales** (finis/locus), followed by that of **status generales**, **effectus** and **transcendentiae** of a land dispute. Now, as far as **status** and **transcendentiae** are concerned, it may be noted that he mentions a **non necessaria transcendentia** (p. 70, 7 La = 30, 8 Th) and, in a later passage, **non necessarii status** (p. 75, 28-29 La = 35, 5-6 Th) of land disputes. Consequently, one inclines to think that, in Urbicus' theoretical systematization, it is the character of a **transcendentia** which determines the character of the corresponding **status** of a land dispute. On the other
hand, it seems that also *transcendentia* and *effectus* may be treated as the same. This is confirmed by the following passages. In the first, Urbicus comments on the correct way of deciding a land dispute, which stage is called a *uera propositio*:

> ex uero in falsum transcendent<ia> fit, cum relieto generalis statu[s] quolibet alio statu controversia instruitur. (p. 67, 21-23 La = 28, 3-5 Th)

> «'Transcendentia' from truth to falsehood occurs when the 'general condition' of a dispute is abandoned and the controversy is arranged according to any other 'condition' ».

The terminology used in this passage is the same as in Urbicus' explanation of *effectus subjectius*:

> est effectus controversiae, cum reliquitur status generalis et alio quolibet statu controversia defenditur. (p. 69, 8-10 La = 29,12-14 Th)

> «A 'misleading effect' of a controversy occurs when (its) general condition is abandoned and the case is argued according to whatever 'condition' ».

Urbicus does not offer any sort of explanation for such apparent oddities. As already seen, he is the only author of the Corpus Agrimensorum who dealt with such aspects of land disputes. It is therefore difficult to ascertain whether he tried to modify some theoretical principles (from his personal experience or his sources) or whether in his exposition he simply overlooked some details. The simple solution may be to suppose that Urbicus' theoretical systematization was an attempt at gathering all information from other authorities - those *professores* mentioned at p. 64, 8 La = 25, 1 Th - on this particular subject. In this case such (although minor) inconsistencies in Urbicus' text, apparently not caused by the manuscript tradition, seem to confirm that he followed several sources.

On the other hand, it is difficult to evaluate to what extent Urbicus' systematization and theories may have influenced those who consulted his treatise on land disputes. A section of the handbook written by Frontinus' anonymous commentator has a particular value. Although he does not mention his source, in a long paragraph at the end of his commentary (transmitted by P, ff. 19v-20v: p. 25, 4-35; 26, 12-25 La = 69, 21-70, 34 and
based on Urbicus' text p. 67, 24-70, 9; 89, 25-90, 21 La = 28, 22-30, 10; 49, 26-51, 3 Th) this author follows Urbicus' text dealing with the technical terminology about status and effectus of land disputes. Both classes of technical terms are here confused:

\begin{quote}
\textit{quod (sic) sint status earum (scil. controversiarum), id est injectiuus expositiuus subjectiuous recuperatiuous assumptiuous initialius materialiis effectiuius. sunt enim VIII. ex his omne genus controversiarum exoritur. (p. 25, 9-11 La = 69, 25-27 Th; on this passage, see Thulin, 1913 b, pp. 116-117)}
\end{quote}

«(I have to point out) how many are the 'conditions' of land disputes, that is, 'condition of laying', 'condition of explanation', 'condition of substitution', 'condition of regaining', 'condition of substantiation', 'condition of corporeality' and 'condition of implementation'. They are eight: every kind of land dispute originates from them».

As said, the evidence is too scanty to come to any firm conclusion about the sources of Urbicus' systematization and terminology. We can only say that his handbook on land disputes, as far as the theoretical aspects of this peculiar aspect are concerned, may well regarded as a sort of turning point. This supposed originality of Urbicus should therefore warn us against making generalizations from his evidence.

To summarize, the main points emerging from the analysis of Urbicus' text are the following:

a) Urbicus intended to write a book with didactic purposes for people who had to be informed of the technical and legal aspects characterizing the procedure to settle land disputes;

b) Urbicus' treatise has been indubitably influenced by earlier technical literature. From the work of Frontinus, Urbicus drew his basic distinction of land disputes based on finis or locus. But Frontinus is likely to be the main, not the only source of Urbicus. The latter seems to have used his personal experience and earlier authorities, not necessarily accounts of the same kind of subject. It is impossible, from what Urbicus says, to make any sort of likely suggestion about the date of these authors.
C Urbicus' list of land disputes

As we have seen, Urbicus claims to have written a book on land disputes although he was aware that «many times among experts» aspects connected with this subject «have been discussed more than enough» (p. 64, 8-11 La = 25, 1-3 Th). Unfortunately, it is unclear whether Urbicus refers to other authorities in addition to the extant sections, concerning types of disagreements and the procedures to settle them, of Frontinus' and (the so-called 'first') Hyginus' works on surveying and to the passages on this topic in Siculus Flaccus' handbook.

As regards Hyginus' list of disputes, it is worth noting that it is limited to six types, arranged in alphabetical order. Hyginus' treatise on land surveying was probably written under Trajan (see Chapter 2). It is therefore earlier than Urbicus' work, commonly supposed to have been written in the late fourth-early fifth century AD (on these questions, see Chapter 4). It follows that both the section on controversiae of Hyginus' work on surveying and Urbicus' treatise on land disputes were composed in the period between Frontinus' treatise on surveying (end of the first century AD) and Pseudo-Urbicus' compilation on land disputes (very probably written, as already noted, in the fifth or sixth century AD). Now, as regards the way in which technical aspects of land disputes are treated, Hyginus' text is at variance with the corresponding section of Frontinus' work on surveying. Frontinus' systematization of the types and nature of land disputes seems to be an original creation. And one inclines to think that already in the second century AD Frontinus' work represented, for those who devoted themselves to the study of these technicalities of land surveying, not simply the most revealing extant example of the handbook tradition on this subject, but also an accredited authority one might take issue with.

Furthermore, as we have seen, also Urbicus' exposition dealing with land disputes was characterized by new technical elements such as status, effectus and transcendentiae. It does not seem likely that Urbicus drew this theoretical terminology from a paragraph of Frontinus' work on surveying which has not come down to us. On the other hand, one must not forget the close connection between Frontinus' and Urbicus' use of finis/locus as the basis for the technical and theoretical distinction between land disputes. But, as will be seen presently, Urbicus' account of the substantive nature of each dispute was also largely influenced by Frontinus' technical viewpoint.
Finally, as regards the nature of Pseudo-Urbicus' compilation on land disputes, it may be observed that in general this writer (who, in most cases, also conceals the names of his sources) pillaged the earlier accounts on land disputes which have come down to us (Frontinus, Hyginus and Urbicus). But every time he deals with a type of controversy for which he could use both Frontinus' and Hyginus' exposition, the anonymous compiler prefers to copy almost word for word Hyginus', not Frontinus' text. For instance the tenth land dispute, which is the controversia de subsecuuis in Frontinus (and Urbicus), in this late compilation is named a controversia de iure subsiciuorum (p. 20, 14 La = 66, 18 Th), as in Hyginus' list (p. 132, 24 La = 96, 11 Th).

We may now take a closer look at Urbicus' treatise. To begin with, it is important to observe that both the number and the names of Urbicus' list of land disputes is derived from Frontinus:

<table>
<thead>
<tr>
<th>Frontinus</th>
<th>Urbicus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) de positione terminorum</td>
<td>1) &lt;de positione terminorum&gt;*</td>
</tr>
<tr>
<td>2) de rigore</td>
<td>2) de rigore</td>
</tr>
<tr>
<td>3) de fine</td>
<td>3) &lt;de fine&gt;*</td>
</tr>
<tr>
<td>4) de loco</td>
<td>4) &lt;de loco&gt;*</td>
</tr>
<tr>
<td>5) de modo</td>
<td>5) de modo</td>
</tr>
<tr>
<td>6) de proprietate</td>
<td>6) de proprietate</td>
</tr>
<tr>
<td>7) de possessione</td>
<td>7) de possessione</td>
</tr>
<tr>
<td>8) de alluione</td>
<td>8) de subsecuuis (= n. 10 Front.)</td>
</tr>
<tr>
<td>9) de iure territorii</td>
<td>9) de alluione (= n. 8 Front.)</td>
</tr>
<tr>
<td>10) de subsecuuis</td>
<td>10) de iure territorii (= n. 9 Front.)</td>
</tr>
<tr>
<td>11) de locis publicis</td>
<td>11) de locis publicis</td>
</tr>
<tr>
<td>12) de locis relictis et extracl.</td>
<td>12) de locis relictis et extracl.</td>
</tr>
<tr>
<td>13) de locis sacris et religiosis</td>
<td>13) de locis sacris et religiosis</td>
</tr>
<tr>
<td>14) de aquae pluuiae transitiu/arcenda</td>
<td>14) de aqua pluvia arcenda</td>
</tr>
<tr>
<td>15) de itineribus</td>
<td>15) de itineribus</td>
</tr>
</tbody>
</table>

96 Namely, «controversia de fine», p. 12, 12-31 La = 61, 3-20 Th (= Hyg., contr. agr., p. 126, 3-17; 127, 18-23; 128, 11-12 La = 89, 1-15; 90, 19-24; 91, 12-13 Th); «de loco», p. 13, 7-29 La = 61, 21-62, 8 Th (= Hyg., contr. agr., p. 128, 12-130, 19 La = 92, 17-94, 2 Th); «de modo», p. 13, 30-14,9-31 La = 62, 9-34 Th (= Hyg., contr. agr., p. 131, 10-132, 20 La = 94, 16-96, 7 Th); «de alluione», p. 16, 25-17, 4-22 La = 64, 3-24 Th (= Hyg., contr. agr., p. 124, 3-9 La = 87, 4-88, 9 Th); «de iure subsiciuorum», p. 20, 14-21 La = 66, 18-28 Th (Hyg., contr. agr., p. 132, 24-133, 8; 12-14 La = 96, 11-20; 97, 4-6 Th).
Now, it seems unlikely that the changes in the order of Urbicus' list is a mere consequence either of Urbicus' carelessness in plagiarizing his main source or of Lachmann's and Thulin's arrangement of Urbicus' text. In fact, the same order of Urbicus' list of land disputes, from the sixth to the fifteenth controversia, has been transmitted by both halves of the Arcerianus which, as already seen, overlap at this point.

It is also worth noting that no gap is found in the Latin text from B, f. 5 (dealing with the «controversia de proprietate») to B, f. 35 (dealing with the «controversia de itineribus»). The only gap in the corresponding section of Urbicus' text transmitted by A (ff. 164-178) is between A, f. 171 and A, f. 172 (loss of the beginning of the «controversia de iure territorii»).

As we have seen, Frontinus expounds the technicalities of each land dispute in a section, transmitted by A under his name, which is prefaced by the enumeration of all the fifteen disputes he later deals with according to the order of this general list. Since we do not find anything similar in Urbicus' text which has come down to us, it is impossible to say whether he altered the order of Frontinus' list before he started to explain the nature of each dispute or while commenting on each dispute. But this seems likely because, in Urbicus' systematization, disputes «about subseciva» and «the alluvial land» belong to a general «condition» (status) which differs from that denoting a dispute «about the law of territory». It may therefore be helpful to examine Urbicus' discussion of the nature of each land dispute.

As already pointed out by Lachmann (1852, p. 129), among all the peculiar elements of Urbicus' technical terminology, the status of land disputes is particularly remarkable. As in Frontinus' work, all controversiae are connected with finis or locus, called by Urbicus legitimi materiales status (which depend on controversia de positione terminorum: see p. 65, 14 ff. La = 26, 11 ff. Th). As we have seen, besides these «regular material conditions», each dispute is denoted by its own «general condition» (status generalis privatus): if it is not the right one, the procedure to settle a controversy cannot start in the proper way. Despite the loss of much of Urbicus' technical discussion about these aspects in the first part of his treatise, it is possible to gather more information about «conditions» of land disputes from the second part of his work, where he comments on each land dispute. As regards the status of a «controversia de positione
terminorum», Urbicus states that:

haec controversia moti termini nullus in se aliae controversiae statum recipit: est enim anticipalis et quasi comminatio quaedam litium, declarans aut loci aut modi futura controversiae. (p. 72, 1-4 La = 31, 7 Th)

«Such disputes about boundary markers which have been displaced does not admit the condition of any other controversy: it is introductory and, so to speak, a threatening of litigation. It is this kind of dispute which states whether a controversy will be about a 'site' or about an 'area'»

It is worth comparing this passage with Urbicus' statement, from the first part of his work (p. 65, 26-66, 5 La = 26, 17-22 Th) about the same kind of dispute (see above, paragraph B):

et quamuis (scil. controversia de positione terminorum) sit origo quaedam litium, minime tamen adiungi materialibus controversiis uidetur posse, quoniam singulariter omnium litium anticipalis existit, et si querella eius ad solum descendit, desinet controversia esse de positione terminorum: finis enim incipit esse aut loci.

«Although such a dispute (a controversy about the position of boundary markers) is the origin, so to speak, of all disagreements, it seems that it cannot on any account be added to those which are the real disputes. In fact, it is separately the preliminary dispute. Therefore, if such a case of complaint descends to land, (its nature changes): it is no longer a dispute about the position of boundary markers, but it develops into a dispute either about finis or locus».

In both passages the same concept is found, namely that a dispute «about the position of boundary markers» is not a proper controversy, but a «preparatory» (anticipalis) stage to a disagreement which may be either about the boundary line or the area. There is little doubt that the second fragment provides a recapitulation of Urbicus' earlier technical explanation. It follows that:

a) as regards «status» (and other technicalities) of land disputes, the second section of his treatise is based on the technical terminology Urbicus used in the first one, which serves as a general and theoretical introduction;
b) the first and second sections of Urbicus' treatise on land disputes are connected by a peculiar element: his theory of the status of land disputes and their relation with a fixed number of disagreements, on the one hand, and with also practical cases. Such a doctrine seems to represent also the main trait of Urbicus' work.

In Urbicus systematization, the «condition» of the second dispute, «about straight line boundaries» (de rigore) is strictly connected to the condition of the first «preparatory» dispute:

\[\text{de rigore controversia est status initialis pertinentis ad materia}\]

An dispute about a straight boundary line belongs to the 'category of beginning' which pertains to the object of the survey, and is not without comparison with the previous kind of dispute. In fact, when a dispute is about a straight line, it may be that a boundary marker has been displaced at an earlier stage. Therefore, this second controversy appears to comprise the previous one, although a dispute about a straight boundary line may also arouse separately without the occurrence of that about the position of boundary markers. For boundary markers are not placed in every place in a territory, irrespective of whether or not they can in principle have boundary markers.

According to Urbicus, the first and the second dispute of his list are connected when, by means of a straight line between two points, we ascertain where the straight line boundary between two lands is supposed to run and whether any boundary marker has been displaced from such a line.

Because of a gap in the text Urbicus' exposition concerning the «condition» of the third and fourth dispute is lost, the former «about (other) boundaries» (finis), the latter «about a site» (locus) (for these gaps see p. 72, 21; 74, 10 La = 31, 26; 33, 12 Th). Nevertheless, Urbicus' earlier discussion about status generales and trascendentiae in the first part of his
treatise (see p. 70, 3-4; 6-7 La = 30, 4-5; 7-8 Th), shows that these two disputes fall under the same «condition», called «status materialis» («material condition»). But, as we have seen, finis and locus are also referred to as «legitimi materiales status controversiarum» («regular material conditions»). Therefore, it is difficult to say which of these two technical terms were regarded by Urbicus as suited in their entirety to finis and locus as substantial cases of land disputes.

The fourth «condition», named by Urbicus «status effectiuus» («condition of implementation»), typifies disputes «about the area» (de modo), «about ownership» (de proprietate), «about possession» (de possessione), «about subseciva» (de subseciuis) and «about alluvial land» (de alluione). Urbicus explains the nature of this status, when he comments on the technical nature of the first dispute which is classifiable under such a group:

\[
\text{de modo controversia <est> status effectiui: ante enim locus est ibi quam modus nominetur: aeque recipiens ante dictarum controversiarum omnes status, sed ut superius signicaui irritos et non necessarios. (p. 75, 26-29 La = 35, 3-6 Th)}
\]

«A dispute about the area belongs to the 'condition of implementation' since in that matter the site is mentioned before the area. In like manner, this dispute gets the conditions of all the aforesaid disputes. But, as I said before, these conditions (in this case are held to be) irrelevant and not indispensable».

In this passage it is important to note that a «dispute about area» seems to be considered as a sort of subspecies of a «controversia de loco», since it is the former that may arise in connection with the extent of the disputed «site»\(^{97}\). But a dispute «about area», in Urbicus' view, is also the product of all the preceding disputes, that is to say those dealing with boundary-lines and markers.

The next dispute of Urbicus' list is characterized by the same «status» and is the 'product' of all the preceding types of disputes as well:

\[
\text{de proprietate [mundi] controversia est status effectiui: efficitur enim ex omnibus ante dictis controversiis. (p. 78,28-29 La = 39,1-2 Th)}
\]

«A dispute about ownership belongs to the category of implementation;\(^{105}\)

\(^{97}\) See p. 76, 11-13 La = 35, 19-21 Th (locus connected to modus in the context of a dispute «about area», decided by means of maps); on these aspects, see Chapter 4.

105
indeed it is a product of all the disputes mentioned above;

in hac controversia plus potestatis habet ius ordinariam quam ars mensoria. ab eo enim statu lis incipit, ut de proprietate agatur, non de loco: mensura autem nihil amplius quam secundum formam locum declarat. in hac autem controversia ars mensurarum locum secundum habet, quoniam prius alii uitandum est an a genda sit mensura. (p. 80, 13-19 La = 40, 11-16 Th)

«In disputes of this kind the law in force has more power than the art of surveying. In fact, such is the condition from which such disputes arise, that ownership, not the site is concerned. On the other hand, (the function of) surveying is anything else than to make clear the (disputed) site according to a map. When these controversies occur, the art of surveying comes second, since in the first place it has to be left to someone else (to see) whether a survey has to be made».

In Urbicus' view, also the nature of a «dispute about possession» seems to be denoted by the same concept:

de possessione controversia est <status> effect<i>ui, quoniam primum possessio tempore efficitur, deinde, ut ad solum respiciamus, omnes ante dictas controversias capi: si enim solum cogitemus, ut legitima possessio inpleri possit, indubitale locus definiatur necesse est. (p. 80, 20-24 La = 40, 17-21 Th)

«A dispute about possession belongs to the 'condition of implementation' since possession is, first of all, a product of time. Secondly, if we consider land, such disputes hold all the aforesaid (kind of) disagreement. In fact, when we think of land, undoubtedly it is necessary that the site should be defined in order that a lawful possession may became meaningful».

It is «locus», to which Urbicus connects «disputes over subseciva», that provides the link between this and the three foregoing disputes:

de subsiciuis controversia est status effectiui, quonim subsiciu nominari aut sentiri sine quadam loci latitudine[m] aut modo non possunt. ideoque manifeste appareat supra dictarum controversiarum status in . . . (his habere suppl. Goesius) locum. (p. 81, 3-6 La = 40, 24-27 Th)

«A dispute concerning subseciva belongs to the 'condition of
implementation' because odd portions of land land remainders cannot be referred to or imagined without any extent of the place itself or an area. It is therefore evident that it is the condition of the aforesaid (kind of) disputes that has a role here».

On the other hand, as regards «controversy over alluvial land», it seems that it is «ius ordinarium» which provides the link between this dispute and all the others in the same group:

«Status injectius» («condition of 'laying a claim to'») is the condition denoting «controversia de iure territorii» («dispute about the law of territory»), «de locis publicis» («dispute about public areas»), «de locis relictis et extraclusis» («dispute about areas which have been left out and excluded from the centuration»), «de locis sacris religiosis» («dispute about sacred and religious places»), «de aqua pluia arcenda» («dispute about the passage of rain water») and «de itineribus» («dispute about the rights of way»). Urbicus makes clear what a «status injectius» is while commenting on the first of these disputes:

de iure territorii controversia est status injectiui. inicitur enim solo quaedam controversia e persona: tum praecipue qui d>quid est illud de quo agitur, aut locus aut modus, generalem statum <a> iure ordinario trahit, etiam si multis locis mensurarum exigat interventum. haec controversia [...] nec tantum iure ordinario sed et arte mensoria conponitur [...] quamuis alium statum generalem controversiae accipere debeant, quae de loco non exigo mouentur, res tamen publicae cum privatis si agunt, quasi iure territorii solent uindicare, et hunc statum generalem constituunt eis locis quae loca res p. adserere conantur [...]. Non est dubium necessarias esse mensuras in eius modi controversia, quae quamuis alio nomine appellatur,
locorum tamen facit quaestionem. (p. 84, 11-18; 85, 8-13; 16-18 La = 44, 24-45, 5; 45, 26-46, 4; 46, 8-10 Th)

"A dispute concerning the law of territory belongs to the 'condition of laying' (a claim to). For instance a claim is laid to (an area of) land by a person. It is indeed then, whatever the object of a dispute -modus or locus-may be, that the 'general condition' of this disagreement derives from the law in force, although in many occasions a measurement of the area may be needed. This type of dispute [...] may be settled not only through the law in force, but also the art of land measurement. [...] Although land disputes concerning a wide area of land should be characterized by a different kind of general condition, nevertheless res publicae, in case of this kind of dispute with private individuals, usually assert a claim to this land as it were by 'the law of territory'. Therefore, res publicae determine this kind of 'condition' for those places they try to get hold of. There is no doubt that a survey is necessary when such disputes occur: although this is a kind of disagreement which may be given another name, it nevertheless bears the character of a dispute about areas».

Such a connection between locus and types of controversy belonging to this group appears also from Urbicus' exposition of the nature of a «dispute about public areas»:

de locis publicis controversia est aeque status inieciuii. sunt autem loca publica complura. sed ex his quaedam loca priuata<exigunt> defensionem: et quamuis haec loca diuersis appellationibus contineantur, unam tamen habent controversiae condicionem. (p. 85, 19-23 La = 46, 11-15 Th)

"A dispute concerning public areas belongs to the 'condition of laying' (a claim to) as well. Now, public places are very many, some of which require a separate protection. Although these areas may depend upon different names, nevertheless just one is the character of disputes they involve».

On a similar concept is based the technical nature of a «dispute about areas which have been left out and excluded from the centuriation»:

de locis relictis et extra clusis controversia est status inieciuii: manifestum est enim de loco agi, sed per aliam personam. (p. 86, 26-28 La
This dispute belongs to the 'condition of laying (a claim to)'; it is, in fact plain that such a dispute is about locus, but by the agency of a different party.

Such a close connection between locus and the corresponding 'condition' of land disputes is also the peculiar trait of the last controversies of Urbicus' list characterized by status iniectius:

de locis sacris et religiosis controversia est aequae status iniectius: agitur enim de locis, sed cum aut sacra aut religiosa nominentur, statum generalem a iure ordinario accipiunt. (p. 87, 9-12 La = 47, 22-25 Th)

A dispute about sacred and religious places belongs to the 'condition of laying (a claim to)'. Now, the argument centres on places but, in case they are called either sacred or religious, they derive their 'general condition' from the law in force;

de aqua pluueia arcenda controversia est status iniectius: per quodcumque enim solum transit, ad ius ordinarium magis respicit condicio eius quam ad mensuras; nisi si per extremitatem finis uadat: propter quod statum generalem etiam alium accersire debet et quasi geminatone quadam defendi, quod et per finem eat et sit lis de pluueia arcenda haec controversia per regiones var<es> generibus exercetur, sed quasi ad eandem respicit condicione<es>. (p. 88, 18-26 La = 48, 26-49, 5 Th)

A dispute about the passage of rain water belongs to the 'condition of laying (claims to)'. In fact, whatever is the type of land through which such water goes, the condition of this dispute pertains to the law in force, rather than surveying. Unless rain water flows along the outer edge of a boundary strip. For this reason, such disputes should seek for a different (kind of) general condition and supported by a doubling, so to say. In fact, it may occur along boundaries and is a dispute about the passage of rain water. Such disputes are settled according to different procedures in various areas, but almost everywhere it pertains to the same condition;

de itineribus controversia est status iniectiiu: inicitur enim loco quaestio, et defenditur populo quod forte a priuatis possidetur, haec quaestio multipliciter tractatur. (p. 89, 10-13 La = 49, 12-14 Th)

A dispute about rights of way belongs to the 'condition of laying (claims
to). Indeed, a claim is laid to an area of land and the community asserts what might have been possessed by private individuals. Various are the procedure by which such disputes are conducted.

These passages show, first of all, that the order in which a «controuersia de subseciuis» and «de alluuione» occur in Urbicus' list is at variance with Frontinus' list of land disputes. This is because, in Urbicus' view, every dispute belonging to the fourth «condition» (status effectiuus) is connected with either modus or locus or both. By means of such a connection, these two disputes can be associated to the «conditions» of the previous land disputes (namely, «de positione terminoruim»; «de rigore»; «de fine» and «de loco»). On the other hand, it may be noted that land disputes characterized by the fifth «condition», «status iniectiuus», do not seem to be connected with any of the four preceding «status» mentioned by Urbicus. Moreover, disagreements denoted by «status iniectiuus» seem to be, in Urbicus' mind, those which can be settled by simply ascertaining who (a res publica or a private individual) is legally entitled to possess an area of land which had been seized, over which either of the contending parties claims its rights of control.

Now, as already underlined, the fundamental difference between Urbicus and the anonymous commentary on land disputes (attributed to Urbicus by the manuscript tradition) is that the latter, as regards «controuersia de fine», «de loco», «de modo», «de alluuione» and «de iure subsiciuorum» (instead of Frontinus' and Urbicus' «controuersia de subseciuis») copied almost verbally from Hyginus', and not Frontinus' (and Urbicus') text. On the other hand, Urbicus' choice to rely chiefly on Frontinus' text (as far as we are able to judge from what we have of Urbicus' text) may be interpreted as an attempt at compromise between a new theoretical trend and earlier knowledge on this subject (Frontinus' work on surveying) rather than a mere compilation of works from different sources. This means that Frontinus' study of land disputes was considered as one of the most revealing specimens of handbook learning which, basically, was still suited to the needs of the surveyors of Urbicus' days.

As pointed out earlier, Urbicus' oblique indication that there were many authorities who dealt with land disputes (see p. 64, 8-9 La = 25, 1-2 Th) seems to suggest that he had indeed looked at other works on this subject. Consequently, the collection of technical and theoretical discussions
about land disputes which have come down to us is not as complete as it must have been when Urbicus wrote his work. It would be very interesting to know whether the professores Urbicus alludes to also chose to use Frontinus' or Hyginus' text as the necessary starting point for their systematization of the subject. In any case, although Urbicus' treatise on land disputes incorporated stock technical materials from Frontinus' text, it does not necessarily follow that Urbicus intended to write a commentary on Frontinus' list of land disputes. But this does not lead to the conclusion that Urbicus, for the technicalities in question, must have accumulated his material from many other sources besides Frontinus.

As already remarked, there is an important difference between Frontinus' and Hyginus' list of controversiae. Hyginus, himself a land surveyor, limits to six the number of land disputes he deals with: in particular, land disputes "quae solent in quaestiones deduci" (p. 123, 17-18 La = 86, 20-21 Th), "which are regularly raised as a problem", "de alluvione atque abluuione", "de fine", "de loco", "de modo", "de iure subsiciuorum", "de iure territorii". In view of Hyginus' (and, in general, of the writers who used him as their main source) lack of interest in some kinds of land disputes listed by Frontinus, it would be no matter for surprise if, in the practice of Urbicus' times, some of Frontinus' fifteen controversiae had been discarded for various reasons by some of the professores Urbicus alludes to. Hyginus, for instance, makes it clear that he deliberately did not deal with disputes connected with the "forense officium", "litigation" (p. 134, 9-13 La = 98, 1-5 Th).

Brugi (1897, p. 195), on the other hand, suggested that some land disputes may have become, from a technical viewpoint, less important than others. But, although in such a tangled matter we can never be certain, it seems likely that most of the technical instructions Frontinus gathered as appropriate for the acquisition of the basic knowledge in this subject had not lost relevance in Urbicus' time. It seems therefore plausible that Frontinus' work on surveying remained the unquestioned authority in its sphere for many who investigated the science of surveying or related aspects, like the technicalities of land disputes.

The aim of the following investigation is to show that Urbicus' work on land disputes may be regarded as a product of erudition rather than investigation, and that his guiding thread was Frontinus. We do not have, it is true, any assurance that Frontinus' text on land disputes was the only
source thanks to which Urbicus could be properly informed of all the aspects connected with this subject.

Nevertheless, once we find out that the underlying technical concepts of Urbicus' exposition derive from the text of his main source, the conclusion that Urbicus' knowledge of Frontinus' work is based on direct knowledge seems unavoidable. Consequently, we can ascertain, by comparing Frontinus' and Urbicus' text dealing with each land dispute, not only to what extent the latter relied on the former's work, but also whether Urbicus had access to the complete version of the handbook of his predecessor, or whether he simply quoted from a mutilated scrap of the original, not very different from Frontinus' text which has come down to us in the manuscripts.

As for a «controversia de possessione», according to the text which has come down to us, Frontinus states that:

\[
\text{de possessione controversia est, de qua ad interdictum, hoc est iure ordinario litigatur. (p. 16, 3-4 La = 6, 13-14 Th).} \\
\text{«A dispute over possession of land is debated with reference to the interdictum, that is, by means of the law in force».}
\]

It can be seen at a glance that there is a marked affinity between this passage and the paragraph where Urbicus deals with the same kind of dispute. The only new information, in fact, is Urbicus' technical explanation of the status of this dispute:

\[
\text{de possessione controversia est <status> effect<ui, quoniam primum possessio tempore efficitur, deinde, ut ad solum cogitemus, ut legitima possessio in plerique posit, indubi<te locus definiatur necesse est, et de hac controversia plurimum interdicti formula litigatur. de qua superiore parte meminimus: ideoque non puto eam iterum retractandum. (p. 80, 20-81, 2 La = 40, 17-23 Th)}
\]
\[
\text{«(For the translation of the first part, see above) These disputes are for the most part contested by the procedure by interdictum. I have mentioned it in an earlier section (see p. 74, 29-75, 25 La = 33, 26-35, 2 Th): therefore, I do not think its meaning has to be expounded again».}
\]

When he comments upon the technical nature of a dispute «de aquae pluiae transitu» (or «de aqua pluia arcenda», as it is referred to in his
general list at p. 9, 11 La = 4, 11 Th) Frontinus explains that:

in qua si collectus pluuiialis aquae transuersum secans finem in alterius fundum influit et disconuenit, ad ius ordinarium pertinebit: quod si per ordinationem finis ipsius agitur, exigit mensoris interuentum et controversia tollitur. (et-tollitur secl. Th) (p. 23, 7-24, 3 La = 9, 21-10, 4 Th)

«In which disputes, if rain water accumulated, crutting across a boundary, floods into your neighbour's estate and causes disagreements, this will be covered by the law in force. And if the dispute concerns the direction of the boundary line itself, the intervention of a surveyor will be required, and the dispute may be settled»;

From a technical point of view, Urbicus' exposition is not much at variance:

"de aqua pluuiia arcenda controversia est status injectiui: per quodcumque enim solum transit, ad ius ordinarium magis respicit condicio eius quam ad mensuras; nisi si per extremitatem finis uadat: propter quod statum generalem etiam alium accersire debet et quasi geminatione quadam defendi, quod et per finem eat et sit lis de pluuiia arcenda. haec controversia per regiones uari<s> generibus exercetur, sed quasi ad eandem respicit condicion<e> in Italia aut quibusdam prouinciis (aut-prouinciis secl. La) non exi qua est iniuria, si fl alienum a grum aguam inmittas; in prouincia autem Africa, si transire non patiaris.

Eiusdem condicionis est controversia de cloacis ducendis et fos<s>is caecis. quod totum, nisi per finem agatur, ad ius ordinarium pertinet (p. 88, 18-89, 2 La = 48, 26-49, 11 Th).

«(See above for the translation as far as condicion<e>) In Italy and in some provinces, it is a real offence if you drain water into someone else's land. On the contrary, in the province of Africa it is an offence if you do not let water get through. Disputes about the construction of sewers and underground ditches belong to the same condition: the entire question is covered by the law in force, unless it is a dispute with reference to the boundary line».

It is important to note, first of all, that both authors make a careful distinction between disagreements which may be settled by ius ordinarium and disputes decided by a land surveyor's intervention. On the other hand,
Urbicus adds a reference to the different legal procedure to settle similar disputes occurring in «provincia Africa» and Italy. This statement is an evident repetition of a similar principle in an earlier section of Urbicus' work (to which he does not allude) coming after his treatment of «condiciones possidendi» in Italy and the provinces» (p. 63, 14-22 La = 24, 4-12 Th):

multa enim et uaria incidunt quae ad ius ordinarium pertinent, per provinciarum diversitatem. nam cum in Italia ad aquam pluuiam arcendam controversiae[m] non minima concitetur, diuurse in Africa ex eadem re tractatur, quem sit enim regio aridissima, nihil magis in querella habeant quam siquis inhibuerit aquam pluuiam in suum influere: nam et agereres faciunt et excitant et continent eam, ut ibi potius consumatur quam abfluat.

«Indeed, many and different cases, which are covered by the law in force occur in the variety of provinces. In fact, whereas in Italy a dispute 'about the control of rain water', to which people may give rise, is very important, in Africa they follow a different procedure when dealing with the same subject. Since this is a very dry country, they regard it as the first cause of a dispute if someone hinders rain water from flowing into other people's land. In fact, they build dams and take water enclosed, in order that it may be used there, rather than may flow away».

The simple solution may be to suppose that Urbicus drew this reference to Africa from Frontinus. But in this case one wonders why Urbicus failed to mention agereres (and other technical systems people can use in Africa to retain rain water inside their plots) when he explains the technical nature of a dispute «concerning the passage of rain water».

Theoretically, it is quite possible that Urbicus did not derive his information about the way of settling such a dispute 'in Africa' from Frontinus. Or, alternatively, it may also be that already in Frontinus' text these details were not connected with his discussion about a dispute de aqua pluuiia arcenda. But, in this case, one cannot see why such an important passage of Frontinus' text, pointing to the different ways of considering the same kind of dispute in Africa and in Italy, should have been discarded by copyists or excerptors, whereas other references to provinces (Spain, for instance) have been preserved in Frontinus' text. It is therefore more likely, as already remarked (see above, B), that references to the way disputes
about *the passage of rain water* may be contested in Africa and Italy are Urbicus’ own addition.

Finally, it is worthy of note that, in Urbicus’ view, the technical nature of *disputes concerning the passage of rain water* is similar to that of *disputes about the construction of sewers and underground ditches*. The latter type of dispute is not found in Frontinus’ text which has come down to us the manuscripts. According to Urbicus’ short exposition, a dispute *about the construction of sewers and underground ditches* may be regarded as a type of disagreement which is classifiable under *controversia de aqua pluia arcenda*. As far as one can say, in general a dispute *concerning the passage of rain water* seems to be decided by means of an arbitrator’s intervention (see Cic., Top., 43), whereas disputes concerning sewers and ditches are settled by means of an *interdictum prohibitorium* or *restitutorium* (see D 43, 23, 1, 1).

Urbicus’ technical discussion of disputes *concerning areas which have been left out and excluded from the centuriation*, which is one of the shortest in his text is also interesting. It is worth dividing this paragraph into sections to make easier a comparison with Frontinus’ text:

a. *loca autem relicta et extra clusa non sunt nisi in finibus coloniarum, ubi adsignatio peruenit usque qua cultum fuit, quatenus ordinatio<ne> centuriarum intermissa finitur.*

b. *ultra autem siluestria fere fuerunt et iuga quaedam montium, quae usia sunt finem coloniae non sine magno argumento facere posse. ergo fines coloniae inclusi sunt montibus.*

c. *propter quod haec loca, quod adsignata non sint, relicta appellantur;*

d. *extra clusa, quod extra limitum ordinationem sint et tamen fine cludantur;*

e. *haec plerumque proximi possessores inuadunt et opportunitate loci inuitati agrum optinent. cum his controversiae a rebus publicis solent moueri.* (p. 86, 28-87, 8 La = 47, 9-23 Th)

«Areas which have been left out and excluded from the centuriation are situated in the territory of the colonies - in which places land has been allocated up to the point where cultivated soil was found - as far as the area regularly divided in centuriae is marked. But beyond (this area) laid waste land and hills: they appeared to be a considerable mark by which the boundary of a colony could be represented. Therefore, the boundaries of a colony are surrounded by a range of mountains. Because of this such
areas, which have not been allocated, are referred to as 'left out' (relictua); (other such areas are referred to as) 'excluded' (exclusa) because they lay outside the (central) system of limites, but are surrounded by an outer boundary line. These portions of territory are, for the most part, occupied by near landowners who, tempted by the advantageous situation of such areas, keep some land. Against them the communities of citizens (publicae personae) usually lodge claims.

On the other hand, Frontinus' technical discussion about the same kind of dispute is comparatively one of the broadest in the text transmitted by A under his name:

\begin{itemize}
  \item A. relicta autem loca sunt, quae siue locorum iniquitate siue arbitrio conditoris relicta limites non acceperunt. haec sunt iuris subsiciuorum.
  \item B. exclusa loca sunt aequae iuris subsiciuorum, quae ultra limites et intra finitimam lineam erint.
  \item C. finitima autem linea aut mensuralis est aut aliqua observatione aut terminorum ordine servatur.
  \item D. multis enim locis adsignationi agrorum inmanitas superfuit, sicut in Lusitania finibus Augustinorum.
\end{itemize}

«A dispute about areas which have been left out and excluded from the centuriation occurs in allocated lands. Areas which have been left out are those which, because of the roughness of the terrain or the decision of the founder did not receive limites. These areas come under the law relating to subsiciuorum. Excluded areas, which also come under the law relating to subsiciuorum, are those situated beyond the limites, but inside the line forming the outer boundary (of the whole centuriated area). This boundary line is either measured or marked out by some perceivable point or a line of boundary marks. Indeed, in many regions a large amount of land was left over from the allocation of plots, for instance, in Lusitania in the territory of the colonists of Augusta (Emerita).»

The first thing we may note is that Urbicus does not mention ius subsiciuorum, which seems to be fundamental in Frontinus' exposition. In addition, Frontinus' reference to the very large amount of land, belonging to the colony of Augusta Emerita, which has not been allocated, is omitted as
well. It seems unlikely that Frontinus' text where Emerita is mentioned has been later attached to a «controversia de locis relictis et extra cluis» by an excerptor, whereas originally it was part of Frontinus' discussion about a «controversia de alluuiione», on the grounds that Urbicus refers to the «magnitudo agrorum» of Emerita while commenting upon «disputes concerning alluvial land» (see p. 83, 26-33 La = 44, 5-12 Th).

On the other hand, it is interesting to note that Urbicus' remark in section b. of the paragraph quoted above (waste land and hills as natural boundary marks of a colony) seems to be only a teaching example he introduced as a general rule and probably was not in his source. In addition, according to sections a., c., d., of Urbicus, it is not clear whether both «loca relictia» and «(loca) extraclusa» or whether only the latter class of land have to be regarded as areas which lay beyond the centuriated area and within the outer boundary line of a colony. As far as one is able to judge from Urbicus' text, it seems that both such areas derive their name from the fact that they have not been allocated and lay beyond the edge of the centuriated grid of a colony. But, in Frontinus' passage, only «(loca) extraclusa» are described as areas of territory which no doubt lay beyond the line surrounding a centauriated grid of a colony.

It may be noted that Frontinus' technical interpretation of «extraclusum» («excluded», shut out beyond the centuriated area), subject to «ius subsiciurorum», is no doubt consistent with his earlier statement about «ager similis subsiciuro rum kondicioni extraclusus et non adsignatus» (see p. 8, 1-19 La = 3, 6-15 Th). As far as one can judge from his text, in fact, nothing prevents us from thinking that in Frontinus' view «loca relictia» may be unassigned areas laying, in some cases, inside the centuriated grid itself. In addition, in contrast to Frontinus, Urbicus does not expound what a «mensuralis linea» is. On the other hand, Urbicus explains how near owners usually settle without permission on these odd portions of land not yet allocated. Nevertheless, since this information is very similar to what he wrote in an earlier passage about the illegal occupation of subsiciva, it is not going too far to say that both such statements are due to Urbicus, not to his source (both the following passages have been translated above):

haec plerumque proximi possessores inuadunt et opportunitate loci inuitati agrum optinent. (p. 87, 6-7 La = 47, 20-21 Th)
According to Frontinus, «disputes dealing with the rights of way» arising on ager arcifinius are covered by «the law in force» (ius ordinarium), whereas a surveyor’s intervention is required «in allocated lands». In the latter case, it is prescribed by the «law concerning colonies» that all limites which separated the squares or rectangles of the centuriated land have to be kept clear. But, especially when such strips necessarily «run through steep and rough areas» so that the throughfare should be provided by a limes which is cut off from the land of adjacent landholders, private individuals’ intractability sometimes frustrates the rights of the community:

«Disputes dealing with the right of way are covered in lands called arcifini by the law in force that, whereas in allocated lands by means of measurements. In fact all limites, according to the law dealing with colonies, serve as a public right of way. But many of them, because the plan of a centuriation requires it, run through steep, rough areas where no road can be made and are used as part of the local fields, where the adjacent landowner, whose wood may happen to occupy a limes, may impudently refuse a right of way, although he ought to provide a limes or an equivalent space for the right of way».

If we compare this extract with Urbicus’ paragraph concerning the same kind of dispute, it will be seen at glance that the latter has been constructed out of Frontinus’ text:
loca extendant, hoc est qua ratio dictavit, per cluia et montuosa, qua iter nullo modo fieri potest, quae loca fortasse possessori siluae causa sint utilia, horum loco non inique, per quae possit loca commode iri, iter commutant.

Nam quae sit condicio itinerum, non exiqua iuris tractatio est. agitur enim utrumne actu sit an inter ambitus, per quae loca quid liceat populo, iure continetur. (p. 89, 10-24 La = 49, 12-25 Th)

Such disputes are debated in numerous ways. For in centuriated land the width of the limites is excepted (from allocation) with respect to the right of way. Nevertheless, there may be the case that the straight line of limites stretches away across areas of whatever kind - that is to say, where it was necessary according to the directions of the overall plan - through hilly and mountaneous areas, where by no means a road can be made. If these areas are useful for a landowner for the sake of a wood, in the place of them a limes may equitably change direction (in order to run) across areas through which a road can be easily made. In fact, it would require a long discussion (to expound) what is the legal condition of roads, since it is a question concerning whether a dispute is about right of driving (actus), right of way (iter), or right of going around (ambitus). What people are entitled to do in whatever area is prescribed by the law».

It may be noted, first of all, that both passages refer to the same case: a limes intruding on private land, whose owner had to keep it open. But, although Urbicus' extract seems to be a mere commentary on Frontinus' paragraph, the underlying concept of these texts is not the same. On the one hand, Frontinus points out that such disagreements may be caused by private landowners preventing the right of going across the plot they possess, although they ought to provide a limes or its space for the right of way» in hilly areas, which could not be centuriated, through which people have to go to get at their own fields.

According to Urbicus, on the other hand, limites climbing mountains may change their direction not only when they run through rugged areas but also when the wood belonging to a nearly landowner may happen to embrace any of these strips which should be kept clear. In other words, Urbicus seems to point to the way to avoid or to settle this kind of disagreement, rather than to the possible origin of such disputes. Nevertheless, as Levy rightly suggests (1951, p. 107), it is quite clear that
in most of the cases «administrative coercion» was applied to decide such disputes. It may be also noted that in Urbicus', like (the so-called 'first') Hyginus' view (see p. 134, 7-13 La = 97, 23-98,5 Th), any question about actus, iter or ambitus pertains to ius ordinarius. On the other hand, he does not refer to other examples, which are found in (the so-called 'first') Hyginus (p. 121,1-6 La = 84, 3-7 Th) and Siculus Flaccus (p. 146,14-20 La = 110,14-20 Th; 152,10-17 La = 116, 11-18 Th), about how such a right of way (basically a free access to every field) seems to have been legally enforced. It is also worth making a comparison between Frontinus' and Urbicus' text dealing with a controversia de proprietate. As will be seen in the following passage, Frontinus' text which has come down to us centres upon the ownership of woods belonging to «cultivated fields» in Campania and the co-ownership of pasture land:

A. de proprietate controversia est plerumque, <quom> ut in Campania cultorum agrorum siluae absent in montibus ultra quartum aut quintum forte uicinum. properea proprietas ad quos fundos pertinere debeat disputatur.
B. est et pascoorum proprietas pertinens ad fundos, sed in commune; propter quod ea maxima multis locis in Italia communia appellantur, quibusdam enim provinciis pro indiuiso.
C. Nam et per hereditates aut emptiones eius generis controversiae fiunt, de quibus iure ordinario litigatur. (p. 15, 1-16, 2 La = 6, 3-12 Th)

«Disputes over ownership for the most part rise when, as for example in Campania, woods belonging to cultivated fields are far distant in the hills, perhaps more than four or five neighbouring estates away. Therefore such a dispute is about which farms ought to own these woods. There is also the right of ownership in pasture land, belonging to farms but held in common. Because of this, in many areas of Italy such pasture land is referred to as 'common land' (communia), while in some provinces as land 'not shared out' (pro indiuiso). Inheritance or purchase may also lead to disagreements of this kind, which are tried by the procedure of the law in force».

The wording of Urbicus is:

de proprietateagit plurimum iure ordinario, neque est hic mensurarum

_98 On these aspects, see Palma, 1982._
interuentus nisi cum quaeritur, quatenus agatur.

Proprietas <non> (add. La) uno genere uindicatur.

a. Et sunt plerumque agri, ut in Campania in Suessano culti, qui habent in monte Massico plagas siluarum determinatas; quarum siluarum proprietas ad quos pertinere debeat uindicatur. nam et formae antiquae declarant ita esse adsignatum, quoniam solo culto nihil fuit siluestre iunctum quod adsignaretur.

b. Relicta sunt et multa loca, quae ueteranis data non sunt. haec uariis appellationibus per regiones nominantur: in Etruria communalia uocantur, quibusdam provinciis pro indiviso. haec fere pascua certis personis data sunt depascenda tunc, cum agri adsignati sunt. haec pascua multi per potentiam inuaserunt et colunt: et de eorum proprietate solet ius ordinarium moueri non sine interuentu mensurarum, quoniam demonstrandum est, quatenus sit adsignatus ager.

c. Nam per emptiones quasdam solet proprietas guarundam possessionum ad <privatas> (add. Rudorff) personas pertinere, quae iure magis ordinario quam mensuris explicantur. (p. 79, 3-30 La = 39, 4-25 Th)

«For the most part, disputes about ownership are heard according to the procedure of the law in force and surveying does not take part in it, unless it is a dispute concerning the extent of ownership. Ownership may be claimed not just in one way. Most often are found fields, like for instance in Campania - in the territory of Suessa - to which belong parcels of woods, whose limits are marked by a boundary line, on mount Massicus. People lay claim to the ownership in such woods, namely to which farm they may belong. For ancient maps make clear that these woods have been granted in this manner because no adjacent woodland to be allocated had been found. There are also many areas which have been left over and not allocated to veteran soldiers. Various are the names this land is called in every region: in Etruria it is referred to as 'common land' (communalia), in some provinces as 'land not shared out' (pro indiviso). When lands had been allocated, a distinct group of people was granted such areas, in general pasture land. By means of a want of moderation many people encroached on and cultivate this pasture land. And as far as the ownership in such land is concerned, it is the procedure according to the law in force that people avail of, combined with measurements since one has to demonstrate to what extent the disputed land has been allocated. Indeed, because of some kind of purchases usually the ownership of some kind of
properties belongs to <private> individuals. Such questions are settled by means of the procedure of the law in force».

It is evident that there are differences between the two texts. In contrast to Frontinus, Urbicus specifies that there are farms «in the territory of Suessa» to which belong portions of woods situated «on mount Massicus».

On the other hand, it is Frontinus (see p. 3, 2-6 La = 1, 6-10 Th), and not Urbicus, who refers to Suessa Aurunca as a Roman colony in Campania99, whose land is characterized by a division and allocation by strigae and scamna. One may explain such discrepancies by supposing that Urbicus copied from a fuller version of Frontinus' work on surveying, and that these topographical details, possibly regarded as not relevant by later excerptors of Frontinus' text, have been discarded.

It is, in fact, opportune to underline that neither from Frontinus' explanation of the technical nature of disputes «about ownership» nor from the illustration (n. 17 La = 17 Th) accompanying this text in J (Apographon Jenense, beginning of the seventeenth century), is it possible to be sure whether he refers to a topographically identifiable centuriation of a colony100. On the other hand, Urbicus emphasises that «ancient maps show that there had been such an allocation because there was no woodland, adjoining cultivated plots, which could be allocated». Also, the illustration accompanying Urbicus' text in A, f. 166 (n. 36 La = 35 Th) clearly shows the picture of a walled colony (Sues<s>a), within a centuriated grid, and to the left a mountain in elevation (mons Maricus [sic]).

In a recent study, which takes into account Frontinus' and Urbicus' text, Thormann (1954, pp. 90-93) has pointed out that «die als plagae silvarum verdeutlichten abgeteilten Weidstücke wurden gleich zu Anfang, zusammen mit den Stücken bebauten Landes, zu Eigentum zugewiesen, weshalb das Recht an ihnen durch vindicatio geltend zu machen ist». In other words, since Urbicus refers to «ancient maps» as a substantive element recording this particular type of allocation, we should accept as an axiom that the legal title by which the holders of allotments in the valley became owners of portions of woods in the adjacent mountain were entered in these official records.

Therefore, if plagae silvarum determinatae became ager privatus because granted to the farms of the valley by means of an official act, it follows that

100 On this illustration, see Carder, 1978, p. 52; pp. 136-138.
any dispute about the ownership of these portions of woods connected to farms was, practically, a dispute concerning a right in re, the right of factual control (possessio) over these structures. This means that one or the other of the contending parties was granted the right to take the property back, if illegally occupied, not only by means of proprietary (rei vindicatio), but also possessory remedies (interdictum uti possidetis).

This interpretation seems to be consistent with Urbicus' statement at the opening of the paragraph quoted above, namely that «disputes about ownership for the most part are conducted according to the law in force (ius ordinarium)». Also the second example in Urbicus' text, alluding to a dispute about the right of pasture vested only in the owners adjoining such land is, basically, a case of claiming ownership in an area of land, although in common use (compascua) (on these aspects, see Brugi, 1897, pp. 319-330).

Consequently, if what has been observed so far is correct, Urbicus' distinction between controversia de proprietate and controversia de possessione (regarded as covered for the most part by the interdict procedure: see p. 80, 25-81, 1 La = 40, 21-22 Th) is, from a legal point of view, irrelevant.

As far as one is able to judge from what has come down to us of Frontinus' text, it seems that in a peculiar area of Campania the object of a dispute concerning ownership is not the existence of a right in re by which farmers on the plain could claim their rights over parcels of hilly woods situated «maybe more than four or five neighbouring estates away». As seen, there is no reference, in Frontinus' passage, to any official record by which, possibly during the settlement of a colony, farmers on the plain were granted the right to use portions of hilly woods, as in Urbicus' paragraph. Frontinus simply alludes to the fact that unfenced areas of woodland or waste land, in which only specific fundi had acquired individual ownership, were probably presumed by other farmers to be common. As we have seen, in the final part of his technical report, Frontinus refers to the ownership of pasture land, which is vested as well in some farms «but is held in common». The probable purpose of such statement is to make clear that individual ownership in a quota of waste land held by a single farm was different from individual ownership in a quota of waste land held in common by co-owners. Evidently Frontinus wants to inform his readers that in both cases such a right in re was enforceable against anyone else.
It is worth noting that Urbicus is not the only author of the Corpus Agrimensorum who alludes to maps as official documents recording when woodland or common pasture land were granted to farms. According to (the so-called 'second') Hyginus:

\[
\text{si qua compascua aut siluae fundis concessae fuerint, quo iure datae}
\]
\[
sint formis inscribemus. (p. 201, 12-13 La = 164, 11-12 Th).
\]

«If areas of pasture land in common or woods have been allocated to farms, we will enter in maps the title by which such land has been granted».

In another paragraph from the same work it is said that was a common practice granting to single allotments a quota of woodland situated «in the mountains, more than four or five adjacent estates away»:

\[
\text{hunc agrum (scil. rudem prouincialem) secundum datam legem aut si}
\]
\[
placebit secundum diui Augusti adsignabimus eatenus QVA FALX ET
\]
\[
ARATER IERIT. haec lex habet suam interpretationem, quidam putant
\]
\[
tantum cultum nominari: mihi uidetur, utile\text{<m>} ait agrum adsignare
\]
\[
oportere. hoc erit ne accipienti siluae uniuersus modus adsignetur aut
\]
\[
pascui, qui vero maiorem modum acceperit culti, optime secundum legem
\]
\[
accipiet aliquid [et] siluae ad implendum acceptae modum. ita fiet ut alii sibi
\]
\[
alletas siluas accipiant, alii in montibus ultra quartum forte uicinum (p. 203,
\]
\[
14-204, 2 La =166, 10-167, 1 Th).
\]

«This land (undeveloped land in provinces) we shall allocate according to the specified law or if we wish according to Augustus' law 'as far as the scythe and plough shall have gone'. This legal phrase is thought by some to refer only to cultivation. But in my opinion it means that all useful land should be allocated. The purpose of this is to avoid that an entire allocation of wood- or pasture land may be apportioned. The colonist who will have been granted a wider portion of cultivated land, quite rightly according to this legislation will receive also a small portion of woodland to complete the area of his allocation. Therefore, it follows that some colonists are granted woods adjoining their lots, some other woods far distant in the mountains, possibly more than four neighbouring estates away».

Ps. Hyginus’ allusion to woods, belonging to farms, which may be situated «more than four or five adjacent estates away» clearly derives from either
Frontinus' or Urbicus' text, not from other authors of the Corpus Agrimensorum. For instance, one of the several extracts, later incorporated in the list of towns known as the first *Liber coloniarum*, which has been transmitted by A under Balbus' name, seems to point out that similar practices were common in Italy. In fact, although there is no allusion here to woodland, we have it from this fragment itself that in the *ager Spoletinus*, as well as in the territory of *Interamnia Nahartium* and *Interamnia Praetuttianorum*:

\[\textit{ager qui a fundo suo tertio uel quarto uicino situs est, in iugeribus iure ordinario possidetur} (p. 226, 3-4 La).\]

«The possession of land which is located more than three or four neighbouring farms away from the property it belongs to is possessed in iugera by way of the law in force».

Therefore, as it is likely that the section of Ps. Hyginus quoted above, to give an instructive example to his readers, is a conflation of more than one text, so it is likely that Urbicus might have added details to the basic account of his source, Frontinus. This explains also why Urbicus did not pay any attention to the illustration (fig. 17 J) accompanying Frontinus' text which, as already seen, has nothing to do with a centuriated or allocated territory connected with a colony. Alternatively, one may suggest that Frontinus' text was originally accompanied by two distinct illustrations. But such a suggestion is on weak ground, simply because the loss of an illustration and the accompanying text, both alluding to Suessa Aurunca and Mount Massicus is not likely.

On the other hand, if we prefer to think that Urbicus copied from a fuller text of Frontinus, so that the former's text may be used to supplement the latter's concern for «disputes about ownership» transmitted by A, the conclusion seems unavoidable that the illustration 17 J, accompanying Frontinus' text, is probably not original. In other words, it may have been drawn simply on the basis of the text which has been transmitted under his name by A, probably when the collection of the Arcerianus was established.

As already remarked by Levy (1951, pp. 86-87), there are differences between the second sections of Frontinus' and Urbicus' passages concerning a «controversia de proprietate». In fact, according to Levy, Urbicus has omitted «compascua» and substituted «communalia» for
«communia» and «certae personae» for «proximi possessoress»; «he entirely drops the idea that the right of pasture belongs to the fundi and is exercised in commune. What comes to his mind instead is the situation so familiar to his own age, when potentess were invading and exploiting the pascua as they did with all types of usable land».

As for his first remark one may observe that, although Urbicus' has omitted 'con pascua', it is evident from the context that he is here referring to a particular type of land which has been granted only to a group of people. What is worth noting is that Frontinus makes a clear distinction between «conpascua», called «communia» («land in common») «in many areas of Italy», and land referred to as pro indiviso («land not shared out») «in some provinces» Urbicus does not seem to follow such a distinction. In fact, whereas in Frontinus' text communia seems to be a system of using pasture land which is common in Italy, according to Urbicus it is a characteristic practice of Etruria only. It does not seem likely either that Urbicus drew just this detail from a different source, or that he copied from a different original or, finally, that he made such a change by carelessness.

Nor it is likely that 'in Italia' was later replaced by 'in Etruria' because a copyist of Urbicus' text found it more appropriate to Urbicus' foregoing statement, namely that pasture land has different names 'per regiones'. But this implies that also 'communia' in Frontinus' text has been substituted by 'communalia' in Urbicus' passage because of the carelessness of the same copyist. It therefore remains likely that it was Urbicus himself who substituted 'in Etruria' for 'in Italia'. This means that Urbicus was aware that «pasture land in common use» (communalia) was a peculiarity of Etruria only. Unfortunately, there is no evidence to determine whether Urbicus derived his information from a source or from his personal experience. For instance, in a passage of the life of the emperor Aurelian (270-275 AD) in the H.A., 48, 2 (probably written in the second half of the fifth century) we read that Aurelian planned to grant large areas of waste and not allocated land in Etruria to the adjoining landowners with the proviso that war prisoners would cultivate it.

Urbicus' reference to the illegal occupation of both these parcels of woods belonging to some farms «in the territory of Suessa» and «pasture land in common use» in Etruria leads to the real object of his discussion. It is worth making again a comparison between the last sections of Frontinus' and Urbicus' passages:
Front. *contr.agr.*, p. 16, 1-2 La = 6, 11-12 Th: *nam et per hereditates aut emtiones eius generis controversiae fiunt, de quibus iure ordinario litigatur.*

Urb., p. 79, 28-30 La = 39, 23-25 Th: *nam et per emptiones quasdam solet proprietas quarundam possessionum ad <privatas> personas pertinere, quae magis iure ordinario quam mensuris explicantur.*

It may be noted that Frontinus' sentence is the natural conclusion of the preceding argument, namely that disputes over ownership may occur whenever the right of the 'co-owners' originally entitled to use that parcel of pasture land was conveyed to an outsider because of inheritances or purchases (see also D 8, 5, 20, 1 (Scaevola), with Thormann's discussion). Urbicus, on the other hand, seems to point simply to the fact that «the ownership of some properties is conveyed to <privatae> personae» because of some purchases, and *not* that purchases and inheritances may give rise to disagreements over the ownership of the structures mentioned earlier by way of illustration. Urbicus' allusion to <privatae> personae has perhaps to be interpreted as an attempt to draw a parallel between privatae personae who, by means of the adsignatio-procedure (in some cases recorded in maps), were granted portions of waste land situated in areas not adjoining the land already allocated and publicae personae (colonies) entitled to possess separate areas of land, called praefecturae, in the territory of another colony. Also such a peculiar allocation was made possible by means of the adsignatio-procedure:

*nunc ut ad publicas personas respiciamus, coloniae quoque loca quaedam habent adsignata in alienis finibus, quae loca solemus praefecturas appellare, harum praefecturarum proprietas manifeste ad colonos pertinet, non ad eos quorum fines sunt deminuti.* (p. 80, 1-5 La = 40, 1-5 Th)

«Now, to devote our attention to public bodies, also colonies have been granted some kind of areas in the territory belonging to another colony. We usually call these areas 'districts' (praefecturae). The right of control on such districts clearly belongs to the colonists (settled on these 'districts'), not to the inhabitants whose territory has been made smaller».
On the other hand, in Frontinus' text which has been transmitted to us there is no allusion to any distinction either between coloniae/coloni or privatae/publicae personae as the legal body in which was vested the right of control over such land. Moreover, Frontinus seems to refer to a praefectura as an administrative and jurisdictional dependency of a colony, not simply as land in which a colony has perpetual rights and ownership because of the adsignatio-procedure (see p. 26, 8-10 La = 15, 2-4 Th). As seen, in Urbicus is found only the latter concept.

Such a distinction seems to be confirmed by Frontinus' and Urbicus' technical explanation of disputes concerning «public areas». As seen, Frontinus intends to point out that colonies and municipia were both entitled to lay claim to such land (see p. 20, 7-21, 6 La = 8, 12-9, 2 Th; see above, Chapter 2). Urbicus' discussion, on the other hand, is intended to make clear to his readers when the ownership of a portion of land, recorded in a map as a colony's dependency, can be alienated and when it cannot (see p. 85, 19-86, 3 La = 46, 16-25 Th). We may therefore hazard the conjecture that this is also the reason why this paragraph of Urbicus' text does not seem to have been copied from Frontinus' fuller text.

Also Urbicus' technical discussion about disputes concerning «sacred and religious places» does not show any point of contact with the same kind of dispute in Frontinus' list. According to Urbicus, it is the provincial governor who is given the authority to protect them against those who illegally occupy such land. Their task is easier in the provinces whereas in Italy the high number of landowners (densitas possessorum) makes easier the illegal occupation of this land (p. 87, 15-21 La = 48, 4-10 Th; see Chapter 5).

But is Urbicus, not Frontinus, who usually points to what he thinks are the outstanding characteristic differences between Italy and the provinces. In addition, Urbicus affirms that, as far as these areas are concerned, «solum indubitata p. R. est, etiam si in finibus coloniarum aut municipiorum» («no doubt it is land belonging to the Roman people, although it is in the territory of colonies and municipia»: p. 56, 21-22 La = 48, 10-11 Th). This concept is not found in Frontinus' text which has come down to us in the manuscripts, where we read, as already seen, that such land, by the decision of «the person who has the right to allocate it», may be granted, if not yet allocated, to sacred and religious places or to the «res publica populi Romani» (see p. 8, 1-6 La = 3, 6-12 Th).
Urbicus also remarks three times how easy is the illegal occupation of places connected with religio, especially in suburban areas (see p. 86, 8-15 La = 47, 1-8 Th; p. 87, 19-22 La = 48,8-12 Th; p. 88, 1-4; 16-17 La = 48, 20-25 Th). This peculiar aspect may have been in his main source, but it can also be Urbicus' personal addition, given the similarity of these statements.

On the other hand, it may be noted that the first part of Urbicus' discussion about a controversia de subsicivis is clearly based on the same technical concepts as in Frontinus' text transmitted in the manuscripts (see p. 81, 3-9 La = 41, 1-7 Th and p. 6, 5-7,6 La = 2, 17-21 Th). As for a controversia de alluvione, limited to a couple of lines in Frontinus' text transmitted in the manuscripts, Urbicus' text seems to have been supplemented by material from (the so called 'first') Hyginus and Siculus Flaccus (see, respectively, p. 124, 3 La = 87, 12 ff. Th and p. 157, 18-158, 7 La = 122, 1-17 Th). Finally, in Urbicus' controversia de iure territorii we find, again, a distinction between cases in Italy and the provinces (see p. 84, 29 ff. La = 45, 16 ff. Th).

On the other hand Frontinus' exposition (see above, Chapter 2) centres on the distinction between the «two categories» of this kind of dispute: one relating to «land in the town, the other to land in the countryside». But in Urbicus' text there is no allusion to these technical aspects.

Conclusions

The foregoing discussion has shown there are no decisive reasons to reject Lachmann's suggestion, namely that Urbicus' main source was Frontinus. On the other hand, indications seem to converge that Urbicus did not copy from a fuller original of Frontinus' text, but possibly from a version which is similar to that which has come down to us in the manuscripts (first of all A) under Frontinus' name.

In many cases Frontinus' text served as the bare bones of a technical exposition Urbicus later worked up and supplemented through personal observations. This means that Frontinus' treatment of some types of land disputes was originally short, or that his text was shortened by excerptors, possibly for teaching purposes, well before Urbicus' age. In the latter case, it would be confirmed that some of the fifteen land disputes listed again by Urbicus were earlier regarded as less important. We have seen that as

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early! as in (the so-called 'first') Hyginus' age only six types of land disputes were regarded as the most relevant. It does not seem to be a simple coincidence that discussion of 'technical' disputes, such as those about finis, locus and modus, are particularly broad and careful. Therefore, if in Urbicus' time a surveyor had usually to deal with six main types of land disputes, it follows that Urbicus' treatment of a larger number of disputes is based on an 'antiquarian' interest, so to speak.

But, since Urbicus decided to write a work on land disputes characterized by a systematization of earlier doctrine on this subject expressed in terms of teaching examples, his study had necessarily to be based on first-hand research. The only informant, although Urbicus does not mention him, through whom the technicalities of the largest number of land disputes could be known to Urbicus was no doubt Frontinus who, on the other hand, is certainly not Urbicus' only source.

In fact, as rightly suggested by Stahl (see above, footnote 9). «to suppose, because a Latin compiler (..) fails to include Y in his list of sources, (...) that Y was not an actual source, is naive». 
Chapter 4

LAND DISPUTES OF THE AGRIMENSORES. ACTIO FINIUM REGUNDORUM AND THE EPIGRAPHICAL-DOCUMENTARY EVIDENCE

A. Introduction

The foregoing analysis of Frontinus' and Urbicus' list of controversiae has shown to what extent the latter seems to have taken into consideration the former's work on the same subject. Although from the foregoing discussion it appears that Urbicus undoubtedly relied on Frontinus' text, the central point is, still, whether Urbicus used a text of Frontinus' work which might have been fuller than that which has come down to us in the manuscripts. In other words, what is the extent of the original work of Frontinus.

The fundamental point we established in the previous chapter is that Urbicus' basic distinction between land disputes derives (with only a few differences) from the same general distinction between controversies Frontinus connected with either finis or locus. It is true, on the other hand, that in his theoretical systematization of this subject, Urbicus also used a new technological terminology: «status» (conditions), «transcendentiae» (progresses) and «effectus» (effects).

Moreover, we have seen that Frontinus' list (fifteen land disputes) is different from that of (the so called 'first') Hyginus, which is limited to only six. This difference can be reasonably explained as the natural consequence of the fact that such technical treatises, because of their particular purposes, could have been influenced by different needs and factors in the course of time, or mirrored the juridical and social aspects of the period when they were composed. But, whatever these are, it is important to bear in mind that in the period between Frontinus' and Urbicus' age, the concept of a clear distinction between disputes connected with either finis or locus did not disappear.

In the light of such an observation, it becomes of much greater importance to establish, as far as possible, what could be the relationship between Frontinus' and Urbicus' text, in order to single out all those peculiar
(technical and juridical) aspects denoting land surveying technique in their own times.

As already underlined, it seems that what one has to take into account, in the first place, is that Urbicus' attitude toward the earlier technical literature (especially Frontinus) might well be a consequence of his personal 'antiquarianism', so to speak. In fact, it is likely that new definitions were employed, in the course of the time, by the different authors of the Corpus Agrimensorum. Consequently, if one follows uncritically Lachmann's suggestion about the relationship between Frontinus' and Urbicus' text (viz., Urbicus' treatise as the natural supplementation of Frontinus), one might make the mistake of overlooking important differences between their works, some of which have been already underlined in the previous chapter.

Leaving aside, for the time being, Urbicus' 'antiquarian' attitude toward the whole earlier literary production on land disputes (as a result of which the framework of fifteen controversiae may have been used as the guidelines of his treatise), the fundamental thing to note is that (the so-called 'first') Hyginus wrote about only six types of disputes. Such a noticeable difference may be due to his own choice or experience, or suggested by practical/technical reasons. Hyginus, in fact, clearly states that he is listing only those land disputes quae solent in quaestionem deduci (which are regularly raised as a problem: p. 123, 17-18 La = 86, 20-21 Th).

But, what seems interesting is that such a discrepancy between Frontinus' and Hyginus' list of land disputes is not limited to those controversies which, for various reasons, could be referred to the ius ordinarium, possibly the law in force according to the Agrimensores' terminology. There is, in fact, no reference in Hyginus to disputes «de proprietate», «de possessione», «de locis publicis», «de locis relictis et extra clusis», «de locis sacratibus et religiosis», and only an indirect allusion to the controversiae de itineribus and, possibly, to «de aqua pluia arcenda» as belonging to the «forensis officium, id est ius civile» («litigation, that is the civil law in force»: p. 134, 9-10 La = 98, 1-2 Th). But also the controversiae de positione terminorum and de rigore are not mentioned in Hyginus' list, although according to the rules of logic, they ought to be part of the province of a land surveyor.
A 1 Controversies over the boundary line according to the Agrimensores

The only way to explain this change is to assume that both the controversia de positione terminorum and de rigore, in Hyginus' view, had to fall within the controversia de fine. And in fact, according to him, termini and rigores are mentioned as those marks a surveyor had to be well acquainted with if he wanted to reestablish correctly the previous boundary line; that is they are the scope of boundary disputes:

\[ \text{si terminibus finem uides dercji, \text{ qua}les sint \text{ termini, considerandum est.}} \] (p. 126, 19-20 La = 89, 17-18 Th)

«When you see that a boundary has been drawn by means of boundary markers, you must consider what markers they may be»;

\[ \text{si rigoribus, cuiusque (<sui> cuiusque La) rigores obseruantur, et an normales, quod saepe in agris adsignatis inuenitur [...] } \] (p. 128, 20-21 La = 92, 3-4 Th)

«(When you see that a boundary line has been drawn by rigores) the rigores of each (owner) are examined and whether they are with right angles, which frequently occurs on land that has been allocated».

It is nevertheless evident that Hyginus seems to remain well aware of the fact that a dispute about finis basically differs from that about locus, since he specifies that the rule of the five-(six-) foot strip which cannot be acquired by usucapio applies only to the former class (see p. 126, 3-8 La = 89,1-6 Th)\(^{101}\).

It was, therefore, by checking carefully the position of termini and rigores that a surveyor was expected to draw the line of demarcation between two (or more) neighbouring structures. Now, as we have already seen, Frontinus' work on surveying is chronologically very close to that of Hyginus. Consequently, it is too short a period of time for it to be likely that the difference between Hyginus' and Frontinus' text was caused by significant technical or theoretical changes in the surveying procedure in settling land disputes (since it does not seem to have changed in its distinctive traits until the age of Urbicus). And, in fact, it is already in

\(^{101}\) Detailed bibliography in the discussion below. The most recent studies on this subject (with earlier fundamental contributions) are Sargenti, 1959 and Knütel, 1992.
Frontinus' text that the «controversiae de positione terminorum» and «de rigore» are considered as a subgroup of disputes «de fine»:


de horum positione (ordinatione La) cum constitit mensori, si secundum proximi temporis possessionem non conueniunt, diuersas attiquis possessoribus faciunt controversias, et ab integro alius forte de loco alius de fine litigat. (p. 10, 4-11, 2 La = 4,15-19 Th)

«When the surveyor is clear about the position of these markers, if (the above mentioned neighbours) do not agree about the most recent occupation of the land, they give rise to different controversies with the possessors of adjoining parcels of land and lodge again a claim, one with regard to the site, another with regard to the boundary»;

deg rigore controversia est finitimae condicionis (finitimae condicionis secl. La), quotiens inter duos pluresue terminos ordinatos siue quae alia signa secundum legem Mamiliam intra quinque pedes agitur. (p. 11 3-6 La = 4, 20-5, 2 Th)

«A dispute about a straight boundary line is of the same condition as that about the finis when it is conducted between two or more boundary markers set according to an order- or whatever other signs - as prescribed by the Lex Mamilia within the five - foot strip».

The first of Frontinus' comments quoted above seems also to suggest that the land surveyor's examination about the position of the boundary markers was felt as a 'preliminary investigation', so to speak, concerning the disputed object. Only after that was it possible to ascertain what was the kind of controversy to which there applied the procedure provided by a legal action, according to the law in force. The importance of such a remark will be clearer in the course of this chapter.

Now, an analogous picture for the technical nature of the controversia de rigore and the agrimensor's intervention emerges from Urbicus' remarks concerning these two disputes. In Urbicus' mind as well controversies about both rigor and finis have to be considered as falling within the same technical category:

haec controversia moti termini null<i>us in se aliae controversiae statum recipit: est enim anticipalis et quasi comminatio quae adam litium, declarans

102 A similar hypothesis in Brugi, 1897, p. 432; Knütel, 1992, pp. 299-300 (not referring to Brugi).
aut loci aut modi futura contra controversia. (p. 72, 1-4 La = 31, 7-10 Th)

«Such a land dispute concerning the dislocation of boundary markers does not admit the condition of any other land dispute: it is introductory and, so to speak, a threatening of litigation, stating that the controversy will be either about a 'site', or about an 'area';

de rigore controversia est status initialis pertinentis ad materia operis; nec sine prioris controversiae comparatione, nam cum de rigore agatur, potest fieri ut ante motus sit terminus: ideoque haec secunda controversia prioris quoque controversiae capax appetit: quamquam et sine prioris quoque controversiae interventium priusim de rigore controversia suscitari possit: nec enim omnibus locis agrorum, aut capientibus aut non capientibus termini ponuntur. (p. 72, 5-13 La = 31, 11-18 Th)

«A controversy 'about a straight line boundary' belongs to the 'condition of commencement', which refers to the matter of the operation, and is not without comparison with the previous one. In fact, when the dispute is about a straight line boundary, it may be that a boundary mark has been displaced at an earlier stage. Also this second controversy appears to comprise the former one, although a dispute about the straight line boundary line may also be aroused without the occurrence of that 'about the position of boundary markers'. For boundary markers are not placed in every place in a territory, irrespective of whether or not they can in principle have boundary markers».

Now the suggestion, that the operation of checking boundary stones and markers seems to be a preliminary stage aimed at ascertaining whether a dispute will deal with a finis or a locus, remains likely even if Urbicus' passages rely, to a great extent, on what Frontinus may have written on this subject. And it remains likely, although Hyginus does not seem to focus his attention on such aspects. On the other hand, his remarks (and especially his gathering all kinds of boundary marks - natural and artificial - during the operations to settle a controversia de fine) seem to strengthen the impression that boundary disputes consist, basically, in an operation of carefully ascertaining where the line of demarcation between adjoining neighbours was to be drawn.
As far as one is able to judge, the common detail in these passages seems to be that the outcome of the settlement of a boundary dispute was to make plain and indisputable the line of demarcation.

The subsequent point, is that such an operation does not appear to be connected with any conveyance of the area under dispute because it was aimed to restore the status quo ante. In other words, regulating and settling the boundary line basically represents, in these authors, the final operation which ended with acknowledging the legal title the owners of adjoining properties had proved. Finally, Frontinus, (the so-called 'first') Hyginus and Urbicus unanimously connect disputes about finis (and, consequently, those about the position of the boundary markers and rigores, as the case may be) and the five-(six-)foot boundary strip prescribed by the Lex Mamilia (p. 12, 1 ff. La = 5, 3 ff. Th; p. 126, 3 ff. La = 89, 1 ff. Th; p. 66, 11 ff. La = 27, 1 ff. Th. respectively. See also Sic. Fl., p. 144, 18-20 La = 108, 18-20 Th). Therefore, given the importance of the boundary strip as prescribed by the law in force, one does not wonder why in Urbicus we find so pedantic a discussion about how a boundary line has to be regarded by an appentice surveyor, namely whether it is only a single line or a strip of land between two lines (see p. 66, 22-67, 10 La = 27, 12-26 Th).

A 2 Disputes «de loco» in the Agrimensores' writings

If we now turn our attention to what our authors think was the 'Anwendungsgebiet' of a controersia de loco, it cannot fail to strike us that such a dispute is decidedly kept distinct from a controersia de fine because the latter is not connected with the five-(six-)foot strip (or the Lex Mamilia tout court):

de loco controersia est, quidquid (quam quid La) excedit supra scriptam latitudinem, cuius modus a[d]petente[m] non proponitur. (Front., contr.agr., p.13, 1-3 La = 5, 10-12 Th)

«A controversy 'about a 'site' 'is whatever lies outside the width defined..."
above (i.e., the five-foot strip), the area of which is not set out by the plaintiff»;

de loco si aitur - quae res hanc habet quaestionem, ut nec ad formam nec ad illum scripturae reuertatur exemplum, sed tantum 'hunc locum [nam] hinc dico esse', et alter ex contrario similiter. (Hyg., contr.agr., p. 129, 12-15 La = 92, 17-20 Th)

«If a 'site' is at issue, which dispute has this procedure of investigation, namely that you do not turn to any map or written record, but only (this procedure): «I adfim this site belongs here », and the other (party), in reply to that, in the same way»;

<de loco>........+ haberi ordinem legis Mamiliae excessum plurimum, praecipue in agrinis arcifinjis sed nec minus in signatis, cum enim modum loci nulla forma praescribit et controversia oritur, nullo alio statum ad litem deduci debet, quam ut de loco agatur; solent quidam per imprudentiam mensores arbitros conscribere aut sortiri iudices finium regundorum causa, quando in re praesenti plus quidem quam de finium regundo agatur. (Urb., p. 74, 16-28 La = 33, 14-25 Th)

«† ... the arrangement and rules of the Lex Mamilia (, they say ?,) are (?) very much transgressed, principally on agris arcifinii, but also on allocated land. When, in fact, there is no map prescribing the area of the disputed site, and a controversy arises, by means of no other condition you have to lodge your complaint, but in order that it should be a 'controversy over a site'.

Some people in ignorance regularly enlist surveyors as arbitrators or choose judges by lot in order to settle boundaries, whereas, in the place itself, the object (of the dispute) turns to be something more than just a boundary settlement».

Unlike the two others, Urbicus’ passage shows quite clearly that, at least in his view, a dispute about a 'site' has not simply a different technical nature from disputes about finis, because its 'Anwendungsgebiet' is not regulated by the Lex Mamilia104 (although the intelligibility of the whole passage is compromised by a gap in the text). A dispute about a 'site',

104 On the relationship between the Lex Mamilia and the Lex Iulia agraria in the corpus Agrimensorum and in the fragments of the legal scholars of the Empire, see Crawford, 1989.
according to Urbicus, is characterized by its own peculiar status (a term, as already seen, which is Urbicus' own creation). Therefore, the settlement of such a dispute appears to be the outcome of a peculiar juridical procedure which is alluded to as different from that applying to boundary disputes.

Now, whereas it is undisputed among modern scholars that the Roman Agrimensores had a clear idea of the difference between a «controversia de fine» and a «controversia de loco», there is still disagreement over the nature of the 'action for regulating boundaries' (actio finium regundorum) we find mentioned in the fragments of some juris periti collected in Justinian's Digest, and its relationship with the compromissum-procedure. In order better to understand what could have been the nature of such disputes, the way both parties were made able by the Roman law in force to settle them, and what possibly was the surveyor's intervention, it is necessary to look, in addition to the technical writings of the Agrimensores, at the documents recording settlements of this kind of disputes, along with the evidence from literary sources.

In the first place, it can be noted that there have been only a few attempts so far to study the nature and technical object of disputes about boundary marks and boundary settlement by taking into account, at the same time, literary, epigraphical and juridical sources in connection with the writings of the Roman land surveyor. On the other hand, such studies were not meant to be, for various reasons, a systematic analysis of all the (epigraphical and literary) material dealing with the subject.

This chapter is, therefore, intended also to be a fuller collection of all the documents which became known to us thanks to new inscriptions. It must also be said that any kind of approach to these epigraphical documents involves not only the study of the technical problems connected with their peculiar nature. One is, in addition, inevitably going to deal with legal/historical questions. This is because the inscriptions which will be discussed later, either those recording boundary disputes which arise between private individuals, between a private individual and a town, or also those between two communities, belong to different periods. As for the latter two types of disagreements, in fact, one has to take into account also the development of the Roman civil law (especially for those rules which apply to private law cases), with its traditional distinction into proceedings regulated by the rules of the formulary process and those by the cognitio

105 On this question, see the most relevant bibliography quoted by Broginni, 1968.
extraordinaria\textsuperscript{106}.

Before starting the analysis of the literary texts and the documents referring to boundary disputes or recording operations of land surveying and/or boundary settlements, it may be worthy of note that only those affording significant information will be dealt with here. In fact one cannot always, whatever the case may be, say whether each record we may deal with is no doubt the result of a land dispute settlement\textsuperscript{107}.

The present discussion, moreover, is not intended to make any conjecture or to draw any conclusion about the nature of any possible kind of authority and prerogatives the emperors had in Italic or provincial land, by means of the inscriptions recording operations of boundary settlement carried out either by provincial administrators or by their subordinate staff\textsuperscript{108}.

B 1 Land disputes settled by means of an 'arbiter ex compromisso'

The only piece of evidence referring explicitly to the settlement of a dispute about a finis between two Roman citizens through the medium of an arbiter ex compromisso and recording the entire proceedings is given by Herculaneum Tablets Nos 76-80. The dispute these unique documents illustrate is that between L. Cominius Primus and L. Appuleius Proculus in AD 68-69. Ti. Crassius Firmus is the arbiter ex compromisso.

This kind of arbitrator was entitled, by agreement of the parties, both to submit the dispute to his judgement and to pass his sentence only on the basis of such agreement: he was not, in fact, appointed by a magistrate, in accordance with the principles of the formulary process and the per cognitionem procedure\textsuperscript{109}.

Leaving aside Tablets Nos 76 and 77, which are not directly relevant for our discussion - they deal with the preliminary stage of the proceedings (characterized by the pactum among the parties and the arbitrator's

\textsuperscript{106} Mise au point of the question in Raggi, 1965, pp. 15-44; Kaser, 1968 (= 1976); Venturini, 1987; very doubtful about the existence of such a procedure is Orestano, 1980.

\textsuperscript{107} It is, in fact, not always clear whether such documents are referring to the settlement of a boundary line has been decided, or whether it is only an administrative operation. For the same reason, several passages from literary sources which seem to point to a land dispute settlement are not taken into account here: there is a full, although out of date, collection of the period of the Republic and Empire in De Ruggiero, 1892.

\textsuperscript{108} On this particular problem, see Aichinger, 1982, and Eck, 1990.

\textsuperscript{109} This kind of arbitration is, in fact, referred to as «libera et soluta» by Ulpian (D 4, 8, 3, 1). On the arbiter ex compromisso fundamental studies are: Talamanca, 1958; Ziegler, 1971; Paricio, 1984.

As for the papyrological evidence, limited to Egypt, illustrating the legal procedure according to which controversies were settled, see Modzelewski, 1952.
receptum) - it is worth focusing our attention on Herculaneum Tablets Nos 78 and 79.

TH 78 (with the supplements of the editors)\(^{110}\):

[Ti. Crassius Firmus, arbiter ex compromisso de finibus fundi Numidiani, qui est L. Comini Primi,]
et fund[i] Stratanici[an]i (?), qui est L. Appu]-
lei Procu[li] [...a]e d[rimendis et dinosendis],
apud M. Nonium P[... ... partes adesse iussit].
Ibi L. Appuleius Proc[ulus] L. Cominio Primo dixit:
Ego meos palo[s numero - - - aio esse]
ciaes a te, cui[us rei testes adferam]
aput M. Non[ium] P - - -

«Ti. Crassius Firmus arbiter ex compromisso about the boundaries between the fundus Numidianus, belonging to L. Cominius Primus and of the fundus Stratanicianus (?) belonging to L. Appuleius Proculus, - which boundaries have to be settled and distinguished - ordered both parties to appear (before him) at the house of M. Nonius P[... ...]. And there L. Appuleius Proculus said to L. Cominius Primus:'I declare that stakes belonging to me to the number of . . . have been cut down by you, about which I will call upon as witnesses at the house of M. Nonius P[- - -].»

TH 79, pag. 4, left side

t[ianici] (?)[ ...ae et dirim[e]nd[i]s et d[rimendis] et qui sint] pali caesi|
adhito m[e]nsore [L. Opsio Hierma e[t M. N]oniu[m P ... m] ca[u]s[a] (?)| |
pal[te]at (?) L. Opsio Hermae mensori, inter [L. Cominio[m Primum et] L. 
Appuleium] 5
Proculum [cor]am sententiam dixit i(ta) u(t) i(nfra) s(cruptem) e(st) (?)].(uac.)
[ ...] derectus interminatos inter fundum Numidianum L. Comini Pri]-
i et fu[ndum Stratanicianum (?) L. Appulei Proculi ad ta[- - - ]]
[ ...] ** * * * e *-[ - - - - - ] a [ ... fun-]
dum Stratanici[anum] L. Appuli Pr[oculi - - - - - ] 10

\(^{110}\) See Arangio Ruiz and Pugliese Carratelli, 1955; Talamanca, 1958, pp. 6-15; Ziegler, 1971, pp. 133-134; 139-140; 150-154.
«Ti. Crassius Firmus arbiter ex compromisso between L. Cominius Primus and L. Appuleius Proculus about the boundaries between the fundus Numidianus and the fundus Stratanicianus - which boundaries have to be settled and distinguished - and (to ascertain) which stakes have been cut down, having consulted L. Opsius Herma the surveyor at the house of M. Nonius [......], so that the matter can be clear to L. Opsius Herma, in the presence of the parties he expressed his opinion publicly in accordance with what is written below: "(those) straight boundary lines not provided with markers between the fundus Numidianus, belonging to L. Cominius Primus, and the fundus Stratanicianus (?), belonging to L. Appuleius Proculus [- - - -]");

Pag. 1

[......]ae et cu[- - - - ]
[.....]a[t] finem e[- - - - ]
pra[.] coxam proximam at palum secundum [- - - - ]
[se]cundum (uac.) inde a palo at silicem qui e[st - - - - ]
(uac.) inde at palum tertium p[al]c[a]t (?) ab [- - - - -]
qui est proximu[s ad ul]jam p*[.] coxa tertia p[rol]x[im]a [- - - - ]
eius terrae [.....] er[i]t .. f[ront]i ori[entali(?)] - - - -
fun[do]s pro[...... c]tie et V[pl]iae Plotinae [- - - - ]
am[.]la[e] res[.....] pal[......] quos I- - - -
- - - - num red[- - - - ]
- - - - L.] Cominius [P]ri[mus ....... ]no[- - - - ]
- - - - L.] Appulei Pro[c]ui[- - - - -]
- - - - eius tradend[i] quantum proxi[m]u[a [- - - - ]
apparuerit. (uac.)
- - - - n[or]gar[e] aut petere [......]us tut[a- - - - ]
alterutro pos[i]la (?) ex compromisso communia esse(...)
shall have appeared. [...] to request or to claim [...] located in front of each of the parties to be in common by mutual promise of the two parties to abide by (...)"

TH 80 is a much mutilated text the interpretation of which is very problematical. That it deals with the penalty laid down by the arbiter ex compromisso against Cominius in consequence of his cutting down some boundary markers is only a suggestion of the editors. Such an imposition is not, of course, the commissio poenae against L. Cominius Primus because of his non-compliance with the arbitrator's verdict (see Talamanca, 1958, p. 2, note 3).

We know, for instance, that a monetary penalty is laid down against those who knock down or displace termini by the Lex Iulia agraria (see FIRA, 12; see also D 47, 21, 3, pr. [Callistratus]). But this rule seems to be prescribed by a law aimed to regulate as a statute any boundary mark settled by those who found colonies and constitute municipia, praefecturae, fora and conciliabula. It seems, therefore, unlikely that this was a rule of the law in force to which the Herculaneum arbiter ex compromisso might have referred.

It is also interesting to note that, in addition to the name of the arbiter ex compromisso, also that of the surveyor mentioned in TH 79 (page 4), line 5, is included among the signatories of this legal action. His name, L. Opsius Herma (probably a freedman), comes in the list soon after that of C. Opsius Staphylus (perhaps a libertus, as well), who appears also in TH 77 (page 4, right side), line 7, which is a document of different nature. It does not seem worth speculating, in this context, about any possible relationship between these two persons with the same nomen: all one is allowed to infer, is that C. Opsius Staphylus was probably not a mensor.

As we have seen, the foregoing remarks about the Herculaneum Tablets are not decisive enough to throw light on the nature of the outcome of an arbitrator's verdict. Not very much is added to this information by D 4, 8, 44 (Scaevola), a text concerning a similar type of dispute:

"A boundary dispute arose between Castellanus and Seius; an
arbitrator was selected, in order to end the dispute by means of his arbitration. He passed his judgement in the presence of both parties and settled the boundary markers.

More interesting is the comparison between the Herculaneum Tablets discussed above and the famous inscription CIL IX, 2827 (= ILS 5982 = FIRA III², 164) from Histonium (Campomarino):

C. Helvidius Priscus arbiter | ex compromisso inter Q. Tillium Eryllum procurato | rem Tilli Sassi et M. Paquium Aulanium | actorem municipi Histoniensium. | ut risques iuratus sententiam | dixit in ea uerba | q(uae) inf(ra) s(crita) s(unt): |

"Cum libellus uetus ab actoribus Histoniensium | prolatus sit, quem desiderauerat Tillius | Sassiuit exhiberi, et in eo scriptum fuerit || eorum locorum, de quibus agitur, fa | clat definitionem per Q. Coelium Gal | Ium M. Junio Silano L. Norbano Balbo | co(n)s(ulibus) VIII kal(endas) Maias inter P. Vaccium Vitulum | auctorem Histoniensium fundi Heriani || ci et Titiam Flaccillum proauctorem Til | li Sassi fundi Vellani a(ctum) e(sse) in re praesenti | de controversia finium ita, ut utrisq(ue) | dominis tum fundorum praesentibus | Gallus terminaret, ut primum palum || figeret a quercu pedes circa undec | im abesset autem palus a fossa - neque | apparat, quod (sic) pedes scripti essent | propter uetustatem libelli interrupti | in ea parte, in qua numerus pedum || scriptus (sic) uidetur fuisse -, inter fos | sam autem et palus iter communem | (sic) essent. cuis propietas (sic) soli Vacci Vituli esset; | ex eo palo e regione ad fraxinum notatam pal | um fixum esse a Gallo; et ab eo palo e regione ad || supercilium ultimi lacus Serrani in partem sinisterio | [rem d]irectam finem ab eodem Gallo || [- - - -]"

"C. Helvidius Priscus, arbiter ex compromisso between Q. Tillius Eryllus, administrator of Tillius Sassius, and M. Paquious Aulanium, agent on behalf of the municipium Histoniensium, in the presence of both the parties, after taking an oath, expressed his opinion according to the words which have been written below:

"Being handed in by the agents in behalf of the Histonenses the old document Tillius Sassius had required, and since there was recorded that the boundaries of the sites (loca), which are now the point at issue, have been settled by Q. Coelius Gallus under the consulship of M. Iunius Silanus and L. Norbanus Balbus, on the eighth day before the Kalendae of May"
(25th April, 19 AD), between P. Vaccius Vitulus, agent on behalf of the Histonienses for the fundus Herianicus and Titia Flaccilla, administrator of Tillius Sassius for the fundus Vellanus, and that has been executed in the place itself, as regards the boundary dispute, that Gallus should have settled the boundary marks in the presence of those who were at that time possessors of these fundi, so that he placed the first stake starting from the oak-tree - but in order that this stake should have been at the distance of some eleven feet from the canal (it is unclear how many feet there were written, because of the age of this document interrupted at the very point where the amount of feet was perhaps recorded), that between this canal and this stake should have been a common path, the property of the soil of which would be of Vaccius Vitulus. That from the above mentioned stake from the point opposite to the marked ash-tree, a second stake has been located by Gallus; and that from this stake, in a straight line to the utmost edge of lake Serranus, to its left, the boundary line has been set straight by the aforesaid Gallus [- - -]".

This inscription, unfortunately mutilated at its end, has been dated either around the end of the first century, or between the second and the third century AD111. It refers to the compromissum between Q.Tillius Eryllus, administrator of Tillius Sassius, and M. Paquius Aulanius, actor on behalf of Histonium. The final verdict of this compromissum is not preserved. As far as one can judge from the text, what is clear is that the arbiter ex compromisso, C. Helvidius Priscus, refers to a previous award deciding a controversia finium, on 25th April AD 19, between P. Vaccius Vitulus, actor, as concerned the fundus Herianicus, on behalf of Histonium and Titia Flaccilla, proauctor of Tillius Sassius for the fundus Vellanus.

Since it is not relevant to our discussion's aim, speculations to ascertain any possible transfer of title concerning these estates will be not dealt with here. Now, although the information afforded by this inscription is not very detailed, by deductive reasoning we may well assume that the object of the earlier dispute and the estates to which it refers were the same as in the

111 See Mommsen 1855 (= 1905): second or third century AD; De Ruggiero, 1892, p. 423 and 'Arbiter', in Dizionario Epigrafico, I, Rome 1895, pp. 615-616 (he thinks that this text belongs to an earlier period, since C. Helvidius Priscus - probably the praetor of 70 AD, or his father or son - is mentioned in the text); Capogrossi Colognesi, 1976, pp. 203-207 (especially p. 204, n. 16, on Mommsen's two different readings of this text, the second in CIL IX, 2827). As for this text, Mommsen was of the opinion that «Die Fortsetzung [of this record] muss auf einem andern Seiten gestanden haben». 144
later *compromissum*. On the other hand, there is no indication whatsoever to ascertain whether Q. Coelius Gallus is simply a surveyor, or whether he is the arbiter of the AD 19 dispute.

Unfortunately, nothing can be inferred from what we read about the role of the mensor in *TH 79*, lines 4-5, mentioned only in the preliminary stage of the dispute settlement. Nevertheless, since it is Gallus that seems to perform the definitio, there is good reason to think he is a mensor. In this case, either he has been instructed by the arbiter, or he was also the arbiter (which seems to be the case, as we have seen, of D, 4, 8, 44 mentioned above).

It is also worth noting that, as far as one may judge, the disputes recorded in the Histonium inscription seem to be characterized by a different kind of technical operation: in the earlier case, the settlement of a line of demarcation; perhaps only a compromissum aimed to resettle the former boundary line in the later case. In fact, fundamental seems the role, in the later dispute, of the written record concerning the former boundary settlement, in all likelihood preserved in the public archive of the municipium. It is this very record which is demanded by one of the parties at law of the later dispute, and Priscus, the arbiter ex compromisso, constantly refers to the boundary settlement described in this document. We cannot therefore exclude the possibility that Priscus has been chosen by both parties because he had the right technical knowledge to settle such a dispute: in other words, that Priscus was also a mensor.

On the other hand, there is no evidence to suppose that boundary disputes were largely settled through the medium of an arbiter ex compromisso, rather than by a full court procedure, when the boundary line between two (or more) contending neighbours was recorded in an official document, as it was at Histonium and (very probably also) at Herculanenum.

In addition, the compromisse from both Herculanenum and Histonium do not make any allusion to whether these disputes concerned also the

112 According to M. Raoss, 'Locus', in Dizionario Epigrafico, IV, 3, Rome, 1964, p. 1755, this text refers to a dispute *de loco*. On the other hand, (the so-called 'first') Hyginus (see p. 129, 12-14 La = 92, 17-20 Th) and Urbicus (p. 74, 17 ff. La = 33, 14 ff. Th) seem to connect the origin of disputes about the *site* with the absence of a map or a written document. On locus see also W. Kübler, 'Locus', RE, 13, 1 (1926), cols. 957-964.

113 Mommsen, 1855 (= 1905) and Capogrossi Colognesi, 1976 think that Q. Coelius Gallus was a land surveyor. On the other hand, Brogini, 1968, p. 254, thinks that the arbitrator mentioned at D 4, 8, 44 (Scaevola) was a land surveyor.

114 As for the textual difficulties and the differences of the style of the lettering after line 26, see Mommsen, 1855 (= 1905), p. 375, *apparatus criticus*; Capogrossi Colognesi, 1976, p. 206, n. 18.
settlement or re-settlement of the five-foot boundary strip – that is, the right of way along the common boundaries. As for the Histoniun inscription, for instance, we have seen that the «common path» belongs only one of the litigators. But the eleven feet mentioned in this text do not certainly refer to the width of the boundary strip between these two estates.

B 2 Settlement of boundary markers as the early stage of a land dispute settlement

Now, in order to know what perhaps was the character of the operation of terminos ponere mentioned in the example of compromissum at D 4, 8, 44, it is worth turning again our attention to the Herculaneum Tablets.

In TH 79 (page 4 left side) lines 1-3 we read, with the supplements suggested by the editors, that the dispute was an ex compromisso arbitration «de finibus fundi Numidiani et fundi Stratanici (?) (...) dirimendis et dinoscendis et qui sint pali caesi». The stakes which were cut down have been mentioned during the early stage of the proceedings before the arbiter (see TH 78, page 1, lines 5-6). «Palus secundus» and «palus tertius» are found, among other boundary markers, in the arbiter's sentence in TH 79, page 1, lines 3; 4; 5. The problem is to ascertain whether the outcome of the Herculaneum compromissum was limited only to the replacement of the stakes which had been cut down by L. Cominius Primus, or whether the whole boundary line is likely to have been settled then for the first time; and whether the operation of placing stakes has to be considered the practical, but temporary, settlement of a boundary after a dispute so that the AD 19 operation also of «configere palum» in the Histoniun text may be connected with a compromissum-procedure. The only example of an operation of settling boundaries with pali comes from Rome (CIL VI, 1268, about the first century AD). This is commonly considered as an inscription dealing with a dispute settled by means of a compromissum-procedure:

hi termini XIX positi sunt | ab Scribonio et Pisone Frugi | ex depalatione T(itii) Flauii Vespasiani arbitri.

¹¹⁵ Thus De Ruggiero, 1892, p. 424; Ziegler, 1971, p. 140; for Vespasian's name, see H. C. Newton, The Epigraphical Evidence for the Reign of Vespasian and Titus (Cornell Studies in Classical Philology), New York, 1901, p. 1, n. 1: according to him, this inscription belongs to the period before Vespasian's reign.
“These nineteen boundary markers have been placed by Scribonius and Piso Frugi, according to the staking out made by T. Flavius Vespasianus, arbitrator.”

A further epigraphical example referring to land enclosed by means of stakes (although not connected with a boundary settlement operation) comes from the Tabula Contrebiensis (87 BC)\textsuperscript{116}, lines 7-8:

(...) sei Sosinestana ceuitas esset tum qua Salluiensis i nouissime publice depalat(e)unt, qua de re agitur, sei [i]ntra eos palos Salluiensis riom per agrum | publicum Sosinestanorum iure suo facere liceret (...)

“(…) in the case (viz., the land belonged to the) the Sosinestan community was found, at that time, in the place where the Salluienses most recently put in publicly stakes, which matter is the subject of this action, if it would be within the rights of the Salluienses to make a canal through the public land of the Sosinestani within those stakes (…)».

The next inscription is from Capena (CIL XI, 3932), possibly of the first century AD, at the end of which we find, among other goods which are part of a bequest:

(...) iugera agri Cutuleiani p(lus) r(minus) III ita ut depalatum est (...)

“(…) some three iugera of the ager Cutuleianus, according to the staking out operation (…)».

Not many references to pali and their use, or to a depalatio operation, can be found in the writings of the Roman land surveyors. From a passage of Siculus Flaccus, for instance, we learn that

in quibusdam uero regionibus palos pro terminis obseruant, alii iliceos, alii oleaginos, alii uero iuniperos. (p. 138, 20-22 La = 102, 18-19 Th)

“(In some regions people use stakes as a boundary, here of holm-oak

\textsuperscript{116} For the legal and historical problems connected with this inscription, see P. Birks, A. Rodger, J.S. Richardson, “Further aspects of the "Tabula Contrebiensis”, JRS 74 (1984), pp. 48-50 (from which the translation quoted in the text).

In passing, it may be noted that the use of stakes is connected to a particular technical purpose, which has nothing to do with surveying the land, as for instance it is in CIL VIII, 2728 (from Lambaesis: second half of the second century AD), ll. 34-36: «rigor autem | depalatus erat supra montem («but the straight line had been staked out above the hills»); here the operation of refurbishing an aqueduct is involved.
wood, here of olive-tree wood, but also of the juniper-tree.

It is worth noting that *pali*, in this passage, are connected by Flaccus with his earlier explication of the term *agri arcifinii*. The conclusion seems unavoidable that 'stakes' have to be considered as a distinctive way of marking the boundaries of land lying outside a centuriated grid. But, since *pali* are not the most common way people mark the boundaries of their land, Siculus Flaccus underlines that:

\[
\text{si uero pali lignei pro terminis dispositi sunt [...] ex consuetudine regionis et ex uicionis exempla sumenda sunt. (p. 142, 24-143, 2 La = 106, 25-107, 2 Th)}
\]

«If wooden stakes, instead of *termini*, have been placed, examples must be taken from the usage of the region and from the neighbouring owners».

(The so-called 'second') Hyginus mentions *pali actuarii* in connection with the operation of land measurement to mark the limit of the allotments of a centuriated area:

\[
\text{actuarios palos suo quemque numero inscriptos inter centenos uicenos pedes defigemus, ut ad partitionem acceptarum mensura acta appareat. (p. 192, 9-12 La = 155, 8-11Th)}
\]

«We shall place *actuarii pali*, each with its number inscribed, every hundred and twenty feet, in order that the measurement shall appear as being done for the division of the allotments».

According to the first *Liber coloniarum*, «*termini lignei*» («wooden boundary marker», also called «sacrificial stakes») were in use in Latium (p. 218, 5-6 La), in the territory between Latium and Campania (221, 17-222, 1 La) and between Rome and Ostia (p. 222, 16-223, 2 La). According to the second *Liber Coloniarum*, they could be found in Picenum at Asculum (p. 252, 17 La), the *<aQer>* (?) *Foronouanus* (sic) (255, 23-24 La) and the *ager Pisaurensis* (257, 24 La).

Urbicus, commenting upon the technical nature of such *termini* or *pali sacrificales*, points out that they cannot be regarded as the same as proper boundary markers because *pali* - or *termini - sacrificales* are not always placed at the same distances between each other, as in the case of the
other markers along the boundary line. On the other hand, Urbicus refer to the use of "putting in stakes" when subseciva were (illegally) seized by private people (see p. 53, 20-24 La = 41, 10-13 Th).

The only reference to depalatio in the Corpus Agrimensorum is in a passage, which seems to be a copy of an epigraphical text, from the excerpt (transmitted by J, f. 142) entitled nomina agrimensorum, qui in quo officio limitabant - "names of land surveyors: who (they were) and in what office they surveyed" - attributed by Lachmann to the first Liber coloniarum (p. 244, 13-17 La):

item in mappa Albensium inuenitur: 'Haec depalatio et determinatio facta ante d(iem) VI ld(us) Oct(oberes) per C<a>ecilium Satuminum centurionem cohortis VII et XX, mensorio interuenientibus, Scipione Orfite et Quinto Nonio Prisco consulibus.

"Likewise can be found in the cadastral map of Alba: "This settlement of stakes and boundary fixing has been performed the sixth day before the Ides of October, by Caecilius Saturninus, centurion of the twenty-seventh cohort, with the assistance of land surveyors, in the years of the consulship of Scipio Orfiteus and Quintus Nonius Priscus" (10 October 149 AD)"

In addition, signa, and not pali, are the marks Frontinus refers to when he explains how to survey an area of territory:

cuiuscumque loci mensura agenda fuerit, eum circuire ante omnia oportet, et ad omnes angulos signa ponere. (p. 33, 7-9 La = 17, 3-5 Th)

"Of whatever site the measurement has to be done, first of all is necessary to make a circuit of it and place markers at all the corners."

The conclusion is that, according to the texts listed above, pali were not used in explicit connection with drawing a boundary line after a dispute settlement. It seems that stakes are simply a kind of boundary marker among others in the Corpus Agrimensorum. There is also no firm indication that pali were always used only as a temporary marker a surveyor could

117 Stones connected with a ritual sacrifice (but not referred to as sacrificales), connected with the common boundary line, are mentioned by Siculus Flaccus, p. 141, 4-22 La = 105, 5-24 Th (cfr. Ovid., fast., II, 651-657). On these technical terms, see Rudorff, in Lachmann, 1852, p. 272.

118 On this passage, see Dilke, 1992; for the use of stakes, connected with surveying operations, see also p. 307, 2-3 La (an extract from Gaius auctor u(ir) p(erfectissimus)). A reference to stakes as boundary markers is also in a non-technical text: see Tert., de jeiu., 11: "palos terminales fititis deo" ("and for God you place boundary stakes").
have used in order to measure land or to indicate where the definitive boundary line had to run. CIL VI, 1268, for instance, like all examples listed earlier where a depalatio operation is mentioned, seems to be concerned with a particular kind of land measurement, when distinctive marks were needed to distinguish an area from the surrounding territory, or when a new boundary line had to be drawn where no other signs (either artificial or natural) could be profitably used as a fixed point of such line. Of course, nothing prevents us from thinking that pali placed after the settlement of a land dispute may have been replaced with a different kind of marker. On the other hand, this does not seem to be what happened at Histonium and Herculaneum.

B 3 Settlement of a dispute as settlement of boundary markers

If the foregoing hypothesis is correct, it follows that terminos ponere, by which operation the settlement of the land dispute at Herculaneum came to be characterized was, basically, limited to the replacement of the stakes which had been cut down. It means it was that not the entire boundary line between the two contending structures that was either settled for the first time or resettled. There are, therefore, good reasons to think that also the later dispute at Histonium, no doubt decided by means of a compromissum procedure, arose, because some boundary markers placed in AD 19 had been removed or, alternatively, had tumbled down. If this was the case, only a section of the boundary line was no longer detectable.

On the other hand, one cannot reject out of hand the possibility that the later dispute was connected with the extent and ownership of the iter commune mentioned in the text. This suggestion may well be strengthened by observing that the arbitrator’s task, according to the sentence at Herculaneum, seems to be limited to making plain and undisputable those portions of the boundary line between the two estates deprived of markers and stones (cfr. interminati in TH 79, page 4, left side line 7). Moreover, in

119 Unfortunately, the epigraphical evidence referring to operations of resettlement of boundary lines or markers seems to be circumscribed to only one case: the boundary stone published by Ramilli, 1965-66: (according to the editor’s interpretation) juss(u) termin(minus) n(ovatus) | VIitra) K(ardinem) VII. On the other hand, we have the resettlement of ‘public’ boundary markers, such as those of the Tiber bank in AD 161 by A. Platorius Nepos Calpumianus, curator aliae Tiberis et cloacarum Vrbis, who terminos uelst(ate) dilaapsos | exaltauit et restit(it) rect(o) rigore | proximo cinpo (CIL VI, 31553 = ILS 5932; these technical expressions already in a similar document of the reign of Augustus: CIL VI, 1262 = ILS 5963).
the section of the same sentence where all the boundary markers between the two fundi are mentioned, pari seem to be part of a system of boundary marks which already existed (as suggested by Talamanca, 1958, p. 6, n. 3 and Ziegler, 1971, p. 139).

In addition to pari, for instance, the technical term which is more frequently referred to in the boundary descriptions of the Herculaneum decision is «coxæ» (lit., «the hip»); it is mentioned twice: the second time as «coxae tertia». The only author in the Corpus Agrimensorum to use it as a synonym of the acute angle between two boundary lines that meet is Siculus Flaccus¹²⁰. According to him:

alii (scil. terminos finales ponunt) tantum modo in coxis vel <m>-inimis, alii in longioribus spatii [...] (p. 139, 15-16 La = 103, 15-17 Th)

«Some people (place boundary markers) only in corners (coxæ), even on short ones, others for longer intervals»;

qui (scil. termini), ut ante dixeramus, omnis angulis coxisque positi esse debent. (p. 142, 4-5 La = 106, 4-5 Th)

«Which boundary markers, as we have said before, have to be located in every corner and curvature»;

nam et in ipsis generibus (scil. finitionum) sicubi coxae sunt terminos inuenimus frequenter. (p. 151, 14-15 La = 115, 14-15 Th)

«And, in fact, it is in the species itself of boundary settlements, for instance where coxae are, that we frequently find termini».

It is clear from these passages that the owners of adjoining properties are accustomed to place boundary markers also in «coxæ». As already seen, in TH 79, page 1, line 3, the first coxa is said to be located next (proxima) to the second stake, which is supposed to be one of the boundary markers the arbiter has been appointed to resettle. Since the 'second stake' is not located within the corresponding coxa, one would incline to think that coxae mentioned in these documents are not necessarily the curvatures of the new line of demarcation generated by the boundary settlement after the dispute, but preexisting. Also, surely a preexisting boundary marker is the silix connected with the location of the third stake.

According to the technical terminology used by the Agrimensores, silix is a

¹²⁰ On these aspects, see Guillaumin, 1988. For the use of angulus in inscriptions dealing with the boundaries of private estates see, e.g., CIL VI, 29782 = ILS 5989 and AE 1978, 90.
boundary marker as well (see Hyg., gen.controv., p. 127, 1 La = 90, 1 Th; Sic. Fl., p. 139, 11 La = 103, 11Th; see also agror.insp., p. 282, 1-2 La = 75, 20-21; see Rudorff, in Lachmann, 1852, p. 242; p. 273). In addition to these markers, a road and two (?) neighbouring estates are mentioned as reference points. Obviously, the arbitrator's decision about the boundary line between the two litigating parties - in order to avoid further disputes about the same matter - had to include a detailed description of all the boundary markers of the line between the two estates (not only those under dispute). This is also what D 4, 8, 21, 3 (Ulpian) seems to allude to in order to avoid the incerta sententia of an arbitrator.

B 4 A further example of boundary markers mentioned in a sentence after a boundary dispute settlement

Little light is thrown on the way land disputes are settled by means of a compromissum procedure by the inscription from Nettuno, in Latium published recently (see Jacques, 1987). According to the first editor of this record, this inscription comes from the territory of the ancient city of Antium. It possibly records the settlement of a dispute between a private individual and a local community. Only two of the three inscribed sides of this much mutilated cippus can be now read. Not only is the text on many occasions too damaged to admit any safe restoration, but there is also no helpful element, apart from its lettering, by means of which the date of this text can be in some way narrowed down. Therefore, all we are left to infer is that the approximate date of the settlement of the dispute here recorded is the second half of the third century AD. Consequently, the following discussion will be limited to what, in the text, appears to be safe.

Face A


From what survives of line five (in all likelihood, sente]ntia iudicis) and
since two *anguli*, a *rectus rigor* and *lapides* are referred to in the text, one would incline to think that our inscription either refers to a boundary settlement connected with a judge's sentence or, as in the case of Histonium, a document which deals with an earlier boundary settlement. Since a «*lapis alius vetus*» is mentioned, one inclines to think that the land belonging to the contending parties was perhaps already separated by a boundary line before the dispute our document seems to be referring to.

**Face B**


Although this is indoubtedly a boundary dispute, owing to the condition of the text it is not worth engaging in any discussion about what may have actually been the object of the dispute. One would incline to suppose that, the detailed description of the boundary line was intended to show clearly the extent of one of the litigating estates, possibly in order to make clear by which of the parties at law *locus quo de agitur* (?) of **Face B**, line 19 (the *disputed 'site'*) was lawfully possessed. In addition, since «*the validity of the dividing strips*» (*limitum auctoritas* of **Face B**, lines 9-10) is referred to, we are led to think that one of the disputed areas was connected with land officially surveyed or centuriated. It is worthy of note that the concept of «*authority of the limites*» is found also in the Corpus Agrimensorum. The first *Liber coloniarum*, in the extract dealing with *Vei* (section devoted to *Tuscia*) refers to «*potestas limitum*»121:

ne id aliquando sequamini quod maior potestas limitum recturarumque cursus non confirmat. (p. 221, 7-9 La; see Ps.Urb., *comm. de controv.*, p. 11, 33-12, 9 La = 60, 21-22 Th)

«*In order that we should never follow what is not confirmed by the*  

121 But, according to Jacques (p. 56), «*auctoritas limitum* (ou finium) ne paraît pas attesté par ailleurs, et la signification n'est pas obvie».

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greater authority of the limites or the direction of straight lines».

Because of the condition of the text, it does not seem to be possible to progress beyond what the editor suggested about the juridical aspects of this inscription, which centres upon a boundary dispute and a question connected with bona caduca (= goods without a legitimate heir). Nevertheless, since ius possessionis is referred to in the text, it may well be that this dispute dealt with proof of title over a certain area of land. If this is right, we have to assume that the inscription from Antium records the settlement of a dispute which is probably, from a legal and technical point of view, different from those at Herculaneum and Histonia. In both these cases, in fact, the point at issue seems to be the ascertaining of either party’s claim over a portion of the boundary line between two adjoining estates. On the other hand, the dispute recorded in the Antium inscription seems to imply the ascertaining of the rights the contending parties claimed over a parcel of land; possibly, the settlement of this controversy was followed by a transfer of the disputed area.

Therefore, if the previous observations are correct, one may hazard the conjecture that here a dispute involving ownership is connected with the resettlement of the boundary line and markers. Finally, since a iudex is mentioned in this text, it seems that this was not a kind of dispute settled by an arbiter ex compromisso.

B 5 Land disputes settled by means of an ‘arbiter ex compromisso’:
conclusions

After the foregoing analysis of the extant records concerning land disputes settled by means of a compromissum procedure, it is now possible to draw some conclusions. First, the arbitrators at Herculaneum and Histonia (for the later dispute) seem to have been appointed to deal with boundary disputes. It means that their decision, concerning the area of common land between two adjoining estates, was strictly about the boundary strip. In the second place, we have seen that the arbiter of the later dispute at Histonia seems to have taken his decision after consulting a map. Although there is no indications, it seems likely that also the arbiter of the Herculaneum dispute could use a plan of the boundaries between the adjoining farms.
C 'Arbitri ex compromisso' in the literary sources: their competences

It is impossible to say, by what we have seen about the role of an 
arbiter ex compromisso in settling boundary disputes, whether he was entitled to 
decide disputes over an area of land exceeding the boundary strip. Scarce 
are the references in the literary sources:

Tac., hist., I, 24:
Otho (...) adeo animosus corruptor ut Cocceio Proculo speculatori, de 
parte finium cum uicino ambigenti, uniuersum uicini agrum sua pecunia 
emptum dono dederit.
«And he grew so bold in his acts of corruption, that when Cocceius 
Proculus, one of the speculatores, had a quarrel with his neighbour about a 
portion of the boundary line, Otho bought up the neighbour's whole farm 
with his own money and gave it to Proculus»;

Suet., Otho, 4, 2:
cuidam (sc. militum) etiam de parte finium cum uicino litiganti adhibitus 
arbiter totum agrum redemit emancipavitque.
«(Otho), chosen arbitrator by a man who was at law with his neighbour 
about a portion of the boundary line, he bought the whole property and 
presented it to him».

As Ziegler already underlined (1971, p. 158), it is in fact clear enough that 
Otho bought the land he gave to the soldier because the latter was the 
losing part in the dispute he had been appointed for, limited to a 
«Grenzstreit». We have seen that the arbitrator who settles the 
Herculaneum dispute and the arbitrator of the later disagreement at 
Histionium did not deal with proof of title for areas of land adjoining the 
contending properties, simply because an arbiter ex compromisso is not 
legally entitled to do that (on these aspects, see Knütel, 1992, p. 294 and n. 
37).

On the basis and in the light of what has been previously observed about 
the boundary markers mentioned in the records from Herculaneum and 
Histionium (which, be it noted, are almost contemporary), one would incline 
to think that the procedure of settling land disputes by means of a 
compromissum may have been adopted when the common line of boundary
markers (not necessarily the five-foot strip between adjoining parcels of land), settled and acknowledged at an earlier time, was later disputed, either because disturbed by a (natural or) deliberate displacement of boundary markers (as in Herculaneum) or because either of the two parties disagreed about the extent of the boundary strip between two neighbouring estates (so that, for instance, such a line no longer corresponded to the map of the estates, as in the case of Histonium).

Therefore, although the previous remark cannot be proved by means of explicit epigraphical, documentary or literary (legal) evidence, it is conceivable that, by way of a compromissum, there were settled disputes over the boundary strip (whatever its extent may be). Consequently, this was not the procedure people usually followed when boundary disputes also involved the right of control over an area of land which was not thought of or acknowledged as the boundary strip between two structures. For instance we have seen that, in TH 78, page 1, line 5, the plaintiff laid claim only to the area of land of the boundary markers.

D Land disputes settled by means of the 'action for regulating boundaries'

As for land disputes settled by means of legal procedures which are not ex compromisso, still under discussion is the relationship between what the Agrimensores point to as standard types of land dispute settlement and the technical nature of the 'actio finium regundorum' mentioned in legal texts. The points at issue can be summarized as follows:

a) whether the actio finium regundorum may be connected with the legis actio per iudicis arbitriue postulationem of the earlier period;
b) whether the formula of this action (namely, what the magistrate writes down to direct the iudex) may possibly be extended, in addition to the controversia de fine, also to the controversia de loco of the Agrimensores;
c) whether this action ended with an adiudicatio which was purely 'declaratory' (when, for instance, the former line of demarcation needs 'only' to be acknowledged and resettled), or also 'constitutive' (when an area of land - whether or not connected with the common boundary strip - falling short of absolute ownership, had to be assigned to one or other of the two contending parties, so that the new boundary line had to be drawn in a different place from the former one), in analogy with the 'actio communi
dividundo' and "actio familiae herciscundae");

d) whether, finally, the formula ended with a condemnatio and, if so, what it was (namely, whether it was a simple penalty laid down by the judge against one of the parties, or a sort of monetary refund one of the parties had to give to the other, when the latter, for instance, was not any longer entitled to possess an area of land which was acquired by the former after the judge's sentence)\textsuperscript{122}.

Not all these issues are equally relevant for our discussion. Therefore, some of them will be dealt with only incidentally. Now, despite the considerable amount written on this subject, any analysis about the nature of land disputes in the writings of the Roman land surveyors and legal sources cannot take for granted any modern hypothesis.

As for the problems one has to face in approaching the ancient sources referring to the actio finium regundorum and the various kinds of controversiae, it is worth emphasizing that we know only some relatively late imperial decrees introducing or enforcing regulations concerning the settlement of land disputes, either «de fine» or «de loco». In addition, we cannot rely on any precise chronology of the writings of the Roman land surveyors with the exception of the works of Frontinus and (the so-called 'first') Hyginus. Furthermore, one of our most important sources for the understanding of the nature of the 'action for regulating boundaries', namely Digest 10, 1, is nothing more than a collection of extracts from the writings of classical iuris periti. It is therefore uncertain, as already suggested by modern scholars, whether these fragments mirror the actual technical character of land disputes settlement of the time they were written, or that of the time when the Digest was drawn up.

It implies that one cannot say with certainty whether the difference between the terminology used by the jurists and that of the Roman Agrimensores is a consequence of interpolation in the original works of the iuris periti. It follows that it is difficult to estimate what could have been the influence (if any) of imperial interventions or technical changes, in the course of time, on the theory of settling disputes «de fine» and «de loco». Equally, whether the silence of the Agrimensores, on some questions, is only owed to the particular conditions through which the text of their

writings has been transmitted, or to the fact that new measures had been introduced, to regulate the procedure of settling land disputes, to which the Agrimensores fail to refer because they are not so much interested in legal questions.

The following discussion has been divided into two main sections. The first will be devoted to the analysis of the legal and technical sources for the substance of the legal action dealing with the settlement (or resettlement) of a boundary line.

The second section will deal with the inscriptions which indubitably refer to a boundary settlement operation. As will be seen, only careful conclusions will be drawn from the analysis of inscriptions recording either dispute settlements typified by an 'international' arbitration procedure, or to those settled by means of the cognitio procedure, especially during the Empire.

E1 Evidence in Urbicus and in the literary sources

What seems to be clear from the passages about controversiae de fine and de loco listed at the beginning of this chapter is that each of the Agrimensores to whom these extracts belong makes a clear distinction between cases, when the common land strip of an imposed width is disputed, and cases when this rule is not observed.

Now, interesting is what Urbicus, in a fundamental passage from his work on land disputes, writes about the nature of boundary disputes. This paragraph deals with the meaning of transcendentiae (progresses) and status (conditions) of all land disputes:

\[
\text{ex non stante propositione in \{te\}stante\(<m\>) transcendentur controversiae quotiens loci de quo agitur specialia argumenta nulla existunt, neque ullum finitimae similitudinis mo<nu>mentum, sed tantum aboliti finis querella exponitur, et excipiens extantium argomentorum quadam expositione defenditur. nam nec uno genere, sed et si proximiæ\<a\>tas aliqua naturalis fuit, quae similitudine\(<m\>) finis adferre possi\{n\}t, in illam quoque ulul extantium argomentorum opportunitas aptatur. ex re stant<e> i<n> non stante<\<m\>> fit transcendentia, cum certus agro<\<rum\>> finis, qui aut loci natura aut terminorum distinctione firmatus est, relinquitur et per uanas demonstrationes controversiae<br>\<insritur\> (controversiae includitur La, Th). hoc modo controversiae plerumque ab ambitio<\<sis\>> possessoribus}
\]
Disputes develop from a non-grounded statement into a firm statement when there is no special argument for the 'site' at issue, nor any tangible sign which resembles a boundary mark. A mere claim is lodged that a boundary has been obliterated and is defended as a result by some kind of exposition of whatever arguments there are.

This is (made possible) not by means of just one kind (of proof), but, if for instance there was any adjoining area which by nature could have looked like a boundary, the approach is provided by whatever argument there may be adapted to it. There is progress (transcendentia) of a dispute from a firm into a non-grounded statement, when a fixed field boundary, which is confirmed either by the nature of the terrain, or by the existence of distinguishing boundaries, is abandoned and a controversy is arranged by means of groundless proofs. This is very often the way ambitious owners institute a dispute with their neighbours.

But it happens that such arguments, if they are not defended in a rational way, fail. Whereas, if they are considered true, it happens that the operation of settling boundaries fails because of the imprudence of those who have to judge.

Urbicus seems to point out that disputes about a parcel of land between two estates may have a firm basis. This happens, even if there is not only no «particular argument» which can characterize them, but also no evidence of anything looking like a «boundary mark», when «any argument whatever» - instead of proper markers - «may be adapted» in order that the boundary line may be marked out and the dispute settled. It may be noted that Urbicus' expression «locus de quoagit», is used also in the inscriptions from Histonium and Antium.

It means that locus, no matter what is the type of boundary dispute between adjoining holdings, is thought of as the first, basic element of any boundary dispute. Locus, in fact, is the area where necessarily a dispute arises and, therefore, it is also the area subject to any boundary (re)settlement. Similar seems to be the picture emerging from the fragments of classical jurisprudence, collected in the Digest, which deal with the
'action for regulating boundaries'. In Urbicus' view, the basic reason why disputes arise is that a boundary line «has been obliterated». Consequently, there is an area, between two or more holdings, which returns to its former technical condition of an area deprived of a boundary line: in other words, a locus.

It is also interesting that Urbicus' exposition is not about a particular kind of land, for instance either land within a ceñuriated grid, or contained simply by natural markers, such as agri arcifinii. That in Urbicus' view the starting point of disputes concerning a boundary strip of whatever width is in general a locus, seems to be confirmed by what he says about those «ambitious owners», who try to generate land disputes based on «groundless proofs».

There is an enlightening example of such boundary claims advanced by greedy neighbours, which also shows how easily a controversia de fine - a boundary dispute- might shade off into a litigation arising from a claim to a wider area, if not the whole land of one of the parties. It is provided by a famous passage from Apuleius' Metamorphoses (IX, 35). From his account we learn that a rich and potens landowner after every sort of oppression against his neighbour, a poor man,

> ipsis etiam glebulis exterminare gestiebat finiumque iam commota quaestione terram totam sibi uindicabat, tunc agrestis [...] ut suo saltem sepulchro paternum retineret solum, amicos plurimos ad demonstrationem finium trepidans eximie corroqarat.

«Was now bent on driving him off the very soil itself and having instituted an unfounded lawsuit over boundaries, he claimed his rights over the entire land. The farmer, then, [...] in order to retain, at least, his family plot for his own tomb, with great trepidation invited a large number of friends to gather for a formal pointing out of the boundaries».

Now, on the one hand the emphasis laid by F. Norden on the term «uindicare» we find in Apuleius' passage seems to be unjustified123. In fact, we cannot exclude the possibility that Apuleius' account is only a piece of his literary fiction, created by using a terminology he, as a former lawyer, was well aware of. It is true, on the other hand, that Apuleius' passage shows a striking similarity with Urbicus' technical paragraph quoted earlier.

Consequently, if this is not simply a coincidence, both text seem to point out that there was a common tendency, among the Romans, not to distinguish disputes which, from a technical angle, were about the boundary line, from those implying the factual right one of the contending parties had over an area land.

Another passage shows that illegal acquisition of land, by means of disturbances basically concerning the outer edge of a parcel of land, where it shares the strip of territory acknowledged as the common boundary, is from Seneca (ep., 88, 11):

(geometres) docet quod modo nihil perdam ex finibus meis; at ego discere uolo, quomodo totos hilaris amittam.

«A surveyor teaches me how I may lose not the slightest portion of my boundaries; I, however, seek to learn how to lose them all with a light heart».

Therefore, what emerges from the previous observations, if they are correct, is that in Urbicus view, finis and locus (although distinct elements of all land disputes, as in Frontinus' systematization), seems to be no longer regarded as two independent technical terms under either of which all cases of land disputes have to be classified. His viewpoint is much clearer in a passage, which follows the section quoted above, where Urbicus' discussion centres round the explanation of six different types of «effects» (effectus) denoting the settlement of all land disputes. What is worth noting is, in the first place, that this standard number of procedures to settle land disputes - each with its specific purpose and visible effect on the ground - is not connected by Urbicus with the substantial elements of all controversies, finis and locus:

a quocumque autem controversia de agris mouentur, effectus habent aut coniunctius aut disjunctius aut spectius aut expos[ç]it<iusos aut subiectius aut recipier<iusos>. coniunctius est effectus, quotiens consentientibus angulis exploratus agrorum finis ad modum rationis accipit determinationem intaeo utriusque agrif[s] solo: <hoc> genus fitionis plerique inter <se> conuenientes potius quam iudices sortient<es> factum consignare malunt; disjunctius est effectus, cum determinatio alterius partis solum desecat et ita [æ]qualitate<æm> agri diuersam <dis>simili solo
applicat, ut plerumque euenit <ut> ex prato siluae aliquid adiungatur aut ex silua fine distincto adplicitur ad pratum, et similiter per alias agrorum qualitates, spectiuius est effectus, cum est demonstratio finitimis argumentis ex maxima parte fundata, ita ut et dubi<s>quoque locis aspectum praebeat finitionis. [...] expositiuius est effectus controversiae, quotiens finitimorum argumentorum caret demonstratione et partium magis exigat narrationes, per quas exonendum sit quod in rigore termini desi<n>t, aut persuadendum iudici, etiam si loci natura finitiam exibeat similitudinem, quomodo sint reponendi. subjectiuius est effectus controversiae, cum reliquitur status generalis et alio quolibet statu controversia defenditur. recuperatiuius est effectus controversiae, quotiens a trinfia aut quadrifinia <aut> ex quolibet alio finis loco in excipientem terminum rectura dirigat et per incessum definitionis loca quaedam alteri fundo adquirit; aut quotiens solum auferetur et eius loco redditus utrique fundo, effectus quasi recuperatiuius existit. (p. 68,16-69,16 La = 28, 22-29,19 Th)

«Land disputes, whoever might begin them, have either a conjunctive, or a disjunctive, or an investigative, or an explanatory or a subjective or, finally, a recuperative outcome.

The outcome is conjunctive, every time that, being consistent its angles, the ascertained perimeter of the fields undergoes the determination of the boundary according to a rational system, the land of both owners remaining undiminished: most people prefer to carry out and confirm this (kind of) settling the outer boundary by a 'mutual agreement', rather than by 'choosing judges by lot'.

The outcome of a dispute is disjunctive, when the determination of boundary splits the soil of one or other of the contending parties and hence connects different categories of land to dissimilar types of terrain, as very often happens when a portion of meadow is attached to a wood; or a part of a wood, when its confines have been marked, is attached to a meadow, and in the same way all over the other categories of land.

The outcome is investigative, when the proof is, for the most part, based on evidence from boundaries, so that also areas with no definite character are given the appearance of determined area.

The outcome of a dispute is explanatory when a controversy is wanting proof boundaries and is in greater need of the parties' reports, by means of which it has to be explained where in the boundary the markers are missing or the judge (iudex) has to be persuaded of how they have to be replaced,
even if aspect of the terrain is somewhat similar to an area provided with measured boundaries.

The outcome of a controversy is subjective when the general condition (status) is ignored and the controversy is argued by means of some another whatever condition.

The outcome of a dispute is recuperative whenever from any three- or four-sided boundary stone, or from any other place on the boundary, the straight line goes towards the following marker and, by the process of definition, secures some areas (loca) to the other farm; a quasi-recuperative outcome of a controversy arises when some land (from either estate) is removed and in its place this area is granted to both farms.

Whether these six «outcomes» have to correspond to the number of six land disputes we find in (the so-called 'first') Hyginus (so that Urbicus' treatise should be regarded as a sort of compromise between Frontinus' work, based on fifteen land disputes, and that of Hyginus, based on six); or which of those may be combined with either «finis» or «locus» will be not dealt with here. Let us turn rather to the purpose and character of the procedures to settle disputes Urbicus seems to allude to, in order to see whether a comparison can be made with the procedures which are known to us through literary or epigraphical sources.

In the first place, Urbicus seems to differentiate disputes, the outcome of which has a visible effect on the configuration of the boundary line or area of territory (since it is, basically, an «outcome» of a surveying operation), from controversies whose «outcome» derives from a particular type of procedure aimed, basically, to restore the previous configuration of the disputed area. To the first group seem to belong «effectus coniunctius»; «diisunctius» and «reciperatius»; to the second, «effectus spectius» and «expositius». By reading the very beginning of this paragraph, one has the impression, if we follow Urbicus' illustration, that these six «effectus» can be divided into couples of procedures characterized by an antithetical nature. Unlike the first two couples, only the «effectus subiectius» does not seem to be the opposite «outcome» either of the following, or of the previous one. «Effectus subiectius» is, in fact, only a précis of what Urbicus said in an earlier passage, where he correlates «transcendentiae» with status of land disputes (pp. 65, 14-70, 9 La = 26, 6-30, 10 Th; see Chapter 3, B).
But also both the «outcomes» of the second ‘antithetic couple’ («effectus spectius» and «expositius»), do not seem to be anything else than a résumé of what Urbicus said when comparing founded and unfounded land disputes in the first of his two passages quoted earlier.

In the light of what has been already observed about his first passage and from what Urbicus says about their nature in the second, it seems to follow that both these two «outcomes» are the result of a procedure aimed only to restore and resettle a boundary line which is no longer visible on the ground. The surveyor taking part in the settlement of such disputes, in fact, has basically to take into account the assertions of the litigating parties in order to ascertain where the line of demarcation is to be settled, or to give to the judge (ludex) the right evidence to replace all boundary markers exactly where they were originally, and not where other marks - whether natural or artificial - seem to be pointing to. This also means, indirectly, that the role of a surveyor in deciding a dispute could be, on some occasion, particularly important. On the other hand, what Urbicus seem to be unconcerned about, is whether it was the judge(-arbitrator) or the surveyor who was to complete the final operation of placing boundary markers once the pre-existing boundary line had been resettled.

As we have seen, in addition to the «outcomes» dealing basically with the resettlement of a boundary line, Urbicus describes three «outcomes» which seem to imply an elaborate operation of surveying the disputed area of land. The first one, «effectus coniunctius» (conjunctive outcome), is the outcome of an operation based on taking a new measurement of the whole boundary line surrounding the estates of the parties at law. In order to confirm that the existing line is legal, the width of all angles is checked: also Frontinus seems to allude to such operations and their importance (p. 31, 12-32, 6 La = 15, 6-16, 4 Th). According to Urbicus, the consequence of this measurement are:

a) no change in the size of the estates which have been surveyed again;
b) that the «ascertained perimeter (finis) of the fields undergoes the determination of the boundary according to a rational system».

Although there is no element to prove it, it seems more likely than not that such a «determinatio ad modum rationis» of the boundaries is the resettlement of the five-foot strip (or whatever strip of common land lay between two adjoining estates) where it was no longer visible.

And, what is more important, Urbicus states that «most people» have such
an operation completed by reaching an agreement («inter <se> conuenientes»), rather than by «choosing judges by lot» («iudices sortientes»). In all likelihood, therefore, he is referring to land possessed by private individuals. In contrast with the foregoing, «effectus disiunctius» («disjunctive outcome») is the result of an operation of land measurement aimed, as far as one can say from Urbicus' terminology, at settling the common boundary where it should run, not just checking it. In fact, after the settlement of the dispute, the boundary line goes through the land of either of the parties. The most tangible effect of such an operation is that areas of waste (wood or pasture) land are granted (and, therefore, connected), as a single and indivisible whole, to the areas of waste land belonging to the estate of one or other of the contending parties. Again, Urbicus seems to be referring to private land. A third «outcome», which is followed by a visible effect on the configuration of the estates after a dispute has been settled is «effectus recuperatus» («recuperative outcome»): like the previous one, it implies an operation of resettlement of the boundary line. Since it runs either from a boundary marker (like a trifinium or a quadriринium), or from «any other place (locus) on the boundary», in a new direction towards the following marker, such a line encloses loca which will be awarded to one or other neighbouring estates (similar is the case of the «effectus quasi recuperatus» which is at the end of Urbicus' discussion). And, again, there is no reason to doubt that here Urbicus alludes to private land.

As far as we are able to judge from the treatises which, in the Corpus Agrimensorum deal with land disputes, it seems that Urbicus' theory of six different types of «outcomes» connected with the settlement of land disputes was not drawn from an earlier authority. As we have seen, this theoretical exposition is not only something new, but also one of the most essential parts of his theoretical illustration of land disputes (see Chapter 3, B and C). I suspect, although I cannot prove it, that Urbicus' theory of «outcomes» is an attempt at classifying all possible cases of disputes (whether between private individuals or communities) by a standard number of visible effects on the boundary line and the disputed area.

Now, it is true that in Urbicus' text there is no allusion to which of these six «outcomes» denote the procedure to settle land disputes between two communities and which have to do with the settlement of disputes of a private nature. Nevertheless, as will be seen in the part devoted to this
argument, what is called by Urbicus «effectus inspexitiuus» and «expositiuiuus» of the settlement of a land dispute, seems to correspond to the substantive procedure to settle controversies by means of the so-called 'interstate-arbitration'.

Consequently, conclusions about Urbicus' theory of «effectus» which may be connected with a standard, so to speak, procedure to decide disputes between private individuals can be drawn only if such a basic assumption is correct: namely, that Urbicus took into account all existing procedures of his own time to settle disputes in order to formulate his theory of six «outcomes». If this is likely, it is also likely that in Urbicus' text there should be references to the nature and the object of that kind of controversy in which we are most interested: those between private individuals. Thus, Urbicus' text concerning the explanation of «effectus coniunctiuius», «disiunctiuiuus» and «reciperiatiuus» becomes of a much greater importance in the light of what can be observed about other passages of the same author.

E 2 Some problems of terminology in Urbicus

As already seen, Urbicus is no doubt aware of the fact that land disputes can be brought to an end by means of different kinds of procedures. He mentions a iudex, to whom the land surveyor reports about the technical aspects of a dispute Urbicus considers as characterized by an effectus expositiuiuus. Since a iudex is referred to as the person who has to hear the case, one inclines to think that Urbicus is probably referring to a full court procedure, and not to settlement, the main characteristics of which have been already illustrated, through the medium of an arbiter ex compromisso.

Such a distinction seems to be clear to him since, in the passage concerning the nature of «effectus coniunctiuius» already discussed, Urbicus specifies that disputes with this «outcome» are for the most part settled by way of a mutual agreement, rather than by «choosing judges by lots» («iudices sortient<es>»).

He also states that this «outcome» implies a measurement of angles of the whole outer boundary line of the litigating estates, whereby there is no change of extent or ownership in either of these estates when the dispute is decided. It is therefore conceivable that the scope of such an operation was, basically, to restore exactly the same extent and form of both farms as
before whatever disturbance took place. Now, as also modern scholars suggested, «convenientes» in Urbicus' text is in all likelihood an allusion to the *compromissum* procedure. If this is acceptable, one may use Urbicus' words as an argument to maintain that the boundary disputes decided by means of a *compromissum* procedure do not imply any change either of extent or ownership in the land of either of the contending parties. Conversely, «iudices sortient<es>» (sortiti, La) should refer, as a whole, to the court procedure.

As rightly pointed out by Talamanca, the formulary procedure, based on a fixed pattern which may change only to fit the actual case, has to be distinguished from the *ex compromisso*-procedure. Only the latter can always be arranged according to the way the contending parties think is the best to achieve their goals (Talamanca, 1958, p. 5 and note).

But, as has been said before, no explicit allusion is found, in Urbicus' text, either to the *compromissum* or to the formulary procedure. In fact, by a mere argument from silence we can affirm that Urbicus indirectly alludes to the *actio finium regundorum* when he comments upon *effectus coniunctius*. Therefore, this passage has to be compared with another, where is found the same expression «sortiri iudices». This is the section where he expounds the technical nature of «controversia de loco»:

<de loco> (lacunam statuit La) *haberi ordinem legis Mamiliae excessum plurimum, praecipue in agris arcifinis sed nec minus id adsignatis.cum enim modum loci nulla forma praescribit et controversia oritur, nullo alio statu[m] ad litem deduci debet, quam ut de loco agatur; solent quidam per imprudentiam mensores arbitros conscibere aut sortiri iudices finium regundorum causa, quando in re praesenti plus quidem quam de finifum regundo agatur. si<ce> fit ut pos<t> sent<ent>iam inritum sit (post sententia irrita sit, La) et rescindi possit, quod aut iudex aut arbiter pronuntiauerint, neque ullum commissum faciat qui sententia<m> non sit secutus, quando de alia re iudicem aut arbitrum sumpserint. (p. 74, 16-28 La = 33, 13-25 Th)

(See above for the translation up to *agatur*) «Thus, it follows that, after the sentence, is void and may be invalidated what the arbitrator or the judge

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124 As suggested by Broggini, 1968, p. 254, and Hinrichs, 1974, pp. 188-189; for a similar interpretation, see also Brugi, 1897, p. 221.
has decided, and does not breaks the law who does not comply with the sentence, given that (those people) appointed an arbitrator or a judge for a different matter.

It is a common opinion, among the modern scholars who took into account this passage, that Urbicus undoubtedly refers to the procedure of a legal action, the scope of which is the settlement of land disputes. Consequently, this section has been used to speculate about the nature of the only legal action known to deal with land dispute settlement: actio finium regundorum.

But unfortunately, even the basic aspects of this legal procedure are not independent of various theories. The nature and object of the actio Urbicus seems to be citing is still uncertain, as also why he says that its outcome is not necessarily to be binding. According to Brugi (1897, pp. 217; 221-22; 307), it is the surveyor that has to be prevented from passing his judgement about a locus: for such a judgement he has no authority; an illegal sentence may follow. Brugi also thinks that «mensiores arbitros conscribere» may allude to arbitri ex compromisso, but «sortiri iudices» to the ordo iudiciorum privatorum; in most cases land surveyors were appointed for both offices.

Partially similar is Broggini’s opinion (see discussion in Pikulska, 1990, p. 80) according to which, on the basis of the «principio della tipicità delle azioni», a iudex finium regundorum is not legally entitled to judge about a locus because this is a case of rei uindicatio. He also thinks that mensores, referred to as arbitri or iudices, could be appointed either by agreement of the litigants or by sortitio to decide boundary disputes - in Broggini’s view, the only object of actio finium regundorum (pp. 250-254).

Kaser is almost of the same opinion also as regards the interpretation of the aforesaid passage (pp. 99 and note 3; 100 and note 2 = p. 131 and note 3; p. 132 and note 2).

According to Hinrichs (1974, p.189), finally, Urbicus states that such a decision ended by being void because both parties assumed it regarded the area, modus, of their farms, whereas a locus, a site, was disputed\(^\text{126}\). Any discussion about these interpretations implies a rediscussion of the technical nature and object of the ‘action for regulating boundaries’ mentioned in the legal sources on the one hand; its relationship with both boundary disputes and land possession/ownership controversies non-legal texts (including the writings of the Roman Agrimensores) may allude to, on

the other hand.

First of all, the aforesaid scholars failed to observe that according to their suggestions, the result of the settlement of the land dispute mentioned by Urbicus will always be a void decision. In fact, apart from «imprudentia» of the contending parties, whatever the sentence may be, this would be the final stage of a procedural wrong choice made by the magistrate entitled by the law in force to appoint a iudex. Such a procedural mistake lies in the fact that the magistrate allows a judge to decide that controversy by means of a wrong legal action. Now, if Urbicus, in this passage, refers to the formulary process, such a magistrate is the praetor. If Urbicus alludes to a case which was to be decided by way of the cognitio extra ordinem, it is conceivable that such a magistrate is any public official provided with jurisdiction.

It is, therefore, in both cases unlikely that a magistrate was unable to find out what the actual object of the dispute - boundary or 'area' - may have been. Moreover, if mensores, according to the predominant opinion, in many cases actually settled land disputes as either 'arbitrators' or 'judges' and this was the law still in force in Urbicus' time, it follows that the «void decision», in his passage, was caused by the fact that surveyors had been appointed to try a case (either as 'arbitrators' or 'judges') they were not entitled to. Consequently, not only was the magistrate twice wrong in consequence of the aforesaid reasons. It is also follows that, as far as this aspect of the Roman law is concerned, in most of the cases people were unable to work out what kind of procedure and decision should be used for a valid settlement of land disputes. In order to find a way out of the difficulties connected with this subject, Broggini (1968, p. 250) suggested that the praetor was «incapace a proporre azioni tanto eterogenee» or that, in case of a controversia de loco, not a land surveyor, but a proper judge was possibly the only competent, technical adviser to try such cases.

It is, therefore, necessary to re-examine the whole question starting from the analysis of Urbicus' passage about mensores arbitri and iudices. The first thing one may look at, is what Urbicus deals with before speaking of mensores arbitri and iudices.

As we have seen, this passage centres upon the technical nature of controversia de loco. The beginning of the paragraph, according to the editors, is lost because of a gap in the text. Nevertheless, it does not seem that Urbicus' extant discussion is closely connected with the preceding text.
Now, Urbicus refers to the case when a controversy *about a site* occurs on *agri arcifinii*. As already seen, this is, according to the Agrimensores' terminology, land with no officially measured boundary. It is, therefore, likely that Urbicus here refers to land in private ownership, that is a private law case. The case in point he gives his readers is, consequently, that of a dispute occurring on land characterized by a system of various boundary markers (whether natural or artificial) and by the absence of any 'public' document recording the *modus loci* (the extent of the area), which either litigant could use to point out the extent of their own land and the proof of title.

What seems to be Urbicus' main concern here, is that the contending parties have no such documents to show, as in the case described by Papinian (see D 10, 1, 11, discussed later), the extent of their holdings in relation to the extent of the common boundary strip. This assumption may be strengthened by observing that Urbicus clearly refers to Lex Mamilia. This law, according to the current opinion, prescribes the imposed width of no less than five feet (as already seen, (the so-called 'first') Hyginus mentions six feet) for the boundary strip between properties. What Urbicus seems to point to at the very beginning (although mutilated) of this passage is that the transgression of the rules prescribed by the Lex Mamilia about the boundary strip is characteristic principally (*praecipue*) on *agri arcifinii*, but the same may happen on *agri adsignati* as well (*nec minus id adsignatis*). Because of this, according to Urbicus, the mistake *some people* make, is *enlisting surveyors as arbitrators or choosing them as judges by lot in order to settle boundaries* whereas, on the spot (= at the moment of the technical investigation *in the place itself*, as Urbicus says again at p. 78, 7-8 La = 38, 6-7 Th), it turns out that the dispute is not a mere operation *of boundary settlement*. Now, although it may appear self-evident, it is worth underlining that *finium reiundorum causa* is, in Urbicus' passage, a final clause: it has therefore to be referred to both operations of *enlisting* and *choosing by lot*. This interpretation is confirmed by the expression *de fini regundo* Urbicus used in the same context. Final clauses like this can be found elsewhere in Urbicus' work: in a later part of the same paragraph (p. 75, 12 La = 34, 15 Th: *finis declarandi causa*) and at p. 63, 5 La = 23, 17 Th (*fructus tollendi causa*). The phrase *finium regundorum causa* is not to be regarded as an additional formulation to make it clear that either *arbitri*, or *judices*, or
both, are those usually appointed to settle a dispute de fine, in connection with the procedure of a legal action known to us as 'actio finium regundorum'\(^{127}\).

We must not forget that Urbicus' discussion here is basically aimed at giving concise and fundamental instructions to his readers by using a modest didactic style, without engaging in any detailed juridical exposition. A final clause, like that used, seems to be intended to explain concisely what could be the (incorrect) purpose which «some people regularly» assume to be the proper way to settle a dispute, concerning a site, by «enlisting surveyors as arbitrators» or «choosing them as judges by lot». In fact, as Urbicus' exposition clearly points out from the outset, the fundamental and correct «condition» (status) of such disputes is locus, the site itself («nullo alio statufml ad litem deduci debet, quam ut de loco agatur»).

«Finium regundorum causa» has, therefore, a double meaning. On the one hand, it indicates what is the (wrong) technical object of the dispute; on the other hand, it is an implicit allusion to the very reason why, according to Urbicus, all that is connected with the final settlement of such a dispute is, from a technical-legal angle, «void» («inritum»). As for the first aspect, in fact, if one bases a legal action on a wrong «status», one makes it pass from «correctness to incorrectness» (see Chapter 3, B and C). And, as already seen, Urbicus devoted a special attention to such «progresses» («transcendentiae») of «conditions» in a section of his treatise which, unfortunately, has been transmitted incomplete (see p. 67, 16-23 La = 27, 28-28, 5 Th). As for the second aspect, it seems likely that Urbicus' didactic purpose is, in this passage, to compare and contrast the correct and incorrect use of those technical aspects of a land dispute settlement which may determine, respectively, a valid and an invalid sentence. In other words, and this is the point worth noting, Urbicus is not discriminating between two particular cases: one, when the actio finium regundorum applies because it was a controversy about a finis; the other, when a different kind of legal action (e.g., rei vindicatio or uti possidetis) was needed in connection with a disputed locus. To judge by his language, Urbicus seems to be basically speaking of valid and invalid outcomes of land disputes settled by the same procedure: this can be only the 'action for regulating boundaries' known to us from the legal sources.

\(^{127}\) Broggini, 1968, p. 250, and Behrends, 1992, p. 266 speak, respectively, of a «iudex finius regundorum» and a «Richter der Grenzregelungsklage (von der Richterliste)».
A similar suggestion is, of course, in contrast with the most common interpretation of Urbicus' passage. According to this, he is supposed to be pointing out that 'action for regulating boundaries' cannot apply to a dispute about locus, since the province of this action is those controversies concerning fines, so that in the former case either a rei vindicatio or an interdict is available.\(^{128}\)

But, if the previous remarks are correct, one has to assume that Urbicus, in this passage, is cautioning his readers that such mistakes may well be determined by the very nature of the only legal action one was entitled or liable to undertake when a land measurement was needed in order to settle a dispute: actio finium regundorum. This being so, it therefore follows that a procedural mistake, like that which Urbicus exemplifies, may well be caused by the fact that the action he seems to be referring to was characterized by a double technical province. In other words, such a mistake could be understood by his readers because the actio finium regundorum could apply not only when a boundary was disputed, but also a whole locus between adjoining properties.

Now, if it is likely that Urbicus wrote for apprentice surveyors (or students), and not necessarily for Roman private law students (although the latter class of trainees might also have found his book useful), it is also possible to make a further suggestion.

For instance, Urbicus' aim, in the second passage quoted above, is to show what are the wrong ways «some people regularly» follow to settle a land dispute they believe has to do with a finis, whereas it is about a 'site'. When a technical writer like Urbicus wants to make clear why the outcome of a procedure based on such a wrong assumption is an invalid sentence, it is conceivable that he draws his readers' attention especially to the technicalities characterizing the settlement of that dispute, rather than to the juridical peculiarities of the procedure itself.

\(^{128}\) Modern scholars' contributions to the age-long debate about the technical nature of the 'action for regulating boundaries' have to be divided into two groups. To the first, belong scholars who think that this legal action was a remedy to decide disputes about both «finis» and «locus»: see Rudorff. in Lachmann, 1852, pp. 442-445; Arangio Ruiz, 1922, pp. 8-16 (= 1974, pp. 18-26); Talamanca, 1961.

The second group is formed by those who assume that disputes about the «site» are covered by a rei vindicatio: see Karlowa, 1892; Girard, 1924.

A compromise-suggestion is that of Brogolini, 1968, pp. 249-252, according to which adiudicatio of an 'action for regulating boundaries' and rei vindicatio are connected up to the end of the Republic.

For the story of the interpretation of the actio finium regundorum during the Middle Ages and in the thought of the glossators and post-glossators, see Bellomo, 1961.
In these circumstances, it is clear that what Urbicus' readers would have better understood was an evident mistake. Such an evident mistake may only be either a wrong technical operation, or a wrong aim for which that technical operation has been undertaken. If "mensores arbitri" and "iudices" are technical terms referring to the procedure of one legal action only (actio finium regundorum), we are led to think that, in Urbicus' mind, they were intended to represent two different ways the same action can bring to an end such land disputes. Therefore it follows that by "mensores arbitros conscribere" and "iudices sortiri", Urbicus may indicate: a) both these two operations were technically appropriate in case of boundary disputes, but not those over loca; b) these two operation are both appropriate to settle also disputes over 'sites'.

E 3 Arbitrators, judges and land surveyors

As we have already seen in discussing "effectus coniunctiuus" (p. 68, 21-23 La = 28, 27-29 Th), Urbicus uses two distinct expressions to denote two operations connected with the settlement of land disputes ("conuenientes and iudices sortientes"). There as here, "iudices sortientes" represents an allusion to the Roman legal system (with its only remedy for disagreements between neighbouring estates: actio finium regundorum). Since "sortiri iudices" is comparable to "iudices sortientes" (of p. 68, 21-23 La = 28, 27-29 Th), if "mensores arbitros conscribere" is an expansion of the meaning of "conuenientes" used at p. 68, 22 La = 28, 27-28 Th, one would incline to think that "mensores arbitros conscribere", like "conuenientes", refers to the ex compromisso procedure. It cannot be maintained that Urbicus' "mensores arbitri" were members of a special kind of court, which was to judge about land disputes; but there is no reason why a mensor should not have been chosen as an arbiter ex compromisso.

As for the other documentary material, it is worth noting that some papyri from Roman Egypt seem to confirm that the duty of land surveyors (γεωμετραι), was basically that of drawing up a preliminary technical report later used by local or regional officers and magistrates. Nor does it seem that officers referred to as horiodeiktai in some papyri from the late

130 The idea that all land disputes fell within the "legal" jurisdiction of the Agrimensores dates back to Rudorff (in Lachmann, 1852, p. 422). Buckland, 1936, maintained that land surveyors formed a special court. Against both these suggestions see Brugi, 1997, p. 220, and Broggi, 1968, p. 250, n. 6; 251, n. 5.
second to the second half of the fourth century AD were ever appointed, in this province, as either judges or arbitrators in a dispute settlement. They appear to be responsible only for the operation of checking and confirming that the measurement made by the land surveyors was accurate. In fact, the most relevant example referring to this particular boundary-inspector’s intervention to settle a dispute about boundary markers illegally displaced (BGU 616: end of the second century AD; possibly also P. Ross.-Georg., II, 25: 154-155 AD) seems to suggest that he was simply an assistant of the local komogrammateus.

The evidence is too scarce to support any firm hypothesis. Nevertheless, it seems likely that the function of a horiodeiktes, in administrative cases, was limited to the task of checking quality and types of cultivated or waste land and the extent of farms for the census declarations, but within a commission of other officials (see, e.g., P.Comell 20: 302 AD) (see Kupiszewski, 1952, pp. 257-259; 260-263). Although he refers to Africa several times (p. 63, 17 La = 15, 48 Th; p. 78, 4 La = 38, 3-4 Th - surely Egypt; p. 84, 31 La = 45, 18 Th; p. 87, 29 La = 48, 18 Th; p. 88, 28 La = 49, 7 Th), it can be excluded that Urbicus derived his view of mensores arbitri from the notion that Egyptian horiodeiktai were arbitrators.

It is now worth examining again the passages in Urbicus from which it has been supposed that land surveyors hold also the office of either judges or arbitrators or, at least, that of legal consultants, in the procedure to settle a land dispute. Now, in addition to the passages previously analyzed, Urbicus alludes to «iudex» and to «aduocatio» in two important section of his work. The first is at p. 63, 27-64, 2 La = 24, 17-24 Th:

> etenim ad artificium defendendi ølurimum prode erit, si persecuti [huius omni][s] diligentia fuerimus. non enim a qualibet partem [m] adgrediendum est in controversia[m] sed dispiciendum, cui postulationi absolutio proxima sit. ne implicationem [m] aliqua et iudicem inpediamus et controversiam faciamus obscuriorem. nihil puto deformius esse quam <cum> de eius modis causis inperiti idoneas uolunt exhibere aduocationes.

«It will be useful, for the preparation of a defense, if we have considered the legal position with all due care. In a dispute, you do not have to approach (the point at issue) from any aspect, but you have to investigate which approach is most likely to being acquitted, in order that we do not hinder the judge through any entanglement and make the controversy more
obscure. I think there is nothing as odious as when people with no experience set out to offer the proper arguments to such cases.

To make sense of what Urbicus actually means, we cannot divert our attention, as already stressed, from the aim of his work on land disputes, which was basically didactic. It is clear that he is here making a plain distinction between tasks which a land surveyor has to fulfil by means of his technical knowledge, and the function and legal expertise of a iudex when they have to settle together a land dispute. The former's role seems to be that of finding an «absolutio» which suits the 'claim' («postulatio») of one or other party at law.

But Urbicus perhaps also implies that a valid decision of a land dispute is, to a great extent, based on the surveyor's ability. It is in fact he who is supposed to find, in Urbicus' view, the best technical formula to combine any variable and diversified situation, from which a dispute may arise, with the formalism of the legal framework to which land disputes have to be converted, in order to start correct proceedings aimed at a valid sentence. A correct outcome is the natural consequence, for a surveyor, of keeping his distance from whatever kind of complication which may both hinder the judge and make more obscure the technical nature of a dispute.

From what Urbicus says in the last sentence of the passage quoted, it seems that one of the worst eventualities occurring during the settlement of a land dispute is when «people with no experience» about this kind of legal action («imperiti»), «set out to offer the proper argument to such cases»³¹. From what he says, it is difficult to determine whether land surveyors or 'advocates' are referred to. This statement can be enlightened by a second important passage, where the expressions «adjudicare» and «aduocationem praestare» occur again:

> difficillimus autem locus hic est quod mensori iudicandum est; sed nec minus ille exactus quod est aduocatio praestanda. prudentiam tamen eandem artifices habere debent et qui iudicaturi sunt et qui aduocationes sunt praestituri in iudicando autem mensori[em] bonum uirum et iustum agere debet nequeulla ambitione aut sordibus moueri seruare opinionem

³¹ According to Schindel, 1992, pp. 389-391, this passage of Urbicus has to be interpreted «unter Berücksichtigung der Doppelfunktion des Mensor, der arbitratischen wie der iudikativen»; therefore, he thinks that «imperiti», to whom Urbicus refers, are «Mensoren ohne Rechtskenntnisse»
et arti et moribus omnis illi artifici ueritas custodienda est. exclusis illis
similitudinibus quae falsa pro ueris subiciuntur. quidam enim per imperitiam
quidam per in prudentiam peccant: totum autem hoc iudicandi officium et
hominem et artificem exigit egregium. erat aequissimum et in
aduocatione[m] eandem fidem exhiberi in controversiam a mensoribus. sed
hoc possessores aequo animo ferre non possunt: nam cum his ueritas
exposita est, aduersus sinceritatem artis facere coQunt. multa sunt in
professione quae generaliter pro ueris offerantur, multa quae specialiter,
quaedam quae argumentaliter, conjecturaliter etiam mentiri artifices
coguntur. (p. 90, 1-21 La = 50, 3-51, 3 Th)

«But a very difficult aspect is the latter fact, that a surveyor has to judge.
Nevertheless the former aspect is not less difficult, namely the fact that
defense must be granted. Professional people ought to have the same kind
of skill, whether they are going to judge, or grant defense
. When judging, a surveyor has to act as a good and just man. He must not
be moved by means of any ambition or greed; he must preserve a good
reputation for his ars and his character, excluding any analogies which may
suggest falsehood for truth. Some make mistakes because of lack of
experience, some because of lack of skill. But the entire office of judging
requires an outstanding man and an outstanding expert. It would have been
most equitable if the same character had always been brought to bear on a
controversy by mensoris in their advocacy.

But land owners cannot with equanimity stand such things since, when the
real situation is expounded to them, they force (these experts) to act against
the principles of their art. In a profession there are many aspects which may
be offered, in general, instead of the truth, many specifically, some also in
the context of reasoning. Also as regards the conjectural aspect experts are
forced to lie».

The meaning of the first sentence is quite clear. By means of «locus
hic/locus ille», Urbicus draws a comparison between the land surveyor's
duty of «judging» and that of the «person granting defense». No allusion to
the possible intervention of a land surveyor in a land dispute as either an
advocate or a judge can be found at p. 71, 22-24 La = 30, 18-19 Th:

(speaking of disputes 'about the position of boundary markers') erit in
prouidentia[m] mensoris secundum angulorum finitimorum positionem
arbitrari. in quantum sit terminus translatus et qua ratione sit in locum suum restituendus.

"It is part of the surveyor’s providence to decide, according to the position of the nearest corners, how far a boundary marker has been displaced, and in what rational way it is to be reinstalled."

Nothing more, finally, seems to be added to this picture by p. 76, 24-26 La = 36, 5-8 Th:

nec enim refert. cuius si[n]t solum aut cuius iuris. ad mouendam controversiam: tunc autem habe[n]t differentia<m>, prout ab iudice (La; mrius aliadice, B) tractatur.

"And, in fact, it has no importance, to whom the land belongs or what is its juridical condition in order to raise a land dispute. But it makes a difference at the point at which (the dispute) is tried by a judge."

The role of a land surveyor and that of a judge/arbitrator are distinguished in Urbicus’ work. On the other hand, according to (the so-called ‘first’) Hyginus such a distinction seems to be limited to strictly technical questions, for the most part concerning “right of way”:

de uia e<t> actu et itinere et ambitu et accessu et riuis et uallibus fossis fontibus saepe mouentur contentiones. quae omnes partes non nostra<m> sed forensis officii, id est iuris ciuilis, operam exigunt: nos uero tunc eis intervenimus. cum aut derigendum aliquid est quaestionibus, aut. si forma aliqua aliud notatum inuenitur, repetendum est. (p. 134, 7-13 La = 97,23-98,5 Th)

"There are often disagreements about the public right of way, of way for driving cattle and the legal right of way; moreover, about the right of going around and right of throughfare. In addition, about streams, valleys, ditches and springs. All these are’s require not our services, but the intervention of the forensic office, that is, the civil law. We take part in these (procedures) when a case has to be arranged through investigations or if something, which is recorded in some map, has to be reclaimed."

Therefore, the only way to identify the sense of the phrase «mensores arbitros conscribere aut sortiri iudices finium regundorum causa» is to
suppose, as already said, that it refers to two technical operations (still in practice in Urbicus' time) which were not the right ones to settle a dispute about 'site' («locus»). The ancillary problems posed by such statements are, consequently, that of determining, first of all, who were those entitled either to «enlist land surveyors as arbitrators» or to «choose judges by lot»; in the second place, why neither of these two operations is the proper one to settle such a dispute. It has been observed that there is no firm evidence to maintain that «mensores arbitros conscribere» is an expression referring to the ex compromitto-procedure, although it may be possible.\footnote{According to Brogini, 1957, p. 167, n. 23; and Ziegler, 1971, p. 159, they may be arbitri dati (against this suggestion, without any argument, see Hinrichs, 1974, p. 189); arbitrators chosen by a judge according to Kaser, 1968, p. 99, n. 3 (= 1976, p. 131, n. 3): On the other hand, Brogini, 1968, p. 250, saw in Urbicus a possible allusion to a procedural mistake, made by either of the contending parties: same view also in Buckland, 1936, p. 749.}

\section*{F 1 The legal texts: from the Digest to the Theodosian Code}

According to Hinrichs, the authority of a magistrate to appoint a judge in boundary disputes was first granted by the Lex Mamilia which is commonly dated to the third-second century BC. In his view, this law not only introduced a standard width for any boundary strip and replaced with one the three arbitri of the Twelve Tables who, according to Cic., de leg., I, 55, up to that time used to settle boundary disputes, but it also prescribed a new kind of legal procedure (influenced by the formulary process) which substituted the legis actio per iudicis arbitriue postulationem which applied to such controversies.

Nevertheless, as Knütel argued, the quality of our evidence makes it difficult to accept this interpretation. Therefore, Knütel is of the opinion that «schon zur Zwölftafelzeit habe ein vom Magistrat ermächtigter Richter bei Grenzstreitigkeiten durch adiudicatio Eigentum zuweisen können» and that «es konstitutive richterl iche Eigentumszuweisungen im Legisaktionverfahren gegeben hat, und es geradezu natürlich ist, daß man diese Ermächtigung des Richters in den Formularprozeß übernahm»\footnote{See Knütel, 1992, pp. 294-299 (quotation from page 294), is right against Hinrichs (1974, pp. 186-188). On Cicero and the actio finium reaundorum in early Rome, see A. Watson, Rome of the Twelve Tables. Persons and Property, Philadelphia, 1984, pp. 158-159.}

In addition to the praetor, the only magistrate who had a similar authority was the provincial magistrate (on his prerogative to appoint a judge, see D 5, 1, 12, 1 (Paul)). Now, as far as the authority of the provincial magistrate
is concerned, it seems that such disagreements were decided by means of a different legal procedure. The two stages (in iure/in iudicio) of the formulary process were, in fact, replaced by a kind of proceeding totally in the hands of the provincial governors.

It also seems certain that the new procedure did not come into common use within a short period and in all provinces to the same extent. It was, possibly, only around the middle of the fourth century AD that the procedure connected with the ordo iudiciorum privatorum, according to the opinion of modern scholars, was completely replaced by the extraordinaria cognitione\textsuperscript{134}.

Therefore, since the provincial governors were, in theory, totally competent to administer justice according to this new system, it becomes intelligible why they might have occasionally delegated to iudices pedanei (not to procurators as special legates) the office of dealing with land disputes, most of which (occurring in provinces and during the Empire) seem to have been settled according to such a new system of administrative justice. An example of that, which seems to refer to one kind of controversy and way to settle it, is provided by D 10, 1, 8 (Ulpian):

\begin{quote}
    si irruptione fluminis fines agri confudit inundatio ideoque usurpandi quibusdam loca, in quibus ius non habent, occasionem praestat, praeeses provinciae alieno eos abstinere et domino suum restitui terminoscuius per mensorem declarari iubet. 1. Ad officium de finibus cognoscentis pertinet mensores mittere et per eos dirimere ipsam finium quaestionem ut aequum est, si ita res exigit, oculisque suis subjectis locis.\textsuperscript{135}
\end{quote}

"If water obscures the boundaries of a property in consequence of the overflowing of a river and, therefore, some people have the opportunity to seize land to which they have no right, the the provincial governor gives orders that they should keep out of land which does not belong to them, that owners should have their land restored, and that the boundary markers should be indicated by a surveyor.

1. The duties of who has to judge about boundaries include sending

\textsuperscript{134} See above, footnote 106. For the enforcement of the formulary process in the provinces of the Empire, see Parfsch, 1905, especially pp. 19-110; in general, see also Jones, 1954-55; Burton, 1975; Murga, 1983.

surveyors and settling the boundary dispute in an equitable manner with their help; if circumstances demand, he should (do that) after inspecting the land himself».

It is easy to see that not only the settlement of the legal aspects of the dispute belongs to the jurisdiction of the praeses provinciae, but also the authority of dispatching a surveyor, if necessary, to bring to a definitive end boundary controversies. Now, this passage informs us that the basic office of a land surveyor, appointed by the provincial governor when such controversies have to be settled, is 'declarare terminos'.

This information is consistent with what has been observed earlier about D 4, 8, 44 (Scaevola) and the Herculaneum and Histonium boundary disputes: a land surveyor may either give knowledge to the arbitrator/judge about the location of the boundary line, or even implement the decision - which he, as judge/arbitrator, or someone else may have taken - by placing (or replacing) the boundary markers.

The next natural step of the present discussion is the analysis of the Theodosian Code's rubric 'de (scil. actione) finium regundorum' (the translation in italics is that of C. Pharr, Princeton, 1952):

CT 2, 26, 1 (22/2/330 AD) (= p. 267, 4-268, 3 La; cf. CJ 3, 39, 3)

Imp(erator) Constantinus A(ugustus) ad Tertullianum u(irum)

p(erfectissimum) comitem dioceses Asianae. Si quis super inuasis sui iuris locis prior detulerit querimoniam, quae finali cohaeret cum proprietate controversiae (quia finalis cohaeret de proprietate controversia, La; quae finalis cohaeret de proprietate controversia Weber, 1891), prior super possessione quaeestio finiatur et tunc agrimensor ire praeci piatur ad loca, ut patefacta ueritate huiusmodi litigium terminetur. quod si altera pars locorum adepta dominium subterfugiendo moras attulerit, ne possit controversia definiri locorum ordine, electus agrimensor dirigatur ad loca (a locorum ordine selectus agrimensor dirigatur ad loca La; ad locorum ordinis, directus agrimensor Weber, 1891), ut, si fidelis inspectio tenentis locum esse probauerit, petitor uictus abscedat; at si controversia eius claruerit, qui primo iudiciis detulerit causam, ut inuasor ille poena teneatur edicti, si tamen ui ea loca eundem inuasisse constiterit. nam si per errorem aut incuriam domini ab aliis possessa sunt, ipsis solis cedere debent. dat(a) VIII K(alendas) Mart(ias) Bessi Gallicano et Symmacho cons(ulibus).
Emperor Constantine Augustus to the most perfect Tertullianus, comes of the Diocese of Asia.

If any person should be the first to lodge a complaint that parcels of land of his ownership have been forcibly entered and seized, which complaint is inseparable from that kind of controversy which is about boundaries in connection with ownership, shall be fixed first the terms of the question of possession; and then a surveyor shall be ordered to go to the loca, so that such litigation may be ended when the truth is made known.

But if one of the parties to the suit, after obtaining the mastery of such areas, should by subterfuge bring delays in order the the controversy cannot be decided by position and arrangements of the parcels of land, a selected surveyor shall be dispatched to the place, so that if a trustworthy survey should prove that the land belongs to the person in possession, the plaintiff shall withdraw defeated.

But, if the contention of the person who first brought the case to court should be clearly proved, the other party, as guilty for forcible entry and seizure, shall be liable to the penalty of the edict; provided, however, that it is established that the latter party entered and seized this property with force. For if through error of the owner, parcels of land are possessed by others, such occupants must yield possession to the owner themselves.

Given on the eighth day before the Kalends of March at Bessum, in the year of the consulship of Gallicanum and Symmachus;

CT 2, 26, 3 (1/8/331 AD) (= p. 268, 4-11 La)

«The same Augustus to all Provincials. (After other matters)

If there should be a boundary dispute, the appointment of an arbitrator shall be permitted only when it is established that the locus concerning which suit has been brougt before the governor (praeses) is less than five feet in width.
When the case concerns a greater area of land than five feet in width, it must be settled before the governor himself, since it is a case of ownership, and not one of boundaries. If a partner should sue for anything from another partner, the governor first shall decide whether anything should be granted by one partner to the other, and then finally the amount which it is determined must be paid shall be delivered through arbitrators. Given on the Kalends of August in the year of the consulship of Bassus and Ablavius.\textsuperscript{136}

For modern scholars who, like Brogini, believe that the 'actio finium regundorum' has basically to be considered as the legal analogue of the Agrimensores' controversia de fine, whereas disputes about a locus are the province of 'rei vindicatio', these laws mirror two different aspects of the development of late Roman legal practice on this subject.

In the first lex, for instance, there is a reference to a controversia de fine which seems to be closely connected, since it refers to a quaestio super possessione, with a vindicatio locorum, while the second enactment correctly preserves the basic technical difference between these two disputes. But, if one assumes that from the beginning of the fourth century AD there started, in Roman law, a process of leveling the differences between boundary disputes and those concerning the ownership of loca\textsuperscript{137}, one has to admit that the legislation on such a peculiar and important technical subject was characterized by a random mixture of old and new. A new trend can be more plausibly supposed only for a period later than 342 AD, the year when was issued the constitution which practically put an end to the formulary system (see CJ 2, 57, 1); or, possibly, after Justinian's legislation when, according to the predominant opinion, the formulary procedure which gave any legal action its individual cause and scope had disappeared.

But any process like that proposed by Brogini is far from being likely. Brugi, for instance, raised serious doubts about the interpretation of the character of Byzantine legislation about land disputes as it was formulated by Rudorff (in Lachmann, 1852, p. 440). According to the latter, the confusion between controversiae de fine and de loco led to only eine Art

\textsuperscript{136} On this rubric of the Theodosian Code, see Diaz Bialet, 1968.

The text here followed is that of Mommsen and Krüger, Berlin, 1905; English translation in C. Pharr, Princeton, 1952 (unless otherwise indicated). CJ 2, 26, 1 appears also in CJ 3, 39, 3 (but abridged and interpolated).

\textsuperscript{137} See Brogini, 1968, pp. 254-255; see also Levy, 1951, pp. 19-21; 209; 259-260.
von Gränzstreitigkeiten. Two are the arguments of the Italian scholar. The first is a letter written by Pope Gregory I in AD 597 (VII, 39), in order that a land surveyor (who was originally active in Rome) should be sent to bring to an end a dispute between two monasteries in Sicily: it shows that the character of a quaeestio de finibus (settled by an agrimensor’s intervention, be it noted), was still distinguished from that of ownership disputes. The second argument is that by the manuscripts of the Corpus Agrimensorum belonging to both the so-called Palatine and ‘mixed’ families have been transmitted, as a consistent collection of the entire legislation on this matter, both the Digest and Theodosian Code titles concerning the 'actio finium regundorum' (Brugi, 1897, pp. 222-225).

It is therefore worth analysing again what may have been the scope and what the actual novel measures, if any, introduced by the constitutions of the Codex Theodosianus. To judge by its text, the first section of CT 2, 26, 1 seems to deal with the settlement of a civil law controversy which has not, from the very beginning, a definite technical (and therefore, legal) nature. Whatever is the text’s variant one chooses for the fist sentence, it is clear that CT 2, 26, 1 concerns cases when ascertaining the title over an area of land was necessary after the manifest invasion of such an area, the boundary of which was no longer acknowledged. It is obvious that loca inuasa mentioned in this statute have a disputed demarcation line or strip of land which adjoins the two contending holdings. Such remarks do not add anything to the information provided by D 10, 1, 8 pr. quoted earlier. Nevertheless, what can possibly be regarded as the novel measure or a reduction to order of the common practice are the institutions concerning the way such a controversy has to be settled. The procedure to be followed, according to this decree, is aimed, first of all, to define and decide the question of possession over the area of land at law. Later, a surveyor may be ordered to go to the disputed area to ascertain which of the contending parties has declared the truth.

Consequently, it seems that the surveyor’s office is, in this case as well, to implement the interim decision. It is likely that, by means of inspecting the disputed loca in person, he had to decide where the markers of the line of demarcation were missing or displaced, so that the actual boundary line

between the two properties could be resettled. In fact, according to the text of the first lex quoted above, it seems that such a dispute is settled only after this operation. Naturally, this is part of the principle that nobody is entitled, according to Roman law, to possess a pars rei incertae (cf. D 41, 2, 3, 2 (Paul); D 41, 3, 32, 2 (Pomponius)). What is worth noting is that the surveyor is not supposed to take any part in the legal discussion which, either in terms of written legislation or substantive law, is about the ownership of disputed areas, loca.

Consequently, the impression is confirmed that the technical distinction between locus and finis, as far as the function of land surveyor is concerned, is still carefully distinguished in fourth century legislation.

F 2 The scope of the laws listed in CTh 2, 26

CT 2, 26, 2 (20/7/330 AD) (= p. 268, 4-11 La) concerns the case, when a plaintiff, who has raised a finalis quaestio, seizes a portion of land belonging to any of the neighbouring structures «priusquam aliquid sententia determinetur» (before something is determined by the judgement). This lex prescribes that, in these circumstances, the plaintiff found guilty has to keep out of the land which does not belong to him. Consequently, this may be regarded as further evidence that questions of ownership or possession were still distinct from boundary disputes.

In the light of what has been observed, the expressions «super possessione quaestionem finire» and «controversiam definire» in CT 2, 26, 1 seem to mean 'to fix the terms of' rather than 'to bring to an end a question of possession', while it is «litigium terminare», by analogy with - be it noted - «causam proprietatis terminare» of CT 2, 26, 3 (issued by same emperor only one year later than CT 2, 26, 1), that may be regarded as the final stage of the whole controversy and translated «to bring to an end a disagreement». We cannot, therefore, exclude the possibility that questions connected with the ownership (or possession) of a disputed locus, the boundary line of which had to be settled (or resettled) on the one hand, and questions concerning the projection of the boundary strip between neighbouring farms on the other hand, were the province of one legal action: 'action for regulating boundaries'. In fact, both the first and second section of CT 2, 26, 1 refer to the necessary investigation by the agrimensor (in all probability an inspection of the boundary markers): this
seems to be the fundamental operation by way of which the entire dispute, not a mere preliminary stage of it, may be settled.

As we have seen, CT 2, 26, 1 does not treat at length the way an agrimensor is supposed to carry through such inspection. The expression «locorum ordine» seems to mean the technical way such a dispute may be decided. In all likelihood, by the «position and arrangements of the loca» a surveyor was able to determine how the disturbance took place concerning the configuration of the disputed area and what was its actual extent. On the other hand, although the mensor is necessary to the settlement of the dispute, there is no indication, in this decree, that the surveyor dispatched to the disputed area had the authority, on behalf of the provincial administrator, to hold the office of arbitrator or judge. Sentencing in such cases remained a prerogative of the comes to whom CT 2, 26, 1 was addressed. It may be noted, in passing, that CT 2, 26, 1 was cut into two parts by the compilers of the Justinian Code. The second section, from 'invasor' to the end of the law, was interpreted as a piece of legislation which could possibly deal with an actio recuperandae possessionis: what is interesting, is that only this section, and not the first, has been regarded as belonging to this rubric.¹³⁹

Now, this line of remarks seems to suggest quite clearly that each decree of this section from the Theodosian Code has basically to be regarded as a piece of legislation to specify the competence of the jurisdiction of the provincial governor according to the system of rules commonly known as 'cognitio extra ordinem'. Bearing such a character, of instructions and measures concerning the administration of justice in the provinces, the aforesaid decrees can be only very carefully used in order to outline the historical development of the law dealing with land disputes. In other words, being rules designed to be guidelines for a public magistrate, they may well illustrate the limits of his function in settling land disputes. We have, on the other hand, to be very careful when we refer to the passages, in the Corpus Agrimensorum, which seem to mirror the law actually in force.

After what has been observed so far, we may end up with the conclusion that CT 2, 26, 1 does not stand in contradiction with CT 2, 26, 3. The former decree, in fact, does not mix together different kind of legal actions; it is intelligible only on the assumption that it is a coherent decree dealing with disputes about «loca invasa». The central aspect of the procedure

¹³⁹ For the juridical aspects, see J. De Malafosse, L'interdit 'momentraiae possessionis", Toulouse, 1947 (thesis), pp. 39-41; see also Levy, 1951, pp. 258-260.
introduced or reinforced (for administrative purposes) by CT 2, 26, 1 is the clear distinction a provincial governor will observe between the two stages which denote the proceedings aimed to bring to an end this kind of controversy. Now, it is worth emphasizing that also CT 2, 26, 3 was not issued, as far as one can judge by its text, to systematize what kind of procedure was to be followed when a dispute regarded fines, or when it was about a locus. Indeed, it has not a single word relating to a connection between the former technical term and the actio finium regundorum on the one side, and/or this action and rei vindicatio on the other side. It can only mean that CT 2, 26, 3 was issued to delimit the nature and types of legal action. To put it another way, the purpose of this law is to be used to discriminate between land disputes which deal with the five-foot strip and those about a wider area of territory. In the former case, this law prescribes that an arbiter holds the office of settling the controversy; in the latter, the controversy was to be brought to an end by the provincial administrator himself. CT 2, 26, 3 seems to be referring implicitly to a preliminary operation aimed at ascertaining what was the real object of a controversy between two adjoining farms.

If this is so, it follows that our ordinance concerns the stage of the proceedings about a disputed locus when it was already clear whether it was a controversy about finis or locus. Therefore, if its aim was to systematize the practice to follow during the 'second' (so to speak) stage of the legal action, it means that CT 2, 26, 3 is clearly referring to one and the same legal action, the scope of which could indeed be double: disagreements concerning a finis (or, the five-foot boundary strip), and those about an area exceeding this extent. Unfortunately for us, there is no indication to infer that arbitri mentioned in CT 2, 26, 3 were land surveyors, who settled disputes connected with the five-foot strip. Incidentally, it may be also noted that the law in force in the fourth century seems to have acknowledged what, at the very beginning of the present discussion, has been pointed out as a sort of a new technical trend, already characteristic for the age of (the so-called 'first') Hyginus. In fact, «controversiae de positione terminorum» and «de rigore» seem to have been considered, in this decree, as falling within boundary controversies.

In addition to CT 2, 26, 3, arbitri who have to deal land disputes concerning the boundary strip, whereas iudices are entitled to decide controversies about a larger area, are mentioned in CT 2, 26, 5 (4/11/392
AD) (see p. 269, 14-270, 3 La). Of course, also in this case arbitri and iudices were appointed by the praetorian prefect to whom this statute is addressed. A litigant in a province, in principle, should have been able to appeal eventually to the praefectus praetorio. Again, there is no allusion in this law to any office of 'mensores' as 'arbitri'. Theoretically, it is quite possible that the term arbiter was enough to understand that a mensor was referred to in CT 2, 26, 2 and 5.

It is, nevertheless, arbitrary to draw any kind of conclusion since the evidence we have seems to be limited to only a single inscription from the Greek East. It refers to a boundary settlement, during the reign of Antoninus Pius, through the medium of a private individual indicated as an *arbitrator* and *boundary settler* (kritès kai horothêtès). This inscription is, from a technical point of view, of doubtful worth, since it is not clear whether he was a land surveyor or only a temporary appointed official for such purpose.

**G 1 Urbicus and the late legal texts: continuity and change**

Let us now focus our attention, in the context of what has been observed so far about judges and arbitrators in land dispute settlement, on the points which help us to understand the nature of the 'procedural mistake' Urbicus refers to. We have seen that, in his view, this mistake is the consequence of either *enlisting land surveyors as arbitrators* or *choosing judges by lot* in order to determine a boundary line, whereas the actual dispute was about a 'site' (p. 74, 21-28 La = 33, 18-25 Th, quoted earlier).

First of all, according to what appears to have been the law in force throughout the fourth century AD, boundary disputes and proceedings concerning disputed loca (with the settlement of which, as already seen, title questions are connected), are considered as falling within the same kind of legal action. The new trait of this period is, possibly, a clearer distinction between effectual disputes about the five-foot strip, settled by arbitri, and those concerning a larger area of land, settled, according to the decrees discussed above, either by provincial administrators, or by iudices - appointed by a higher official of the provincial hierarchy or, possibly, by

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the advocates of the provincial bar.

After Rudorff (in Lachmann, 1852, p. 235), also Daube (1957, pp. 40-42) came to the conclusion that one of the most important functions of finium demonstratio, in Roman private law, was pointing out to the judge (either on the spot, or by documents), when a boundary dispute between neighbours took place, where the contending parties «claimed the line to be».

Needless to say, references to the act of 'pointing out' boundary markers or lines in connection with land disputes can be found not only in those passages quoted by these scholars. As for technical sources, Frontinus for instance underlines that «a controversy about the site», when it occurs on arcifinii agrī, is settled by means of «variorum signorum demonstrationes» («by means of pointing out various markers»: see p. 13, 4 La = 5, 13 Th).

The same term, demonstratio, is used four times by Urbicus in that section, already mentioned, where he expounds the nature of transcendentiae and status of land disputes (see p. 68, 9; 68, 13; 68, 28-29; 69, 5 La = 28, 16; 28, 19; 29, 4; 29, 9). It is worth noting that, in one of these instances, according to Urbicus, narrationes iartium (= reports of the parties at law) can replace demonstrationes finitimorum argumentorum (the act of pointing out evidences of boundary markers) in order to resettle termini and bring to an end a land dispute (p. 69, 4-5 La = 29, 8-9 Th). On the other hand, since it bears the character of a work aimed to give technical instruction to land surveying trainees, observatio, and not demonstratio(-demonstrare) is the term used by (the so-called 'first') Hyginus when he explains what are the most important marks in order to settle various kinds of land disputes.

Also in Siculus Flaccus' manual, written for those who have «to observe» boundary markers and lines, these terms are not found, with the exception of p. 145, 15-16 La = 109, 15 Th (trees which may «extremos fines demonstrare», «point out the outmost boundary line»). Such an interconnection between observatio and demonstratio is in D 10, 1, 12 (Paulus), discussed by Daube (1957, pp. 41-42).

In contrast to the Agrimensores, legal sources do not refer to finium demonstratio, in connection with the settlement of a land dispute, as «the procedural usage of the controversy de fine», possibly because «from a jurist's point of view it is merely one of the methods by which the judge collects his evidence». Therefore, in the light of what has been observed so far, it seems likely that 'pointing out the boundaries', in Roman private law
and the art of surveying, is an operation which may be connected with either the ex compromisse-procedure or any full court procedure aimed to settle controversies about a finis or a locus.

Now, it is conceivable that it is not the way both parties 'point out' the disputed area that can make a boundary controversy differ from those about a 'site'. But, if both parties 'point out' the boundary line each of them assumed was the right one for the disputed area between properties - whereas the whole area embodying the dividing strip was disputed - 'pointing out' a boundary was not a firm safeguard to claim one's rights or proof of title over a disputed area of land between two estates. In fact, the ascertaining and projection of a plain and undisputed boundary line between two farms is the outcome, not the starting point of land disputes about either a finis or locus.

This is why the mensor, as in CT 2, 26, 1, appears after the definition of the questions of ownership, or why (as in the Herculaneum and Histonium dispute, but also in D 8, 4, 44) the operation of settling boundary markers follows the arbitrator's decision about the points at issue. In fact, we have seen that according to Urbicus the function of a surveyor, when the litigants 'point out' to a judge or arbitrator either the boundary line or markers, is simply that of helping the judge-arbitrator - if necessary - to be clear about where the line of demarcation between two holdings had to run. If the dispute was about a locus, both parties had still to point out the boundaries of their estate(s) in relation to both the disputed area of land and the neighbouring farm(s). Consequently, the accuracy of 'pointing out' the perimeter of the disputed locus between two properties implies pointing out carefully the extent of what was under legal control of both parties. It is therefore clear why to settle the boundary of a disputed 'site' may be connected with questions of (legal-illegal) possession.

In the light of what has been observed so far, we may now turn again to Urbicus' reference to an invalid decision connected with «enlisting land surveyors as arbitrators or choosing judges by lot in order to regulate boundaries». As we have already seen, Urbicus seems to refer to a private law case. A plaintiff starts the available legal action, assuming that the procedure, in order to get a mere boundary line regulated was a quite firm safeguard of his rights over that area, while the dispute was, in reality, connected with the right of control over a locus embodying the line where boundary markers had to be settled (or resettled). Now, in view of the law in
force in the Theodosian Code, according to which the first stage to decide land disputes of this kind was, very probably, a preliminary investigation into the facts of the case in order to determine whether it was a controversy about finis or locus, or both, it seems that, in principle, there was no room for technical or 'procedural' mistakes.

On the other hand, from the width and generality of CT 2, 26, 3 (referring to "all Provincials"), clearly prescribing what was supposed to be the office of arbiter and provincial governor in order to settle land disputes, one inclines to think that in the fourth century AD procedural mistakes, or even wilful misunderstanding of the law in force, still needed to be prevented.

So, when Urbicus refers to people who have recourse «per inprudentiam» to the wrong legal procedure, we must believe that they did not pay attention to the basic distinction between cases at law. In fact, no magistrate would have allowed «land surveyors as arbitrators» to settle disputes about loca ('sites') since, as already seen, a mensor had no authority to grant ownership on any portions of land unless, accidentally as it were, as a iudex. Consequently, arbitrators - whether private individuals or mensores - could not be appointed (or, to use Urbicus' terminology, «enlisted») to settle a dispute about an area of land (a 'site') by way of the only procedure we know of as connecting boundary disputes and arbitri: the ex compromisso-procedure.

Alternatively, one may suggest that Urbicus' text, like possibly CT 2, 26, 1 (AD 330), is about the particular case of loca invasa, when the right of control over an area of land, together with the dividing strips between two estates, was disputed. Nevertheless, the important point emerging from this law, as has been already observed, is that owing to the agrimensor's inspection of the disputed area of land, after the definition of the «quaestio super possessione», «the truth is made known». In view of both the surveyor's function and the possible close connection of finis/locus in the context of the same dispute, seems unavoidable the conclusion that Urbicus, when he wrote the paragraph at p. 74, 21-28 La = 33, 14-25 Th, had in his mind the legislation enforced by the Theodosian Code.

It is true, on the other hand, that such a passage does not seem to be a firm enough argument to ascertain the date of Urbicus' work. In contrast to Urbicus, in fact, it is possible to date the anonymous author of a «commentary on land disputes», based on this section of Frontinus' text which has come down to us in the manuscripts, after either AD 438 or 535
(see Chapter 1, C 2 b) because the anonymous compiler cites almost verbatim the words of the law made effective at that time, either CT 2, 26, 3, or C. 3, 39, 3:

> de possessione fit controversia quotiens de totius fundi statu per interdictum, hoc est iure ordinario, litigatur. hoc non est disciplinae nostrae iudicium sed apud praesidem provinciae agitur, et ex lege restituitur possessio cui poterit adtineri, in his secundum locum habet disciplina nostra, sicut lex ait: nisi de possessionis statu quaestio fuerit terminata, non licet mensori praie ad loca. (p. 16, 18-24 La = 63, 30-64, 2 Th)

«A controversy about possession is when one is at law about the condition of his whole property by means of interdict, that is to say, the law in force. This is not a lawsuit involving our discipline, but it is conducted before the provincial administrator. And, according to the law in force, the person, whom it might concern, is given back the rights to possess (such land). In controversies of this kind our discipline is second in importance, as the law prescribes.

And before the question about the possession conditions is not determined, the surveyor is not allowed to go to the parcels of land».

Consequently, one may object that Urbicus, who is commonly supposed to be an author of the fourth or fifth century AD, is very vague, so that his passage about arbitri-judices cannot be used to fix the date of his treatise on land disputes. But, if we come to the conclusion that the details in Urbicus’ passage are too vague, we have to assume that he completed his work before the rules collected in CT 2, 26 were issued.

On the other hand, since his reference to the possible double object of the same dispute can surely not have been construed by him out of nothing, one may suggest that Urbicus wrote in a period when the distinction had gone between cases heard by arbitrators (boundary disputes) and those conducted either by the provincial administrator himself or by other officials (disputes involving the title).

Now, it is a common opinion among modern scholars that the technical differentiation between boundary controversies and those about ‘sites’ was temporarily abolished (but, as we have seen, later reinforced by CT 2, 26, 5 [AD 392]) after CT 2, 26, 4 (267/385 AD) (cf. p. 269, 1-13 La; C 3, 39, 5):
Imp(eratorum) Valentinianus, Theodosius et Arcadius A(ugusti) Neoterio P(raefecto) P(raetori) o. quinque pedum praescriptione summota finalis iurij uel locorum libera praescriptionio, quae improbi petitoris possit refrenare inuidiam. si ueteribus signis limes inclusus finem congruum erudita arte praestiterit, nec uero prolitioris temporis in huiusmodi iurijis locum habebit ulla praescriptionio, cum diuturno otiio alienum ruis quis se asserat diligentius coluisse, quando omne huiusmodi iurijum solo praecipimus iure discingi, quo artis huius peritis omnem commisisimus sub fideli arbitrio notionem. dat(a) VII K(alendas) Aug(ustas) Arcadio A(ugusto) I (primum) et Bautone cons(ulibu)s.

«(Pharr's translation in italics) The Emperors Valentinian, Theodosius and Arcadius Augusti to Neoterius, Praetorian Prefect.

Being abolished the 'prescription' as applied to the five-foot strips of land, a disentangled prosecution of disputes concerning boundaries or loca (sites) shall be conducted. Therefore, for such cases there shall be only one kind of prescription, which can restrain the envy of unscrupulous plaintiffs, namely that a border strip of land enclosed by ancient landmarks should disclose a suitable boundary characterized by professional skill. Indeed, no prescriptive period of time, however long, shall have any place in such lawsuit, in which any person can assert that he has diligently cultivated the land of another for a long undisturbed period of time, since we order that every case of this kind shall be decided in accordance only with the rules, by means of which we entrusted the entire investigation, under trustworthy arbitration, to those persons who are skilled in this profession. Given on the seventh day before the Kalends of August in the year of the first consulship of Arcadius Augustus and of Bauto».

According to Rudorff's interpretation, both usucapio and 'longi temporis praescriptionio' had now to be settled «durch Arbitri und Gränzurkunden»141.

Also in the recent interpretation of Simon, based on Alciatus and Karlowa, «quinque pedum praescriptione summota» of CT 2, 26, 4 alludes to the

141 Rudorff, in Lachmann, 1852, p. 444. His assumption is criticized by Hinrichs, 1974, p. 216, n. 214. On the other hand, Hinrichs is of the opinion that CT 2, 26, 4 refers to the abrogation of the «Usucapionsverbot der Grenze» (p. 215). Hinrichs' suggestion has been convincingly criticized by Behrends, 1992, p. 246, n. 155.

Also the predominant opinion, namely that CT 2, 26, 4 abolishes any kind of distinction between boundary-disputes and those about 'sites', is based on Rudorff's opinion. It is worth recalling that Diocletian generally increased the provincial governors' authority to administrate justice: see M. Sargenti, Studi sul diritto del tardo impero, Padua, 1986, pp. 152-153.
suppression of the so-called longi temporis praescriptio (viz., the prescription connected with the process of acquiring ownership by lapse of time), and not to the suppression of the rule in force since the Twelve Tables, prescribing that the five-foot boundary strip was not subjected to usucapio. In other words, CT 2, 26, 4 simply prescribes that, for «Grenzstreikkeiten», such «Ersitzungseinrede» (= objection to the acquisition of ownership by lapse of time) cannot be pleaded, by either of the litigants, as a legal basis in order to justify a forfeiture of the right to possess a 'site' adjoining his property. Moreover, this decree confirmed that the five-foot boundary strip could not be acquired by usucapio. Simon thinks that his interpretation of what seems to be the actual novel measure introduced by CT 2, 26, 4, may throw light on the following section also of this decree. In his view, in fact, the second paragraph suggests that prescription of acquiring ownership by lapse of time has now to be taken into consideration only when disputes deal with parcels of land as a whole, fundi.

The closing sentence, finally, seems to be enacting that lawful prescriptions (concerning the acquisition of ownership by lapse of time) are, without exception, only those within the period of years indicated by the law in force, and not longer portions of time according to whatever the single case might be. Now, as Simon himself admits, such an explanation of the text of CT 2, 26, 4 fits in nicely with the later constitution, CT 2, 26, 5 (AD 392), already discussed, issued by Theodosius, Arcadius and Honorius (where the abolition of the «observance of time limitation» is referred to as a measure in force by means of CT 2, 26, 4 (AD 385), to which, as already Karlowa suggested, «praescripsimus» and «iussumus» in CT 2, 26, 5 are probably alluding). At the same time, CT 2, 26, 4 is also consistent with a constitution Valens and Valentinian I addressed twenty years later to the consularis Piceni (cf. consult., 9, 4; 28/4/365 AD) already prescribing that boundary disputes had to be settled without taking into account the time prescription («amota praescriptione temporis»).

G 2 The relationship between CTI 2, 26, 4 and CTI 2, 26, 5

On the other hand, this interpretation of CT 2, 26, 4 stands in evident contradiction with CT 2, 26, 5: in the latter law, fines and loca are clearly distinguished and the abolition of the observatio temporis seems to be
narrowed to boundary disputes only (Simon, 1969, pp. 89-92).

It is not impossible, however, to find an alternative interpretation of CT 2, 26, 4 to make it square not only with the later constitution - CT 2, 26, 5 - but also with all the earlier laws in this title of the Theodosian Code.

First of all, as rightly argued by Leonhard, the prohibition of acquiring the five-foot strip by usucapio became possibly characteristic, since the age of Constantine I, of the longi temporis praescriptio of the provincial law. Such a prohibition is to be explained as a remedy in order not to paralyze the office of the judge who had to settle boundary disputes (whether a praescriptio triginta annorum was finally acknowledged by Justinian - through CI 3, 39, 6 - or whether before him, will be not dealt with here)

As already seen, the legislation issued by Constantine to regulate what kind of procedure had to be followed in order to settle controversies about a locus which are inseparable from boundary disputes implies a preliminary discussion, in order to ascertain whether it was a matter of a controversia finalis or a quaestio super possessione. The only way to understand the central trait of CT 2, 26, 4 is to suppose that this decree also is characterized by the same kind of procedure. In other words, it is not the settlement of disputes concerning, without distinction, either the five-foot boundary strip or the 'site' that had to be «disentangled», «set free» from «the prescription as applied to the five-foot strip» («quinque pedum praescriptio»).

By analogy with CT 2, 26, 1, therefore, it seems that the scope of CT 2, 26, 4 was to «disentangle» to the very preliminary discussion into the fact of the case in order to determine what was the nature of the dispute. If this is likely, it follows that the scope of the measure introduced by CT 2, 26, 4 was to prevent the contending parties pleading the 'longi temporis praescriptio' as a proof of title over the disputed area of land. By claiming a lawful ownership based on such a praescriptio, the contending parties could make it impossible, in some cases, to ascertain whether only a strip, dividing two neighbouring estates, or (with the mutual rights of control over it) a wider area of land, which had to share the common boundary line, was disputed. Now, by means of CT 2, 26, 4 a plaintiff had the opportunity to bring to court a case the substantive and technical nature of which, when not precisely indicated by the parties, could be ascertained - in order to follow the right kind of procedure - without questions connected to the 'longi

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142 See Leonhard (mentioned above, footnote 103). On these aspects see also Levy, 1951, pp.184-194; Nörr, 1969, pp. 46-62; 92-107.
temporis praescriptio'.

Consequently, a clear distinction between boundary disputes and those concerning a 'site' was still observed after CT 2, 26, 4. Moreover, this law refers to a «veteribus signis limes inclusus», showing the line of boundary markers (finis, not locus): this is to be regarded as the «only prescription» which is aimed at «restraining the envy of unscrupulous plaintiffs». As seen earlier, one of the most important parts of Urbicus' treatise is the instructions he gives to his readers about the way a dispute concerning a boundary line which has been «obliterated» (abolitus finis) has to be conducted from a technical point of view. According to him, one has, first of all, to be able to acknowledge «any adjoining area which by nature could have looked like a boundary», because it could be used as «the approach provided by whatever argument there may be» on the terrain (see p. 67, 24-68,15 La = 28, 6-21 Th). CT 2, 26, 4 emphasizes that the «boundary», to be disclosed between the two estates at law, has to be not only «suitable» («finis congruus»), but also characterized «by professional skill» («erudita ars»). Consequently, if the most important part of Urbicus' treatise is that about the basic technicalities to find out how boundary markers have been displaced or a boundary line perturbed, it may be because the offices of land surveyors had been influenced by CTh 2, 26, 4.

The main purpose of CT 2, 26, 4 was, possibly, that of opposing the trend some literary sources seem to indicate as characteristic as early as the second century AD: namely, that boundary disputes might have easily shaded off into disagreement about the 'site' or an area as such.

The consequence of the novel measures introduced by CT 2, 26, 4 is, therefore, that the proof or expedient of the 'longi temporis praescriptio' was no longer regarded as binding (or requested) to settle land disputes of any kind. It follows that such a decree cannot be supposed to have expressly to do either with the suppression of the difference between disputes about finis/locus, or the prohibition to 'acquire by use' the boundary strip, or even to have enforced the prohibition to acquire fines or loca by prescription, but not the entire adjacent farm.

The consequence of that is a further, obvious consideration. In provincial or (the so-called) vulgar law developments there possibly was an increasing attention toward general necessities and situations. Now, although such an increasing trend to use the 'longi temporis praescriptio' as a proof or expedient to seize and appropriate not only (neglected) areas of
territory, but also the five-foot boundary itself between adjoining lands, became an object of imperial legislation in the second half of the fourth century AD, it is by no means certain that such a trend was ended by weakening the distinction (still clear in legal and technical texts) between disputes about either finis or locus. Thus, by means of CT 2, 26, 4, emperors tried to eliminate any question caused by the procedural usage of the 'longi temporis praescriptio' during the hearing of cases concerning land disputes. At the same time, by this decree could be eliminated also any misunderstanding connected with the rules of the law in force and the way it had to be interpreted every time a disagreement arose over the direction of the boundary line or the displacement of boundary markers, so that the decision to be made at the outset was whether a finis or a locus was disputed.

As the following discussion will show, if my interpretation of CT 2, 26, 4 is convincing, there are good reasons to think that CT 2, 26, 5 is a sort of explanatory supplement. As far as one can judge from its text, CT 2, 26, 5 seems to have been issued to reinforce both the measures passed seven years before and the main traits of the legislation of Constantine I:

**Imp(eratores) Theodosius, Arcadius et Honorius A(ugusti) Rufino P(raefecto) P(raetori)o. cunctis molitionibus et machinis amputatis finalibus iurigis ordinem modumque praescripsimus ac de eo tantum spatio, hoc est pedum quinque, qui ueteri iure praescripti sunt, sine obseruacione temporis arbitros iussimus iudicare, quod si loca in controversiam ueniant, sollemniter de his iudices recognoscent: et seu ciuilis seu criminalis actio competet, tribuetur ita, ut causa cognita et redhibitioni obnoxius decatur nec oenas conuictus aufugiat. dat(a) (ie) j(us) Novem(bres) Constantino(poli) Arcadio A(ugusto) II (iterum) et Rufino cons(ulibus). (cf. p. 269, 14-270, 3 La ; CJ 3, 39, 6: Pharr's translation in italics).

«Emperor Theodosius, Arcadius and Honorius Augusti to Rufinus, Praetorian Prefect.

By suppressing all schemes and machinations, we have prescribed an order and a method for determining boundary disputes, and we ordered arbitri to judge only as regards that width, namely of five feet, which are prescribed by early law, without observance of deadline.

But if loca come into controversy, the iudices shall make formal investigation concerning them, and wether a civil or a criminal action lies, it
shall be granted in such a way that once the case has been investigated, the person liable to redhibito shall be decided and the guilty shall not escape the penalty.

Given the day before the Nones of November at Constantinople, in the year of the second consularship of Arcadius, and the consulship of Rufinus».

The point emphasized at the outset of this decree is that an «order and method» have been prescribed for boundary disputes (iurqia finalia). It seems likely that such an order and method is what follows in the same decree and not necessarily, as Karlowa maintained, CT 2, 26, 4. CT 2, 26, 5 refers to the interconnection between boundary disputes and arbitri, as in CT 2, 26, 3 (AD 331) and, at the same time, to the annulment of the observance of the time prescription, as in CT 2, 26, 4 (AD 385). In other words, the emperors want, first of all, to emphasize very clearly this rule: arbitrators are entitled to settle only disputes concerning the five foot boundary strip. Consequently, the central measure of this constitution cannot be only the abolition of the longi temporis praescriptio as a procedural expedient to claim ownership over the boundary strip.

This, in fact, seems to be the right interpretation of the first sentence of CT 2, 26, 5, which fits with what is prescribed in the second part of the constitution. Here, 'sites' or parcels of land are disputed: iudices have to try the case. Now, only if «ac de eo tantum spatio» is connected to «arbitros iussimos iudicare» is it clear why the link between the first and second section of this decree is quod si, which prefaces the part concerning disputed 'sites'. This second section does not contradict the measures introduced by CT 2, 26, 4 where, as already seen, «artis huius periti» are mentioned in connection with an «omnis notio sub fidelii arbitrio». As already observed, these are men to whom is entrusted «the entire investigation» about cases of long lasting occupation of parcels of land (fundi). But there is no conclusive indication to assume such men were either arbitri or iudices.

To summarize, we now have enough elements to maintain that all these constitutions included in the title 'de finium regundorum' of the Theodosian Code refer to a clear distinction between disputes concerning the five-foot boundary strip and those about a wider area of land, which are also
Returning to Urbicus, it is therefore not conceivable that when he wrote p. 74, 21-28 La = 33, 14, 25 Th he was unaware of the distinction between disputes settled, respectively, by 'arbitrators' and 'judges'. Probably, since he was not interested in any rigorous legal distinction, what matters for him, is that his account on the settlement of disputes about finis/locus was not in contrast with the law in force. As already seen, in fact, the main trait of Urbicus' handbook is its didactic purpose. Therefore, for Urbicus' readers it was enough to know what were the available remedies when people were at law either about the boundary strip or about an area of land between two neighbouring estates. In view of these technical, rather than legal purposes, the most important information Urbicus gives his readers is that a dispute about locus can be settled only if it starts from the right kind of theoretical status, which is that of 'agere de loco'.

In a nutshell, we have here information for a kind of reader who was not expected to question the whole accuracy and validity of Urbicus' digressions about Roman private law connected with land surveying.

H Urbicus and the Digest

It is now worth examining Urbicus' passage at p. 74, 21-28 La = 33, 14-25 Th along with the remains of classical jurisprudence collected under the title 'finium regundorum (scil. actio)' in the tenth book of the Digest (also transmitted by the manuscript of the Palatine family of the Corpus Agrimensorum, pp. 276-280 La). As already said, five of the thirteen fragments of the jurists in this rubric are considered interpolated by modern scholars (see above, footnote 136). As far as the interpretation of this title of the Digest is concerned, it is worth starting from the most recent studies on this subject which refer to earlier suggestions of modern scholars.

Knütel's analysis of some fundamental passages of D 10, 1 starts from the assumption that no indication whatsoever appears, from this section of the

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143 On the distinction between finis and locus in the so-called liber de actionibus, see F. Sitzia, 'De actionibus'. Edizione e commento, Milan, 1973, pp. 38-39; 84-86: this text only shows that disputes about the five-foot boundary strip are considered as covered by a legal remedy which is different from that applying to disputes «peri pleionos gês».
Digest, that an 'action for regulating boundaries' was limited to disputes about the five foot strip between adjoining properties. First of all, Knütel convincingly argues that, when a judge decides that the line of demarcation between two properties has to run elsewhere in order to settle the dispute (see D 10, 1, 2, 1 [Ulpianus] = p. 276, 8-13 La), the outcome of this controversy and thus also the scope of the 'actio finium regundorum', is an operation exceeding the width of five feet. The result of the dispute, in fact, is a widening of either estate at law since it incorporates that portion of land which previously formed the common boundary. Interesting also is Knütel's interpretation of D 10, 1, 4 pr. (Paul) (cf. p. 276, 18-20 La):

> sed et loci unius controversia in partes scindi (rei scindi vel rescindi gromatici) potest, prout cuiusque dominium in eo loco iudex compererit.

> «But also a dispute over a single piece of land can be divided into parts, according to what the judge has established about each party's right of control over that area»

According to the German scholar, since Paul mentions adiudicatio, this passage indubitably refers to the 'actio finium regundorum'. Consequently, it is likely that such an action applied also to disputes connected with 'ein einzelnes Stück Land', and not merely the whole, or part of the boundary line. He also suggests that Paul's definition ('controversia loci unius') may be considered as useful, in a formulary process, to distinguish the object of such disputes from cases of rei vindicatio. Moreover, according to Knütel, disagreements like that in Paul's fragment arise only when a 'locus unus', between the estates of the contending parties, is either no longer distinguishable or not yet marked out.

The third passage he discusses is D 10, 1, 4-5 (Paul) (cf. p. 277, 10-15 La). It refers to the case when the contending parties about a locus are represented by more than just one owner. Although two or three possessors have a joint ownership on a fundus, the area under dispute is to be awarded as a whole, according to Paulus, to one of the parties, not to each co-owner, «quoniam magis fundo quam personis adiudicare fines intelleguntur» («because the boundaries are held to be adjudicated to the

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144 Arangio Ruiz, 1922, p. 12 and n. 2 (= 1974, p.22 and n. 2) suggests «in partes scindi»; according to Kaser, 1968, p. 93, n. 1 (= 1976, p. 125, n. 2) we should read «in loci unius controversia».

farm, rather than to the persons»).

Consequently, since fines are the object of adiudicatio, and since locus has not (as in the foregoing part of Paul's fragment) any peculiar technical meaning (which may be held to be construed out of the Agrimensores' distinction between finis and locus), it seems to be likely that the available action is, in such cases as well, 'actio finium regundorum', although the object of this dispute is referred to as 'the site'.

The last passage studied by Knütel is D 10, 1, 7 (Modestinus) (cf. p. 278, 13-17 La):

> de modo arbitri dantur et is, qui maiorem locum in territorio habere dicitur, ceteris, qui minorem locum possident, integrum locum adsignare compellitur: idque ita rescriptum est.

«Arbitrators are appointed to establish the area of the land, and anybody who is stated to have more land than he ought to in the territory, is compelled to hand over the full share to those who possess less than they ought to: this is laid down in a rescript».

He thinks that such a dispute, again, falls within the province of the 'actio finium regundorum': in other words, only by means of a new checking and measurement of the whole perimeter of a holding could its precise area be ascertained (thus, already, Kaser, 1968, p. 97, n. 3 (=1976, p. 129, n. 3)).

Interesting also are those preliminary remarks which are the basis of Knütel's interpretation of these passages from D 10, 1.

First of all, he underlines the importance of adiudicatio for the 'action for regulating boundaries', which is commonly connected with boundary disputes. Such a connection explains the point of the judge's intervention in the instances, when the dispute was not about where the boundary strip ran, but concerned a locus\(^{146}\). Second, if it were to be decided in advance whether the 'actio finium regundorum', the rei vindicatio or the interdict procedure was the appropriate remedy to settle the case at issue, the starting point for either procedure is what the parties assume is the object of the dispute, not what turns out later to be the actual (legal or technical) nature of the claim.

Knütel, therefore, is of the opinion that the 'actio finium regundorum' was the basic available legal action when a surveying operation was necessary

\(^{146}\) A similar suggestion already in Broggini, 1968, p. 252. Knütel's next assumption is based on Broggini as well.
(for a judge) to ascertain where the boundary strip had to run, not to fix the
the width of a dividing strip. On the other hand, when a wider area of land
was under dispute, and a 'rei vindicatio'- (or interdict-) procedure was
appropriate, no land measurement being necessary, we are in the presence
of what the Agrimensores call a «controversia de loco». And, since, the
Agrimensores' terminology is different (as already Brugi, 1897, pp. 213-216
rightly argued) from that of the Roman iuris periti at D 10,1, «controversia
de loco», from a technical point of view, should be regarded basically as a
dispute which goes beyond the simple settlement of a boundary.

In other words, according to Knütel, the 'action for regulating boundaries'
cannot be reduced to an operation aimed only to settle the common
boundary strip between properties according to the line the contending
parties agreed upon147.

As far as the texts from the rubric 'finium regundorum' are concerned, if
the pattern traced by Knütel is likely, it follows that Modestinus' passage
about «arbitri de modo agrorum» (which is commonly supposed to refer to
the «controversia de modo» of the Agrimensores: see bibliography in
Knütel, 1992, p. 306, n. 101) is the only legal source to show a striking
terminological affinity with the vocabulary used by the surveyors of the
Empire. The testimony of Modestinus is in fact used by modern scholars
(since Rudorff and Weber) as a reliable and fundamental statement which,
although written by a legal scholar, is helpful to understand the substantive
nature and concrete outcome of the «controversia de modo» of the
Agrimensores (see Front., contr.agr., 13, 7-14, 8 La = 5, 16-6, 2 Th; Hyg.,
gen.contr., p. 131, 10 ff. La = 94, 16 ff. Th; Urb., p. 75, 26 ff. La = 35, 3 ff.
Th)148.

Nevertheless, there is no particular reason to suppose that Modestinus,
unlike other jurists in the same title, is the only authority who may have
borrowed a peculiar kind of technical terminology. Brugi (1897, pp. 314-
319) has rightly pointed out that «territorium» in Modestinus' passage is not
necessarily to be interpreted as the 'divided and allocated territory' (of a
colony), where a 'dispute about the area' may arise, as the Agrimensores
seem to indicate. But even if «territorium» here means 'ager divisus et
adsignatus', we cannot exclude the possibility (as suggested by Brugi) that

147 See Knütel's conclusions about the relationship between «locus» in this rubric of the
Digest and the nature of the 'action for regulating boundaries': they are not substantially
different from the view of Arangio Ruiz, 1922 (=1974).
Modestinus does not refer to a general rule.

That this is the most natural and likely interpretation of Modestinus may be confirmed by the following arguments. First of all, commenting upon the nature of a controversy «de modo», Frontinus refers to «ceteri agri» as «the other types of land» where such a dispute may arise besides in the agri adsignati: see contr.agr., p. 14, 6-7 La = 5, 22-6, 2 Th (in this case, is found a reference to the means of the formal written statement). In addition, Urbicus (p. 76, 20-23 La = 36, 2-4 Th) refers to disputes «de modo» between colonies, municipia, saltus Caesari and saltus privati. Furthermore, as Weber himself admitted, (the so-called 'first') Hyginus' text is an interesting reference to the fact that a «controversy about area» was quite common as early as the second century AD because of changes of ownership and fragmentation of the properties, so that 'controversiae de modo', no longer settled by means of formae (maps), eventually fell under 'controversiae de loco' (pp. 72-79; see Hyg., gen.contr., p. 131, 10-132, 6 La = 94, 16-95, 13 Th). Also Frontinus' (contr.agr., p. 22, 9-23, 1 La = 9, 13-15 Th) and Urbicus' passages (p. 86, 12-15 La = 47, 5-8 Th, where, be it noted, formae of public areas are mentioned), disputes over «loca sacra et religiosa» and «loca publica» (concerning sacred and holy places and public areas) seem to confirm that disagreement about the modus of these areas was without difficulty considered as a sort of subspecies of «controversia de loco».

Consequently, it may be that Modestinus' text, without substantial changes, was inserted in the title «finium recidorum» of the Digest because the compilers supposed it to relate to the same kind of action as that resolved by arbitri. Nevertheless, it remains likely that the contents of the passage are wholly generic.

Generic is, unfortunately, also the reference to a «contentio de modo» in Seneca (de brev.vit., 3, 1):

[...] si exigua contentio est de modo finium, ad lapides et arma discurrunt
[...] (scil. homines)
«and (men) rush to stones and arms if there is even the slightest dispute about the area inside their boundaries».

Now, it is interesting, as CIG I, 1732 (= IG IX, 1, 61) clearly shows, that a judge, along with surveyors, could be appointed in order to settle a dispute.
(between a private individual and a commonwealth) about the 'area' of an estate (modus). Although the substance of the controversy is the extent of the single fields of a property, its purpose is to draw new boundaries to enclose the correct extent of the holdings at law. This may explain why Modestinus' passage was located inside the rubric 'actio finium regundorum' (for a similar opinion by Kaser, see above in the text).

Finally, land documents referring to the 'area' (modus) of private holdings, rather than pointing out the boundaries of an estate, are regarded by Papinian (see D 10, 1, 11) as useful when «finales quaestiones» have to be settled: again, boundary disputes, although connected with the extent of a property.

On the other hand, it remains unclear whether Papinian's «monumenta census» («census records», that is maps and cadastral documents?) were used, in some instances, to settle land disputes concerning the boundary strip, especially when agri arcifinii were involved (see, on these aspects Brugi, 1897, p. 318, n. 9).

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These remarks about Modestinus (D 10, 1, 7) seem to strengthen the opinion of those who assume there is a basic difference between the technical terminology used by the Agrimensores and that of legal scholars of the Empire. What seems more difficult to explain is the reason for such a difference. It cannot be explained simply in terms of terminological variance springing from a defective systematization, so to speak, of the technical framework of land disputes, which is peculiar to the writings of the Imperial surveyors, nor as a result of the indifferent attitude the jurists may have developed towards such technical terminology.

As far as one can judge from the fragments collected in the Digest, it seems that the former class of writers paid indeed attention, on several occasions, to the technical terms and concepts we usually find in the works of the Corpus Agrimenсорum. We have references to the meaning of ager (D 50, 16, 27 (Ulpian)); fundus (D 50, 16, 115 (Modestinus); D 50, 16, 241 (Florentinus); silva caedua and pascua (D 50, 16, 30 (Gaius)); territorium (D 50, 16, 239, 8 (Paul)). Brugi (1897, pp. 309-310) has convincingly argued that these explanations, although bearing the character of summary accounts, were intended to make sense of the words used in the praetor's
As we have seen, from the texts of *juris periti* in the rubric «*finium regundorum*» of the Digest it can hardly be supposed that 'action for regulating boundaries' is, in principle, a technical formula Roman classical jurists used to indicate only disputes limited to the boundary strip. Such a general statement derives from the basic assumption that legal scholars of the Empire did not follow the same kind of technical systematization land surveyors used to distinguish different kinds of controversies. The passages from D 10, 1 which have been discussed so far clearly show that, in classical jurisprudence, the technical nature of the legal action applying does not change when it is a matter of proceedings concerning a disputed *locus* or the entire area of a *site* (*modus*); so it is reasonable to infer that the 'action for regulating boundaries' is not a procedure which applies to disputes strictly about the boundary strip.

On the other hand, there is no element, both in the laws of the Theodosian Code or in the Digest which lead us to hold the 'actio finium regundorum' to deal only with the settlement or resettlement of the five-foot strip between lands, whereas the settlement of disagreements about a wider area of territory was necessarily the province of a procedure of 'rei vindicatio'. As has been observed, neither Urbicus (p. 74, 21-28 La = 33, 18-25 Th) nor the rubric of the Theodosian Code and the Digest lead us to think that a «*controversia de loco*» (adjoining two or more holdings) is *tout court* the same as 'rei vindicatio'.

It is also worth noting, incidentally, that in the rubric 'de rei vindicatione' of the Theodosian Code and the Digest (2, 23 and 6, 1 respectively) there is no allusion to any kind of land dispute or cases at law which may be related to the «*controversia de loco*» as the Agrimensores expound it.

While one cannot rely on any conclusive evidence to argue that the 'actio finium regundorum', known to us from legal sources, strictly deals with the settlement (or, resettlement) of the five-foot boundary strip (the defined width of the common boundary which, in contrast to the Theodosian Code, is *never* mentioned in the Digest), there are some indications, on the other hand, pointing to a broader province of this action. We have already seen (see above, *sub E*), for instance, that two passages from non-technical and

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149 Such technical works date back, in all likelihood, to the end of the Republic, as in the case of C. Aelius Gallus: see F. Bona, 'Alla ricerca del 'de verborum, quae ad ius ciuile pertinent, significatione' di C. Elio Gallo.I. La struttura dell'opera', *B/DR* 90 (1987), pp. 119-168.
non-legal sources (Sen., ep., 88, 11; Apul., met., IX, 35 ff.) show how closely connected is a disputed boundary line with the ascertainment of the title over an area of adjoining land which is considered, by one or the other party at law, as illegally possessed. The simple explication is that any change in the direction of the boundary line after a settlement obviously implies a variation of the place where the strip of territory runs, inside the land belonging to either of the litigators.

This interpretation seems to be strengthened, in a way, by a second short passage from Apuleius (met., VI, 29), which is in line with such a concept of title connected with a boundary dispute:

> *ad quoddam peruenimus (scil. Lucius and the girl) triuium [...] sic nos diversa tendentes et in causa finali de proprietate soli, immo uiae Herciscundae contendentes [...]*

> «We arrived at a cross-roads [...]. And so there we were, straining in different directions and [...] acting as litigators, in a boundary dispute, about the property of land - or rather about the 'distribution' of the way.»

The examination of this text shows that Apuleius' purpose is the amusement of his readers by a concise allusion to the nature of two legal actions well known to the public: 'action for regulating boundaries' and 'actio familiae Herciscundae'. What is important, is that non-legal texts seem to add something to our picture of boundary disputes.

Moreover, indirect but valuable references confirming such a picture come from passages of this section of the Digest which are commonly left out of consideration. We learn, for instance, that the 'action for regulating boundaries' does not apply when a public road or a river shares the boundary of our land, but it does when a private stream intervenes (D 10, 1, 5 [Paul]; D 10, 1, 6 [Paul]). On the other hand, in the case of urban holdings, this action does not apply when they are not separated by a common boundary of adequate latitudo, so that they are *iuncta* (viz., by means of a *paries communis*) (see D 10, 1, 4, 10 [Paul]; cf. Cic., *top.*, 43).

Incidentally, it is worth noting that, according to the Twelve Tables, neighbouring urban buildings had to be surrounded by a two and a half-foot strip of territory which is called ambitus: in the case of two neighbouring buildings we have, therefore, exactly the same width of the common
boundary between praedia rustica\textsuperscript{150}. More interesting is a passage illustrating the authority the appointed judge had to investigate boundaries when «it is alleged that boundary marks have been knocked down or ploughed over» (D 10, 1, 4, 4 (Paul)):

\begin{quote}
\textit{si dicantur termini deiecti uel exarati, iudex, qui de crimine cognoscit, etiam de finibus cognoscere potest}\textsuperscript{151}
\end{quote}

Now, provided that this passage has not been manipulated by the compilers by analogy with CJ 3, 39, 3 or D 4, 17, 6, where the same crime is referred to, or that it has nothing to do with an independent, so to speak, legal action '\textit{de termino moto}' (to which, be it noted, a special rubric is devoted at D 47, 21), we may end up with the following considerations.

First of all, by means of \textit{etiam}, Paul seems to establish a connection between the judge's authority to award a «\textit{single disputed piece of land}» («\textit{loci unius controversia}» mentioned in the preceding part of the same fragment) by ascertaining the title each of the contending parties may claim over such a \textit{locus unus} on the one hand, and his authority to deal with boundaries on the other hand. Now, it may well be that Paul's remark at D 10, 1, 4, 4 is not to be considered as alluding to the most common, but to a particular and unusual case of '\textit{actio finium re gundorum}': precisely, when «it is alleged that boundary marks have been knocked down or ploughed over». Nevertheless, it remains likely that the '\textit{action for regulating boundaries}' may deal, according to Paul's view, first with '\textit{locus}' as the erstwhile litigious object of the case the judge had to hear. And it remains likely despite the fact that the settlement of this kind of dispute, although starting from a '\textit{site}' as a whole, is necessarily connected with the ascertainment of what could be the right line of demarcation between the contending estates, based on where the parties claimed such a line to run, by pointing it out to the judge.


I Urbicus, the Digest and the Theodosian Code interrelated

These suggestions may be strengthened by what seems to be the picture emerging from the Theodosian Code concerning the 'action for regulating boundaries'. It is obvious that this rubric mirrors the legal peculiarities of a period, when the procedure by way of the so-called cognitio extraordinaria was, in all likelihood, the only type of proceedings available for the contending parties.

The analogous title in the Digest is formed of fragments which come, to a large extent, from works of (classical) jurists, composed when the peculiarities of the formulary procedure based on the edictal system still applied. It has been observed above, that either when a complaint involved a dispute concerning boundaries as well as ownership, or if it had to be decided whether it was a controversia finalis (settled by arbitri), or a causa proprietatis (settled by other officials), the starting point for the legal action was the disputed 'site'.

Unavoidable is the conclusion, if the argument from silence is worth anything, that locus, along with finis, could be the province of the same legal action: 'actio finium regundorum'. This was a peculiarity of the 'action for regulating boundaries' in the period of the formulary procedure, as well as when the cognitio extraordinaria was the exclusive mode of procedure.

These remarks may be sustained by another example which seems to be consistent with this pattern. It is provided by a passage of (the so-called 'first') Hyginus, from the section of his work devoted to the illustration of different kinds of land disputes (p. 130, 12-19 La= 93, 16-94, 2 Th). This passage indubitably strengthens the impression that also to the eyes of the land surveyors a dispute concerning a site is to be settled by ascertaining the extent of the title the contending parties might claim over a certain area of land. Again, this operation is closely connected with the ascertainment of how the disturbance of the former boundary line took place:

praeterea solent quidam complurium fundorum continuorum domini, uttere fit, duos aut tres agros uni uillae contribuere et terminos qui finiebant singulos agros relinquere: desertis uillis ceteris praeter ea<m>, cui contributi sunt, uicini non contenti suis possessio ipsorum finitur, et eos, quibus inter fundos unius domini fines observa<n>tur, sibi defendunt.
Moreover, some owners of several contiguous estates are accustomed, as may well to happen, to attach two or three plots to one villa, and to abandon the termini which marked out the boundary of individual fields.

Once all villae have been abandoned, apart from that, to which those plots have been attached, the neighbouring owners, not satisfied with their own boundaries, remove any termini through which their possession is marked off, and claim their rights over those, by means of which are marked the inner boundaries of the plots which belong only to the single landowner.152

We therefore have passages from literary, legal and also technical sources pointing very clearly to the interconnection of the settlement of land disputes concerning either a 'locus' (or the 'modus') of a plot and the ascertainment (or settlement) of the boundary line between the contending properties. And, if our sources seem to put much emphasis on the boundary settlement as the outcome of the 'action for regulating boundaries', it is because this is the fundamental operation which can absolutely make binding the award of the area in dispute to one or the other of the contending parties.

At the same time, the line of demarcation between properties, especially when it was to be recorded in an official document (like those from Herculaneum and Histonium) ceased to be disputed only by fixing the right boundary marks to delimit what used to be a 'site'. In fact, either being granted as a whole to one of the litigators or divided between them (into sections), a disputed locus started to be legally subjected to their rights of control only after the operation aimed at settling the boundaries.

Consequently, if the foregoing observations are right, it appears that the 'action for regulating boundaries' cannot be limited to only one of these technical objects, finis or locus. It also follows, by assuming that the formula of the 'action for regulating boundaries' was not limited to cases of boundary disputes between adjoining farms, but applied also to those disputes about any area of land between two or more neighbouring estates (as maintained by Arangio Ruiz 1922 (=1974) and Talamanca, 1961), that its intentio, rather than the demonstratio, indeed considered the latter class of claims.

This is because the intentio represented that part of the formula, where briefly and in generic terms the case from which the claim arose was set

152 From the types of boundary markers he mentions at the close of this section, which follows the passage quoted above (arbores, fossae, vepres, viae and supercilia), it may be inferred that Hyginus is dealing with the boundary system of the agrì arcifinii.
out. But since intentio was the statement of claim (or the section where a plaintiff was supposed to make clear his aim in the proceedings: see Gaius, IV, 41 ff.), it is natural to assume that it may have varied according to whether such a claim was for a disputed boundary line, or a parcel of land. In all likelihood, such a distinction was fundamental for the technical nature of the adiudicatio (a peculiar element of the three 'divisory actions': *action for regulating boundaries*, along with familiae herciscundae and communi dividundo)\textsuperscript{153} of the 'actio finium regundorum'.

In other words, the point at issue was whether the adjudication - to which the iuris periti of the Digest allude - regarded the simple ascertainment of the pre-existing boundary line, the resettlement of a new one or, finally, the granting of the disputed *site as a whole* to one of the litigators, or sections of it to each of the parties (see D 10, 1, 2, 1 (Ulpian); D 10, 1, 4, pr. (Paul); D 10, 1, 4, 5 (Paul)).

Let us now see whether Urbicus' passage about 'mensores arbitri' and 'iudices' (p. 74, 21-28 La = 33, 18-25 Th) is consistent with the picture emerging from the Digest and the peculiarities of the formulary procedure. It is worth recalling that, in Urbicus' view, the 'procedural mistake' «some people» make occurs because they turn to «land surveyors as arbitrators» or «judges», finium regundorum causa: that is to say, «in order to regulate boundaries», whereas a 'site' was at law. Once this 'mistake' is discovered, says Urbicus, the outcome of the dispute is an invalid sentence. Now, if Urbicus' passage alludes to the formulary procedure, we have to suppose that the 'procedural mistake' may be caused by an erroneous drawing up of the demonstratio (and, consequently, intentio) of the formula. In other words, since the 'actio finium regundorum' may deal either with a disputed finis, or with a locus between two or more estates, the iudex would decide as if the boundary line were the actual object of the controversy, and not about the portion of the disputed site one or each of the contending parties was legally entitled to possess.

In a nutshell, according to Urbicus, should a plaintiff obtain a lawful and binding verdict when a dispute centred round a locus, he had to make sure that the iudex appointed by the magistrate had been selected in order to regulate a portion of land. But it is then unwise to assume that during both

\textsuperscript{153} On the tight connection between the 'action for regulating boundaries' and 'adiudicatio', see Knütel, 1992, pp. 287-299 (with earlier bibliography). It is worth recalling that the technical nature of the 'action for regulating boundaries' was that of 'iudicium duplex'; substantially similar to an interdictum retinendae possessionis according to E.I. Bekker, *Die Aktionen des römischen Privatrecht*, I, Berlin, 1871, pp. 302-303.
stages of the formulary process (that 'in iure', before the magistrate, and that 'in iudicio'), neither the magistrate, nor the iudex appointed by him realized that the technical nature of the actual dispute was not consistent with the plaintiff's claim, especially since the available action gave him the opportunity to state it clearly. After this discussion it is, therefore, clear that Urbicus (p. 74, 21-28 La = 33, 18-25 Th) does not afford enough information only to decide what is the legal procedure underlying the technical details he gives.

One cannot exclude the possibility that iuris periti and Agrimensores, rather than ignoring their respective technical area of interest, which has much in common for the settlement of land disputes, simply did not explain minute technical concepts connected with boundary controversies, or those concerning the site in the same way: Urbicus, in fact, seems to be interested in the substantive rule. It is an undeniable fact that a gulf, as already underlined, seems to separate the language used by these two classes of authors. And it is easy also to see why such a basic difference existed between land surveyors' and legal scholars' terminology. For the Agrimensores, each case of a dispute on the land come to be substantially typified (and, therefore, placeable into the pertinent category embodying similar types) by means of the peculiar technical object a dispute is connected with (e.g., a terminus, a rigor, a finis, and so forth)\textsuperscript{154}.

The iuris periti of the Empire, on the other hand, as far as one is able to judge from their passages above discussed in the Digest's title «finium regundorum», seem to focus their attention only on what may have been the nature of the subject to which the legal action, according to the law in force, applied: that is to say, what may be the province of the 'action for regulating boundaries'. And what seems to emerge as a recurring trait, from the legal texts discussed above, is that a legal action like the 'actio finium regundorum' was thought by the jurists to apply to disputes characterized by an 'invariable object', so to speak: the boundary strip between adjoining parcels of land. Unlike the legal scholars, land surveyors' discussions about boundary disputes and those concerning locus have their starting point in how to create a 'standardized' case, so to speak, as the object of a controversy. And any case of a dispute belonging to the former type can be kept distinct from those of a different nature only on the basis of a peculiar selection and interpretation, within a variety, of artificial or natural markers.

\textsuperscript{154} A similar, general distinction between a technical and juridical point of view also in Knütel, 1992, pp. 302-303.
On the other hand, classical jurists, unconcerned about practical factors and changeable situations on the land which do not strictly deal with the province of those who are to judge, focus their attention on elucidating all the possible instances of controversies people appointed to decide have usually to settle. As already seen, it is worth noting that in all cases of boundary disputes, either concerning a finis or a locus between the contending estates, in D 10, 1 the resettlement of the boundary line is alluded to. It may be noted, at the same time, that no explicit reference can be found, in the Digest, to the five-foot boundary strip, contrary, as already seen, to the Theodosian Code. There is, nevertheless, good reason to maintain, as will be seen below, that such a concept was clear to the mind of legal scholars. In the light of what has been observed about the formula of the 'action for regulating boundaries', it seems also likely that such a boundary strip might have been thought of by the iuris periti in the Digest as an unchangeable combination of finis and locus between the contending lands.

In other words, it should be considered as a peculiar area of territory, made up of the land of each of the surrounding owners in proportion, within which the common boundary, that could not be usucaped, was settled. It is therefore clear what was the subject of the judge's decision. He had to decide what strip of land was supposed to become such a confinium and, therefore, which was the party, whose property was to be either larger or smaller for the dispute to be brought to an end. It is easy to check that 'confinium' as the basic object of the judge's decision did not change according to what might have been the nature of the claim.

Kaser, for instance, has made a comprehensive survey of what kind of claims the 'actio finium regundorum' applied to. A boundary line can be disputed when: a) stones or other boundary markers already settled are either displaced or knocked down (either because of natural reasons or for malice); b) when one of the contending parties thinks the measurement of the plot is not correct (does not correspond to the cadastral map: controversia de modo); c) when boundary markers or stones in a line of demarcation between lands have to be substituted with more convenient ones, by adjudication. Kaser, therefore, assumes that all these kinds of disputes «nur um den Bereich intra quinque (sex) pedes gingen, weil zugleich mit der Ermittelung oder Festsetzung der Grenzlinie auch der Grenzstreifen bestimmt werden sollte» (see Kaser, 1968, pp. 97-99 = 1976,
Now, any of the modern suggestions dealt with above, as well as any modern interpretation of the formula of the 'action for regulating boundaries' are based on the assumption that there existed a strip of territory, between adjoining properties, typified by a standard width of five feet (or six, in some cases, as we learn from (the so-called 'first) Hyginus) all along boundaries, whether straight (rigor) or of other nature (finis), both in the agri divisi et adsignati and in the agri arcifinii: the «iter limitare», which could not be usucaped, known from Cic., de leg., I, 55-57, as a rule in force already at the time of the Twelve Tables. On the other hand, it may be noted that, since the five-foot boundary was already laid down in the Twelve Table, it is unlikely that the Lex Mamilia was merely a law which reinforced the prohibition against the acquisition by use of the strip of territory between adjoining estates, or replaced the three arbitri of the previous legislation with one.

It has been observed beforehand how important was the correct interpretation, in the text of the Agrimensores, of what the Lex Mamilia prescribed about the width of the finis, and the way this latter has to be distinguished from a 'site'. This is a central point especially in Urbicus' work (see p. 66, 11 ff. La= 27, 1 ff. Th). Hazarding a conjecture, we might conclude that it was this very law which introduced a clear distinction about the procedure to be followed after ascertaining whether a boundary or the site as a whole was disputed. From the prologue of one of Plautus' plays (Poen., 48-49) it is possible, in fact, to infer that as early as the turn of the third and second centuries BC, the dividing strip (limes) was distinguished from the boundary strip (confinium) - although with any conclusion based on the accuracy of a non-technical source one must be very careful:

\[\text{eius (scil. fabulae argumenti) nunc regiones, limites, confinia determinabo: ei rei sum factus finitor.}\]

«Its portions, limits and common boundaries I shall now determine: I have become a survejor for that matter.»

On the other hand, we have some passages from the writing of the Roman Agrimensores showing that their main concern was to lay down general rules about the basic condition from which controversies may arise.

\[\text{155 On this passage, see Valvo, 1987: according to him, Plautus here alludes to centuriated land.}\]
For instance, a controversia de loco in connection with agri arcifinii (although not as their peculiar dispute) is attested not only in the passage of Urbicus quoted above (p. 74, 16-21 La = 33, 14-18 Th), but also in Frontinus' text (p. 13, 1-6 La = 5, 10-15 Th):

de loco controversia est, quidquid excedit supra scriptam latitudinem cuius modus a[d] petente[m] non proponitur, haec enim controversia frequenter in arcifiniis agris uariorum signorum demonstrationibus exercetur, ut fossis, fluminibus, arboribus ante missis, aut culturae discrimine.

«A dispute about the site is whatever exceeds the width defined above (a five-foot strip), the area of which is not set out by the plaintiff. This kind of dispute is frequently conducted in land outside the centuriated grid (agri arcifinii) by pointing out various land marks, like ditches, rivers, trees 'which have been planted at an earlier time' (ante missae) or difference in cultivation».

As already seen, in Frontinus' view agri arcifinii are characterized by no «ius subsecivorum» and a boundary system based, «according to a long-established practice», on rivers and roads (in addition to other natural boundary markers) and, finally, «if by any chance loca (sites or areas) could be officially acquired by a landowner earlier» (see p. 5, 6-9 La = 2, 9-12 Th).

Such differences in boundary markers connected with land «not contained in any survey» are underlined by Urbicus as well (see p. 72, 14 ff. La = 31, 19 ff. Th). Agri arcifinii, in his view, are those parcels of land marked out by landmarks characterizing the territory also where such land is located - for instance, roads (viae) and «notabiles locorum naturae» («outstanding elements of the region») - not only the single farms (cf. also Sic. Fl., p. 138, 18-20 La = 102, 16-17 Th).

On the other hand, we learn from Paul (D 10, 1, 4, 11; cf. D 10, 1, 4, 5), as already seen, that «if a river or a public road intervenes, this is not classed as a common boundary, and so there cannot be an 'action for regulating boundaries'». From this statement one may infer that the 'actio finium regundorum', because of the exception mentioned by Paul, is not the legal procedure which applies to that particular kind of boundary system denoting, according to the Agrimensores, agri arcifinii.
In other words, the 'action for regulating boundaries', as it is outlined in the legal texts, does not fit for disputes «about the site» of the Agrimensores. It is not difficult to see why. Suppose, for instance, that what is generally referred to as a 'controversia de loco' in the writings of the Roman Agrimensores is a kind of controversy which can be decided, as it is for controversies over fines, by means of simply drawing a boundary line between the contending estates (an operation aimed at dividing either the disputed locus into two or more sections, granted to the parties, or to delimit the area adjudicated as a whole to one or the other of the litigators). Should it be that the locus at issue is next to the properties at law and that the line of demarcation to be settled (or resettled) in order to award this locus is a five-foot boundary strip, in the light of what has been observed about the technical nature of the 'actio finium re qundorum', this may be well regarded as a boundary dispute for both iuris periti and Agrimensores, rather than a disagreement about the site.

As we have seen, in Paul's view the technical nature of the 'action for regulating boundaries' seems to deal first with the place in itself where the disagreement arose, the locus (as it is referred to in some of the fragments of the classical jurists), although the settlement of the dispute appears to be closely connected with the ascertaining of where and what boundary markers may have been removed (D 10, 1, 4, 4). This makes it likely that, following Paul's view, whatever the technical object of a boundary dispute may be - positio terminorum, rigor or finis - the way such disagreements between two or more adjoining estates have to be settled by a judge does not change.

We have also observed that in the Digest, despite the clear reference to the necessary distance between adjoining rural properties in order that the common boundary can be settled (D 10, 1, 10 (Paul)), the five-foot strip prescribed since the Twelve Tables is never explicitly mentioned. If we may hazard a conjecture, the reason for this is possibly to be sought in the fact that, for the iuris periti, any area of land (belonging to one or the other of the contending parties) which forms part of the common boundary strip may be thought of as a 'site', simply because a right of way along boundaries of whatever kind cannot be at issue. The strip of land devoted to the right of way is, when disputes of this kind are settled, the unchanging substantive part connected with the common boundary line between two or more properties, not a technical criterion to distinguish a finis from a locus.
In other words, disputed or undisputed land has to be outside such an unvarying strip, representing a right of way. Consequently, we cannot make the mistake of assuming that a «controversia de loco» between neighbouring estates is to be regarded as a disagreement over an area (along the boundary line) which exceeds the numerical width of the boundary strip observed in a certain region (see Crawford, 1989, p. 183), but only as a dispute which, from a topographical point of view, lies outside something fixed anyway: in all likelihood, the boundary line + the boundary strip.

If this view of the facts is likely, the picture which emerges from literary sources (but confirmed by Urbicus, p. 68, 11-12 La = 28, 17-18 Th), namely that a greedy neighbour could indeed make a dispute concerning the boundary shade off into one over a locus of uncertain extent, is clearer.

On the other hand Talamanca (1961, p. 957), to explain why the 'actio finium regundorum' in the Digest seems to apply to both finis and locus, suggested that a dispute concerning the boundary line (which is, at the same time, the middle of the confinium) can be easily regarded as a 'controversia de loco', because any change of the position of the boundary line (and, consequently, of the confinium itself) implies a change of the extent of the adjoining farms. Conversely, when such a line is not disputed, the only kind of disagreement one may think of about the five-foot boundary strip is, according to Talamanca, a controversy concerning the function of the confinium, the space left between neighbouring properties for ploughing (circumactus aratri).

Now, Talamanca's explanation as well does not seem to diverge from the common modern view that locus is the object of disputes which deal with an area of land wider than the five-foot common boundary strip, always closely connected with the settlement of such a strip. As already seen, our legal, technical and literary sources point to the existence of a question of ownership connected with disputes «de loco». Consequently, we cannot exclude the possibility that disputes over the site may concern the right of control over an area of land which is either the point where two or more neighbouring estates border upon each other, or a strip of territory (represented by waste or cultivated land) as a whole, belonging to one of the adjoining estates and used - instead of the more common five-foot boundary strip - as the common boundary on land which is not marked off by a measured boundary (agri arcifinii). If this is likely, it follows that
disputes «over the site» may be even about the entire extent of one the various fields, into which an estate can be divided, in the point where it adjoins a second fundus since the common boundary is represented, in this case, by a cultivated plot.

In such cases, therefore, what is important is to decide where the line of demarcation between the two territories has to run, whereas the settlement or resettlement of the five-foot boundary strip is irrelevant if the litigating estates had not observed so far, as their common boundary, any band of territory of that width.

J. The terminology of the Agrimensores and the terminology of the legal texts

This view does not stand in contradiction with the picture emerging from the Theodosian Code. In fact CT 2, 26, 1 (330 AD), which seems to deal (as we have seen) with a particular case of loca invasa, leaves open the possibility that a demarcation line may be settled either between two adjoining plots, or between two 'sites' which represent the substantive boundary between the contending plots. This seem to be the most natural interpretation of the statement that the dispute cannot be decided «locorum ordine», that is, «by position and arrangements of the parcels of land». This is why CT 2, 26, 1 alludes to a «quaestio super possessione» besides a 'controversia finalis' in the context of the same dispute.

In addition, the agrimensor who is «dispatched to the place» has to prove, by a «trustworthy survey», first of all that «the land belongs to the person in possession». This was made possible only by determining the extent and topographical configuration of the 'sites' at issue, not by (re)settling first the common five-foot boundary strip.

CT 2, 26, 3 (331 AD) and CT 2, 26, 5 (392 AD), on the other hand, refer only in generic terms to areas of land lying within or outside the prescribed width of five feet. As for the latter class of disputed land, in the light of what has been observed above, nothing prevents us from thinking that these decrees refer to 'sites' as areas not bordering the estate of either of the parties at law.

Finally, since disputes over the 'site' implied the ascertaining of ownership rights of either party at law, it is clear also why the fourth century law so strictly divides procedures where the case at issue has to be tried by
arbitrators, and cases to be heard by arbitrators or other officials.

On the other hand, a controversy about *finis* cannot be regarded as falling within disputes about the 'site' of the Agrimensores, if the disturbance concerning the boundaries between adjoining lands is not circumscribed to a portion of the line of demarcation, but the whole boundary was disputed.

First of all, such estates maintain their character of *fundi*, and are not classed as *loca* (see discussion below, about D 50, 16, 60). Secondly, the impression one has reading the works of the Agrimensores, in addition to the records and inscriptions discussed above, is that a surveyor was perfectly capable of restoring the former configuration of the farms at law even if their peculiar nature of cultivated plots was at that time indistinct.

Consequently, if the previous arguments are right, it does not make any sense to assume that the «controversia de loco» of the Agrimensores refers to disturbances caused by either the mere disappearing of the line of boundary markers or, less probably, that it dealt with the width of the common boundary strip between neighbouring estates. When two adjoining estates divided by a line made of boundary markers or stones were at law, an *agrimensor* - not a judge - was supposed to investigate this aspect.

Although the area of land between the line considered as the right boundary by one of the parties, and the boundary defended by the other one, is typified as a 'locus', as it seems to be for Paul, from a technical point of view such an area cannot be considered as a 'site' in itself, of which a surveyor has to ascertain the limits and estimate the 'area' ('modus'), being this operation, presumably, irrelevant in order to settle or resettle boundaries.

Siculus Flaccus (p. 152, 1-4 La = 115, 28-31 Th), for instance, is well aware of the fact that ploughing the «solidus margo» (the compact, untilled edge) between properties is one of the various ways landowners try to confuse the line of boundaries. But we do not have to assume such an offence was committed for the mere purpose of seizing the strip which embodies the *finis*, so that the controversy later arising would have necessarily been about a 'locus', basically, the area illegally ploughed along the boundary strip, and despite the fact that, according to Urbicus, «careful farmers», should prevent any kind of dispute by means of some particular, technical solution:

<di>ligentes agricolae propter inpudentium uicinorum consuetudinem
parum se tutos credunt. nisi ita fundauerint agros, ut etiam aliquid extra mensurarum ordinem faciant. (p. 73, 17-20 La = 32, 7-10 Th)

"Careful farmers think they are not safe enough, because of their shameless neighbours' habit (of seizing their land), unless they have established their fields in such a way as to go one step beyond the normal practice of measurement."

According to what follows, there is no doubt that he is referring to usages peculiar to agri arcifinii:

(... magis certior ratio illa uidetur, ut fundamento tenus in agro arcifinio possessio seruari debeat, si termini desint. (p. 73, 26-28 La = 32, 16-18 Th)

"That system seems to be much safer, namely that in land which is not marked off by a measured boundary (ager arcifinus) a property should be protected as far as the edge (fundamentum) of the estate, if boundary markers are absent."

We may note, first of all, that Urbicus seems to refer to a system which is alternative to that of the boundary stones. In all probability, he refers to any outstanding either natural or artificial landmark; if this is likely, even an entire strip or parcel of land (whether waste or cultivated) may be regarded as a boundary marker alternative to termini.

In other words, loca (sites), as Frontinus (p. 5, 9 La = 2, 11 Th) and Urbicus (p. 72, 18-19 La = 31, 23-24 Th: "notabiles locorum naturae") clearly state, may serve to mark off the outermost portion of a farm, instead of a common boundary, in face of the adjacent estate(s). For instance, the interchangeability of a supercilium, one of the most common natural ways to indicate the boundaries of a property, with other kinds of boundary markers (such as trees, ditches, roads and so forth) is confirmed by a passage of Siculus Flaccus (p. 139, 4-8 La= 103, 4-8 Th). It is worth noting that, according to (the so-called 'first') Hyginus, supercilia are loca, not higher than thirty feet (gen.contr., p. 128,15-17 La = 91, 19-21 Th). These 'sites', as Siculus Flaccus says, ad superiores possessores pertinent (belong to the landowners of the upper estates: p. 143, 7-8 La = 107, 7-8 Th); but, since they are used as boundary markers, disputes arising about them follow under the category of controversiae de fine in Hyginus and Urbicus (cf. p. 73, 21 ff. La = 32, 11 ff. Th).
Consequently, controversiae de loco are those which do not regard any of the peculiar marks (whether natural or artificial) the Agrimensores regard as objective boundary markers - although, stricto sensu, they may be loca. A controversy «over the site», therefore, may concern only those loca which come to be disputed because their character of boundary strip, belonging in its whole to one of the adjacent estates, has become uncertain. In these cases in fact, since a line of demarcation is absent, the parties at law claim their rights of control over that land. Now, as already seen, in the passage of Urbicus dealing with mensores arbitri and iudices (p. 74, 17 ff. La = 33, 14 ff. Th) a locus is mentioned which is not provided with any map prescribing a modus loci (the area of that site). Therefore, it was not possible to ascertain what was the actual former configuration of the area at law, namely whether only the line of demarcation, or an entire strip of land - a locus - lay between the litigating estates.

As already seen, Papinian clearly states that «addition or subtraction of land» (although within the boundaries of an estate) «through various successions or through the actions of possessors» may cause an alteration of the boundaries of some estates and, therefore, «controversiae finales» (see D 10, 1, 11). Consequently, it is unlikely that «locus» in Urbicus' passage, where also maps are alluded to, is limited to that particular portion of land temporarily disputed between two next estates (as it seems to be in the mind of Papinian) when a portion of the common boundary strip is disputed. From a technical point of view, in fact, it is unlikely that there may exist maps in which also the extent of a strip or an area of disputed land has been entered: such disputes are brought to an end only when the boundary line has been settled, after which operation a map is drawn, one of the contending parties may later object to.

On the other hand, an explicit correlation between a modus, 'area' of a 'site', and a forma, map, which records the area of a plot can be found in a passage, where Urbicus expounds the technical nature of a controversy about the 'area':

\[ \text{de modo controversia <est> status effectui: ante enim locus est ibi quam modus nominetur [...]. Haec controversia frequenter in agris adsignatis exercetur: agitur enim, ut secundum acceptam eius ueter<\texti>a>n, qui in illud solum deductus est, modus restitutur; aut si quando praescribuit, est lege aliqua agri modus. [...] lex enim modum petitis} \]
definite praescribit, cum ante quam mensura agri agatur modus ex forma pronuntiatus cum loco conueniat. Hoc in agris assignatis euenit, nam si aliquam lege uenditionis exceptus sit modus neque adhuc in mensuram redactus, non ideo fide carere debeat, si nostra demonstratio eius in agro non ante finiri potuerit quam de sententia loc[ut]us sit designatus [...] (p. 75, 26-76, 17 La = 35, 3-26 Th).

"A dispute about the 'area' belongs to the condition of implementation, since a 'site' is there before its 'area' is declared. Such a dispute is frequent in land which has been allocated: the point at law is that the 'area' has to be restored according to the lot of that veteran, who has been settled in that region; or according to the 'area' as prescribed by some law.

A law, in fact, carefully prescribes the 'area' of what is claimed when, before one proceeds by measuring, the area pronounced according to the map, tallies with the 'site'. This is what happens as regards allocated land. For, if in any contract of sale the 'area' is excluded, and this latter has not been yet reduced to any measurement, it is not to be regarded as unreliable just because the designation of it in the field by a mensor could not be completed before this site was officially designated" (on these aspects see D 11, 6, 1 (Ulpian) under the title «si mensor falsum modum dixerit»).

This passage clearly shows that in Urbicus' view a 'site' in itself can be considered, in principle, an actual plot of a given size in every respect only when its modus, enclosed by certain boundaries, is recorded either in a map or by means of a written document.

How close is the interconnection between a controversy about the 'site' and a map or 'written document' appears also from (the so-called 'first') Hyginus (p. 129, 12-15 La = 92, 17-20 Th). When he says that:

\[ \text{de loco si agitur - quae res hanc habet quaestionem, ut nec ad formam nec ad ullam reuertatur exemplum} \]

he does not mean that a plaintiff, although he has a map of the 'site', cannot use it in this kind of dispute, but only that «you do not turn to any map or written record» because there are not any. This is even clearer from what Urbicus states in the context of the same dispute:

\[ \text{conuenire autem omnino in restitutione formarum omnia debent, ut} \]

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secundum signa in formis nominata locus quicumque erat restituatur, aut artificio signorum loca requirantur, si eri\textless{}t, ut frequenter euenit, turbata.

(p. 78, 21-24 La = 38, 19-23 Th)

«Moreover, every detail is to tally in every respect in the restoration of the maps, in order that every place whatever it was, should be restored according to the markers (recorded) on the maps; or if, as frequently happens, sites have been disturbed, they should be searched for by means of the markers».

It follows that the locus in the case in point Urbicus mentions to at p. 74, 16 ff.La = 33, 14 ff.Th, alludes to either a whole estate under private ownership or only a portion of it. It seems, in fact, unwise to assume that Urbicus, who usually reports on general practices for his didactic aims, is here referring to a special case.

On the other hand, certainly locus, in this passage, is not just the strip of land disputed in that moment; in fact, as already suggested, it is not likely that neighbouring landowner set out to draw maps of disputed areas, while the case of Histonium (and, probably Herculaneum) show that a map is used because it refers to a former settlement of a dispute.

Let us now suppose that 'locus', although sometimes it seems to allude to the whole estate, in Urbicus' passage dealing with a <<controversia de loco>> quoted above (see E 2) means only the disputed portion of land, whether cultivated or waste, next to the farm it belongs or a separate plot, between two or more rural estates. This suggestion must be verified by examining the whole passage dealing with Urbicus' <<controversy about the site>>:

de [hoc] loco, si possessio petenti firma est, etiam interdicere licet, dum cetera ex interdicto diligenter peraguntur (peraguntur Th): magna enim alea est litem ad interdictum deducere, cuius est executio perplexissima, si uero possessio minus firma est, mutata formula iure Quiritium peti debet proprietas loci: iudicari praeterea, si locus de quo agitur aut terminis aut arboribus aut aliquo argumento finem aliquem agri declarat et a continuatione soli quasi quibusdam argumentis eximatur. Ne praeterea\textless{}t> nos, illud etiam tractare debemus, si arbores finitimas habet et locus est fere silvester, quo in genere est possessio minus firma, ne certetur i\textless{}nter\textgreater{}dicto: quod si silua caedua sit, post quintum annum parcissume repetatur. [...] Si uero pascua sit et dumi ac loca paene solitudine derelicta,
multo minorem possessionis habent fidem. propter quod inime de his locis ad interdictum iri debet.

De quibus autem locis ad interdictum ire possunt, fere culta, quae possessionem breuioris temporis testimonio adipiscuntur, ut arua aut uineae aut prata aut aliquod genus culturae. haec tamen cum in demonstratione allegabuntur, etiam si partes qua dam proximae et in iacentes culturae fuerint propriae, non erint satis illae sui generis agro adsignare, sed circuire oportebit totum fundum et ita fidem obligare, ne demonstratione neglegenter soluta appareat. (p. 74, 29-75, 25 La = 33, 26-35, 2 Th)

«If a plaintiff is fully entitled to possess a 'site', it is also possible to use an interdict, provided that the whole operation is carefully performed according to this procedure. It is, in fact, a risk to seek an interdict in an action, the enforcement of which is the most intricate by far. If title is not so unquestionable, ownership over that site has to be claimed by way of the normal process of civil law with a change of formula. In addition, one has to judge whether the 'site' at issue shows any delimitation of the land by means of either boundary markers or trees, or any other evidence.

We must not forget that we have also to deal with the case whether such a 'site' is next to trees and is somewhat wild: possession is, in general, less secure in such land and one should not use an interdict. And if the wood is for forestry, it will be very hard to claim it even if to five years.

On the other hand, should it be pasture and wild land and areas which are almost completely abandoned, they carry even less claim to title; for that reason, you do not have to avail yourself of an interdict over such places.

On the other hand, as regards 'sites' to which an interdict may apply, they are almost any area which is cultivated, like fields, or vineyards, or meadows or any other kind of cultivation, which create possession after a short time. Nevertheless, when these 'sites' will be connected with the operation of pointing out (the perimeter of an estate), even if some portions, which are close and lying within your own cultivated area, it will be not enough to assign such portions to a parcel of land of the appropriate kind, but it will be necessary to go round the whole estate and in this way assert your rights, in order that these may not appear to have been negligently deprived of proof».

Now, Urbicus' allusion to the 'site' at issue, either clearly marked out or not
separable from the surrounding terrain, together with his referring to those cultivated 'sites' "which create possession after a short time" (cf. Hyg., contr.agr., p. 130, 1-11 La = 93, 5-15 Th) along with any parcels of land which are "close and laying within (your own) cultivated area" of either of the contending parties, surely implies that separate 'sites' (viz., not contiguous to the land of the party who lodges a claim) may be reasonably supposed to be here under discussion as the possible subject of controversy about a "locus".

The plausibility of these suggestions may be strengthened by a further line of considerations. In Chapter 3, I have pointed out how Urbicus tried to bring up to date Frontinus' work dealing with land surveying by adding his own material to the "controversiae" which had became less important, from a technical angle, in the period between Frontinus and (the so-called 'first') Hyginus. What Urbicus says to explain the technical nature of a "controversia de possessione" (one of the shortest, as already noted, in his work), is basically no more than what we read in Frontinus' work transmitted by the manuscripts. From him, Urbicus draws the argument that a "controversy about possession" is covered by interdict (see p. 16, 3-4 La = 6, 13-14 Th). This is one further argument that Urbicus used a version of Frontinus' book which was already abridged. On the other hand, as already seen, a "controversia de possessione" is not within (the so-called 'first') Hyginus' list of land disputes.

Now, given that Urbicus expanded, in his work on land disputes, Frontinus' account about a "controversia de loco" and not that about a "controversia de possessione", the conclusion seems unavoidable that controversies about a "site", in Urbicus' mind, were those settled by means of a procedure based on the ascertainment of the proof of title to a certain area of land. Such an interconnection between 'locus' and the technical-legal nature of a "controversia de possessione", in fact, clearly emerges in Urbicus' account:

si enim solum cogitemus, ut legitima possessio in pleri possit, indubite locus definiatur necesse est. et de hac controversia plurimum interdicti formula litigatur, de qua in superiore parte meminimus: ideoque non puto eam iterum retractandam.(p. 80, 20-81, 2 La = 40, 17-23 Th)

"For if our only concern is that legitimate possession be endorsed, it is indubitably necessary that 'site' is defined in order that a legitimate
possession could became meaningful. In the case of this controversy, also litigation is after undertaken, for the most part, by means of the formula of an interdict. We have mentioned it in the previous section: therefore I do not think it has to be discussed again.

No doubt the section he is referring to is that where Urbicus expounds the character of a «controversia de loco», the only section of his work concerning this subject, which has come down to us by the manuscripts, not the section about the various kinds of boundary disputes, although this latter part of his work is in bad conditions because of some gaps in the text. We have therefore, to end with the conclusion that boundary controversies, at least according to Urbicus, were not decided by producing any proof of title, although any disputed area between adjoining plots may be thought of as a 'locus', by analogy with Paul's view (which seems to be also that of those modern scholars who interpret the «controversia de loco» of the Agrimensores as a dispute concerning a strip of territory, along the disputed boundaries, larger than, or to be added to, the five-foot strip and decided by merely settling the boundary line).

Hence it also follows that in Urbicus' view a 'locus', once its boundaries have been ascertained and marked off according to what is to be regarded (on the basis of his words at p. 74, 16 ff. La = 33, 14 ff Th) as the central technical purpose of a «controversy about the site», may come as well to be characterized as the object of a «controversy about possession». In other words a 'site', when its precise extent has been determined by settling boundary markers which comprise it and, consequently, either a map or another kind of written document records this survey, becomes much the same as a 'plot' in itself: to it may therefore apply the same kind of legal remedy as to surveyed estates (that is, the interdict). Therefore, in the light of what has been observed so far it seems that the balance of evidence is distinctly in favour of the «controversia de loco» being regarded as a dispute in which the possessory aspects are closely connected with the position of the boundary line.

The foregoing argument seems to be confirmed by the nature of the treatise written by Siculus Flaccus. Although he deals with the boundary system characterizing 'agri arcifinii', Siculus Flaccus does not alludes directly, in contrast to Frontinus and Urbicus, to a 'site' as a strip of territory a landowner may use used to mark the common boundary.
we can see that he does pay attention to the areas of land which may be regarded as the outer limit of an estate:

*illud uero inuenimus aliquibus locis, ut inter arua uicini arguantur confundere fines eoque usque aratum perducere, ut in finibus solidum marginem non relinquant, quo discerni possint fines.* (p. 152, 1-4 La = 115, 28-31 Th)

«We discovered in some areas that neighbours manifestly try to confound the boundary line, and that they plough (their estates) to such a point, that they do not leave any solid edge (probably, the boundary strip as a right of way) where the boundary line runs, in orther that its projection may be acknowledged»;

*si enim duo possessores extremis finibus ui<ne>as habent, cum fodiunt, finem solidum relinquunt nam et signa defodiunt.* (p. 152, 18-21 La = 116, 1-4 Th)

«For instance, if two owners have vineyards in the outermost part of their land, they leave an untilled strip of terrain when they dig: in fact, they dig up the markers as well».

What is interesting, is that such sections of an estate have their own boundary system, which keeps them distinguished from the surrounding territory:

*praeterea siue in cultis siue in siluosis et in incultis locis agatur, respicendum erit, utrum hae quae finales uidebuntur arbores habeant in alterutra[m] parte[s] similes, an utrimque tales habeant.* (p. 144, 27-145, 2 La = 108, 27-109, 1 Th)

«In addition, when people are in dispute about cultivated or wooded and waste 'sites' (loca), it must be observed which of the contending parties have on their side trees which will appear similar to boundary trees, or whether they both have such types (of plants)».

The interesting thing is that the latter passage is from a section where Siculus Flaccus explicitly comments upon the method of marking out land outside a centuriated grid. It means that he is not talking about cases of disputed land which has to be divided by a five-foot boundary strip. On the
other hand, Siculus Flaccus' exposition leads us to think that a distinction between disputes «de loco» and «de fine» is irrelevant to his discussion, since a single plot (no matter whether within the limits of an estate or outside it) or the whole estate are, from his technical point of view, virtually the same: parcels of land provided with their own boundaries over which a landowner may claim his rights.

At this point it is possible to draw some conclusion about the relationship between the nature of the 'action for regulating boundaries' and disputes «de fine» and «de loco» of the Agrimensores. As already seen, since the purpose of the 'action for regulating boundaries', according to Ulpian (D 10, 1, 1) is a «vindicatio of a thing», it must be considered - as Arangio-Ruiz rightly pointed out (1922 = 1974, p. 15 and note) - as the remedy to decide disagreements like boundary disputes based «sull'estensione, anziché sulla titolarità del diritto». In other words, this was the action indeed applying to disputed areas of whatever extent but it was an adequate and sufficient remedy in itself only for disagreements where the contending parties aimed at settling or resettling the line of the boundary markers with its fixed width of five feet.

As regards the «controversia de possessione» of the Agrimensores, Rudorff (in Lachmann, 1852, pp. 448-451) suggested that it may, «auf das Petitorium», change into a «controversia de loco», when the disputed parcel of land borders two or more estates; into a «controversia de proprietate», when the 'site' at issue does not adjoin the holdings in dispute. In both cases, the remedy according to the law in force is an interdict (whether unde vi or uti possidetis).

According to Brugi (1897, pp. 303-305), a «controversia de possessione» concerns, in principle, the right of factual control over a disputed parcel of land the boundaries of which are clearly determined; a «controversia de loco» arises when a 'site' is disputed, the perimeter of which has to be ascertained and settled by the medium of a surveyor. According to him, there is no reason to doubt, although it cannot be proved, that a «controversia de loco» may apply also to disputes about a non-contiguous 'site'.

On the one hand, Brugi's interpretation seems to be consistent with the picture which emerges from the passages of the Agrimensores quoted above and from those legal texts stating that, in general, nobody is entitled to possess «an uncertain portion of a whole» (see. D 41, 2, 3, 2 (Paul); D
41, 3, 32, 2 (Pomponius)). As for a 'site', for instance, we learn that it can be possessed when it is a «locus certus» (D 41, 2, 26 (Pomponius)).

Well known also is Ulpian's statement, where he lays down the rule according to which:

'locus' est non fundus, sed portio aliqua fundi [...] 2. sed fundus quidem suos habet fines, locus uero latere potest, quatenus determinetur et definiatur. (D 50, 16, 60 (Ulpian); see also D 50, 16, 211 (Florentinus))

«A 'site' is not a farm, but a portion of a farm [...]».

2. Now a farm has indeed its own boundaries, whereas a 'site' can extend as far as it may be limited and marked off by boundaries».

My discussion of Urbicus' digressions, which are commonly supposed to be referring to juridic aspects connected with the settlement of land disputes, has shown that such details, although very general, are consistent with the practice in force according to the legal texts of the Theodosian Code.

Moreover, on the strength of the scant informations we have, it seem also probable - as will be seen presently - that Urbicus' main didactic concern was the illustration of disputes which may arise, between adjoining estates, because of any kind of disturbance concerning either the common boundary line (that is to say, controversies 'de fine'), or areas of land (strips of territory or 'sites' as a whole) which serve for a boundary marker of the estates these loca belong to in the agri arcifinii.

This is made possible only by turning again our attention to the section of his treatise where Urbicus illustrates the technical meaning of effectus (outcomes) of land disputes. The following analysis is not simply intended to confirm what has been already suggested about Urbicus' distinction of types of land disputes according to their own effectus. This section of Urbicus' treatise is appropriate also to show his way of looking at the matter free from any earlier literäy, so to speak, conventionalism. It can therefore be used as a sort of argument from silence to verify the likelihood of the modern suggestion about the Agrimensores' and the jurists' views concerning the substance of controversies about 'finis' and 'locus'.

Now, it seems likely a theoretical systematization of the various «effectus» («outcomes») following the settlement of land disputes has to be founded on a certain number of examples which derive from a wider range of
substantive cases. This means that such a choice was probably made by Urbicus not only according to personal, abstract criteria connected with the technicalities of land surveying his treatise was intended to teach. In other words, since Urbicus' illustration of effectus is based on the description of what are the tangible consequences on the ground of a settled dispute, it is more likely than not that he took into account whether such settlement implied no change of ownership on land, or a change of the title on a particular area of land.

Moreover, Urbicus' systematization is intellegible only on the assumption that it is an original attempt to combine together the traits characterizing the most important (if not the only) expositions written before him on this very subject: the fuller list of fifteen land disputes (Frontinus) and the abridged choice of six (so-called 'first' Hyginus). It is, consequently, also natural to suppose that Urbicus' systematization of the technicalities of land disputes was intended to be his response to the conditions of his own age: new factual situations connected with the developement of the law and the technique of surveying the land. In a nutshell, this was Urbicus' own solution, to avoid the possibility that various kinds of disputes arising from land and conducted according to rules which may have changed in the course of the time, should be reduced to those too strict theoretical models created by the earlier literature on the same subject.

I have been suggested above that an «effectus conjunctiuus» («conjunctive outcome») deals, in all likelihood, with controversies decided, after a mutual agreement between the contending parties, by settling a boundary line the direction of which did not imply any change in the extent of the estates in dispute. It may be that in such cases, as well, the contending parties preferred to turn to an arbiter ex compromisso, rather than the competent magistrate, in order to start a full court procedure according to the rules of the 'action for regulating boundaries'. But, according to what has been observed above, this was possible only when no ascertainment of ownership rights was necessary to decide such disputes. Consequently, an arbiter ex compromisso was not supposed to ascertain any proof of title over the whole disputed area of land, but only where the next estates had to share a strip of terrain as the common boundary. Conversely, questions of ownership connected with the line of the common boundary were totally irrelevant when a whole 'site' had to be granted by a judge, through 'adjudication', after a full court procedure.
As for the nature of a «disjunctive outcome» («effectus disiunctius»), Urbicus says it is characteristic of disputes decided when «the determination of the boundary splits the soil of one or other of the contending parties and hence connects different categories of land to dissimilar types of terrain, as very often happens when a portion of meadow is attached to a wood, or a part of a wood, when its confines have been marked out, is attached to a meadow». It is worth noting that here Urbicus does not seem to be pointing to the technical operation of settling the common boundary between two or more properties. His text may be well referred to a rescript of AD 294 (see CJ 3, 39, 1), providing that a landowner may redefine the various sections («certa regio fundi» marked off by «proprii fines») of his estate, and that the buyer of any such land cannot invoke the previous state of affairs. Indirectly, this latter decree is useful to make sense of what may be the substantial nature and importance of the technical operation of surveying a 'site'.

We have, then, the «investigative outcome» («effectus spectius»), when the proof is, for the most part, based on the evidence of boundary markers, so that it may give also areas with no definite character the appearance of a determined area. On the contrary, «explanatory outcome» («effectus expositius») is when a controversy is wanting proof from boundaries and it is in greater need of the parties' reports, by means of which it has to be explained where in the straight line boundaries the markers are missing, or the judge has to be persuaded of how they are to be replaced, even if the aspect of the terrain is somewhat similar to an area provided with measured boundaries.

Finally, a «recuperative outcome» («effectus recuperatius») is peculiar of disputes «when from any three- or four-sided boundary stone, or from any other place on the boundary the straight line goes towards the following marker and, by the process of definiton, secures some 'sites' to the other farm». These examples are sufficient to show that also Urbicus' theory of «effectus» of land disputes follows the basic distinction between («outcomes» of) disputes about «finis» and those about «locus». Consequently, it was easy, for Urbicus' readers, to understand the difference between disputes the «outcome» of which is that areas of land, like meadows and woods, are granted to an estate after and by means of a determinatio, a surveying operation (see «effectus disiunctivus») and disputes connected with the settlement (or resettlement) of the common line.
of demarcation between adjoining farms, marked off by canonical boundary markers. In the latter case, the delimiting leads to a widening of the extent of either plot by means of appropriating areas called by Urbicus "loca".

Such a distinction, if it is not simply the product of Urbicus' peculiar style of expounding the technicalities of land disputes, seems to be consistent with the pattern emerging from the above discussion. In fact, these disputed "loca" connected with the settlement (or resettlement) of the boundary strip between adjoining lands are much the same as the "sites" mentioned by Paul as the scope of the 'action for regulating boundaries'; on the other hand, they do not have anything to do with the factual nature of a 'controversia de loco' of the Agrimensores.

In conclusion, 'disputes concerning the site' seem only to concern those sections of land into which an estate may be subdivided. When their extent is modified for any reason so that the configuration of the estate in itself changes and the way the land belonging to this estate borders the land belonging to the next property gives rise to a dispute, the intervention of an agrimensor is needed to survey these plots and determine the actual extent on which both parties have a factual control. Nevertheless, an indubitable connection between 'finis' and 'locus', the existence or absence of a written document or map and disputes about where an area of land (either an estate, or a section of it) is to end and its boundary line is to run, clearly emerges from the passages of the Agrimensores (especially Siculus Flaccus) discussed above. But also in Papinian's view, as already seen (cf. D 10, 1, 11), a disturbance of the boundary line can be determined 'by additions or subtractions of land, through various successions or through the actions of possessors': he states that, in such cases, 'when there are no records, one should follow the authority of the last census'.

Hazarding a conjecture, we may therefore come to the conclusion that the iuris periti are in accord with the Agrimensores of the Empire in considering any controversy arising from the land as a kind of disturbance to be settled by means of ascertaining where a portion of land either of the litigators is entitled to possess ends and where it begins. From this point of view, we may therefore affirm that both classes of experts, although pointing to different kinds of technical remedies, had a unitary concept of land disputes as a way to establish the configuration (or to re-establish it when altered) of the land by settling a demarcation line. Consequently there is no wonder that the multiform systematization of the Agrimensores seems to be
reduced to a kind of legal action typified by its comprehensive nature which is referred to by the jurists as the *actio finium regundorum*.

Conclusions

The central point I have tried to bring out in the preceding pages by new arguments is, first of all, the reason why the Agrimensores' and the legal scholars' technical terminologies are different. As we have seen, this is to be regarded as a consequence of the divergent technical and practical aims connected with their own activity. Such a factor makes it extremely hazardous to combine together various passages of the Agrimensores which apparently mirror either the practice of settling land disputes according to the rules in force, or the legal aspects characterizing the nature, object and effect, on the configuration of the land, of land disputes.

The analysis of inscriptions, documentary records and passages from literary sources has shown that the terminologies of the *juris periti* of the Empire and of the Agrimensores seem to be, in some cases, similar. Consequently, our approach to the the information afforded by the Corpus Agrimensorum in connection with land disputes has to be extremely careful: asymmetries and inconsistencies of both the legal and technical compilations which have come down to us, changes in terminology and practice and new trends we know for a fact deeply affected our material have to be taken into account to avoid an interpretation which may end up by being at variance with, if not largely contrary to, what ought to be a well-grounded reconstruction of the actual development of the underlying concepts.

The second point at issue was the technical nature of the *action for regulating boundaries*. I have suggested that, in the mind of the *juris periti* of the Empire, it only applied to rural adjoining estates which were in dispute either in order that the drawing of the common boundary line itself (*finis*) might be resettled, or about a strip of territory of varying extent, embodying the line of the common boundary, neighbouring landowners may use as a right of way. Such a strip or area of land, which is referred to as a *locus* by Paul, could be either divided into sections and awarded (by adjudication) *according to what the judge establishes about each party's title to the land in question* to the contending parties, or to only one of the litigants: consequently, this *site* becomes the new point which has to
share the common boundary between two (or more) neighbouring farms.

If this interpretation is correct, we should therefore assume that the question whether the technical nature of the 'action for regulating boundaries' applied only to disputes about 'finis' or 'locus', is unlikely to permit a correct view of the facts. We have seen, in fact, that such a close connection between finis and locus in the context of the same legal remedy (a full court procedure, indicated as «(actio) finium regundorum») is a trait which remains unchanged even in the law in force throughout the fourth century and beyond (as it appears according to the Theodosian and Justinianic collection of decrees on this subject).

The conclusions reached as regards the material examined so far may be outlined as follows.

Only controversies «de loco» and «de possessione» («de proprietate» ?) of the Agrimensores probably represent that kind of technical category of disputed land involving questions of title to which legal remedies like a rei vindicatio or an interdict apply. This is because «controversia de loco» of the Agrimensores seems be characteristic of disputes arising when the whole boundary line of an area is disputed because its actual extent has to be marked off. Since the settlement of such disputes is, basically, a surveying operation\(^\text{156}\), whose natural outcome was a map (or another kind of written document) representing the end of that disagreement by recording the actual plan of the boundaries, a surveyor has to be certain about the extent of each party's ownership over such land, so that portions of the disputed areas may not be wrongly assigned to either of the litigating parties.

On the other hand, it is likely that, especially in rough areas, applying to the traditional remedies to claim one's right of control over a parcel of land was possible only when the exact configuration of that «locus» was ascertained by means of a survey. Naturally, the cognition judge may have needed the intervention of a land surveyor to be certain about the actual extent of a disputed area and to implement his sentence, while, in the mind of the Agrimensores (see allusions in Frontinus, 'first' Hyginus and Urbicus), these operations could not be performed without taking into

\(^{156}\) Intended to mark off and distinguish the disputed 'site' from the surrounding terrain, either when the boundary between two adjoining properties is represented by loca, besides their boundary markers (in agri arcifinii), or when sections of cultivated or waste land in dispute, belonging to neighbouring estates, are not yet divided by the boundary strip to be used as a right of way.
account the proof of title over such areas. But we cannot exclude the possibility that sometimes the contending parties regarded the survey of a whole "locus" exactly as the resettlement of (the whole, or a portion of) the boundary line between two (or more) adjoining estates: the fundamental difference, is that in the latter case a surveyor had simply to put right a disarrangement in an area of land where individual ownership had been already ascertained.

Finally, I have supposed that there is a correspondence between Urbicus' emphasis on the skill a surveyor must have in determining what is a true boundary marker (see p. 67, 24-68, 12 La = 28, 6-17 Th) and the same kind of professional skill prescribed by CT 2, 26, 3 (331 AD). This, and other analogies between Urbicus and the substantive law of the fourth century AD about land disputes seem to represent a new argument to maintain that he is probably an author of the period between the second half of the fourth and the beginning of the fifth century AD.

157 This assumption is based on Brugi's suggestion (1897, pp. 304-305: his arguments are valid also against Weber, 1891, p. 76, and Knütel, 1992: both were of the opinion that the surveyor's role in settling disputes about a 'site' was marginal). After what has been suggested in the preceding pages, it is therefore clear why Rudorff's opinion (in Lachmann, 1852, p. 443) has to be considered, although only partially, right; he thought that "dennoch zählt die Controverse de loco zu den Streitigkeiten im weitem Sinn, denn es handelt sich um Frage: zu welchem der benachbarten Fundi der straftige Locus gehöre, mit andern Worten, wo die Gränze der beiden Fundi sei".

It is also worth noting, finally, that no useful information, to confirm or to reject the picture emerging from the legal and technical sources, comes from inscriptions on termini privati (see, e.g. ILS 5989-5999; AE 1978, 90; 1980, 808).
Chapter 5

ARBITAL AND SURVEYING PROCEDURE IN BOUNDARY DISPUTES BETWEEN CITIES AND COMMONWEALTHS

A Introduction

As for the settlement of land disputes between private citizens, it has been observed in the previous chapter that the office of the arbiter ex compomiso differs from that of the agrimensor. The foregoing discussion of the passage from Urbicus dealing with the technical nature of the way in which controversies were decided has shown that the latter only needed particular skills for the inspection in person of the disputed area of land. It was the land surveyor who had to provide for the necessary report on the basis of which the arbitrator could get a comprehensive view of the facts to settle any kind of land dispute. It is therefore only the arbitrator who deals directly with the substantive legal facts connected with the procedure which has to be followed. That is why, as already seen, their approach to the underlying facts and the terminology they used is not the same.

As has been seen, there is no preserved (or well preserved) document which can throw an adequate light on the way the arbitrator's and the land surveyor's offices interrelated in settling controversiae of 'private' nature. It is therefore necessary to turn our attention also to the texts recording the settlement of a dispute between either a private individual and a commonwealth, or between two commonwealths. By way of the analysis of such documents I intend to verify the likelihood of my earlier suggestions about the nature of boundary disputes and the procedure which applies. The following discussion depends on some preliminary points which have to be made first.

First of all, most of the cases of land disputes between two cities which will be dealt with here are those settled by a particular category of public magistrates, in general delegates of the senate, of the emperor or the provincial governor. This kind of disputes, in fact, were brought to an end either according to a practice, commonly referred to as 'international arbitration' (from the time of the Roman Republic to the Empire), or as
cognitio extraordinaria. Moreover, by far the largest number of such boundary disputes which have come down to us are from the East.

A further point has to be made. Long before the procedure of deciding boundary disputes between towns or states developed into a canonical administrative practice (that is, when the intervention of arbitrators and land surveyors gradually spread over the various provinces of the Roman Empire) a remarkably complex and sophisticated system for settling this kind of controversy (both private and public) was in use in the Greek world. From literary sources and inscriptions we are told that Greek cities adopted various types of approach to maintain the boundaries between private properties or between land of the polis and of private owners\(^{158}\). We also know that conflicting territorial claims between two neighbouring cities or between cities/states claiming their rights on the possession or administration of a certain territory were submitted to a procedure commonly called by modern scholars 'interstate arbitration', the first examples of which can be safely dated to the sixth century BC\(^{159}\). The direct object of such disputes might have been either a particular area of land or territory, or the precise position of the frontier line between the chora belonging to two cities. But, whereas such matters are common knowledge among scholars, it is less well known that in many of these agreements we find employed some technical terms and operations connected with land surveying which have a strikingly close similarity to those mentioned by the Roman land surveyors. For instance, technical terms like 'autopsia' and 'periegesis' (= autopsia by visiting places on the part of the commission which had to try the case) are referred to in the dispute between Samos and Priene (decided by the Rhodians in 196-192 BC), Halai and Boumelitai (second century BC), or between the Mandaenses and Azorirates (178 BC) (Daverio Rocchi, 1988, pp. 73-77).

Furthermore, a common practice among the Agrimensores of the Empire, that of marking the line of demarcation of an area belonging to a commonwealth by means of the most evident elements of the landscape, such as rivers, hills and the like (see, e.g., Hyg., cond.agr., p. 114, 11-115,


\(^{159}\) On these aspects, in addition to Daverio Rocchi, 1988, see also Tod, 1913. On the Roman administrative policy in the Greek East, see Marshall, 1980, and Gruen, 1984.
3 La = 74, 4-19 Th), is recorded in Greek inscriptions from the fifth to the second century BC (see the full list in Daverio Rocchi, 1988, pp.49-53). But 'artificial' (so to speak) boundary markers, similar to those occurring in the writings also of the Agrimensores, such as those stones called ἡροί, τέρμοι and στῆλαι, σπόλαι (stakes) and βόλεοι θήραι (stones heaps) were used by judges to make evident the direction of a boundary line (see, again, a full list of inscriptions and discussion in Daverio Rocchi, 1988, pp. 53-57).

Now, some of these records seem to underline, from a technical angle, a difference between the function of the judge and that of the so-called ἱσταταῖ in settling a dispute. The nature of the arbitrator's authority to decide land disputes, in the Greek world, seems to be strictly limited to ascertaining the evidence in order to arrive at an equitable verdict about where the line consisting of boundary stones and markers was to run. This arbitral function, in general, did not cover either the tangible operation of settling markers or that of supervising how and where boundary markers, as the case might have been, were placed. Such a stage of the arbitral procedure, according to the surviving texts (see Daverio Rocchi, 1988, pp. 77-84), seems to have been carried out by a special staff of experts called ἱσταταῖ ('boundary settlers'): they were to place marks (when necessary, while drawing the boundary line) according to the arbitrators' preceding report. But the information afforded by the inscriptions show that in some cases people charged with the replacement of ἡ ροί either were chosen among the judges of the arbitrating committee, or it was the arbitrators (but only in a single case) who carried out both operations at the same time (see Daverio Rocchi, 1988, p. 79). In addition, there are two inscriptions (see Daverio Rocchi, 1988, pp. 73-77) which mention a γεωμέτρης ('land surveyor') beside the people who had to fulfill the operation of pointing out where the boundary line has to run and settling boundary stones on the disputed area of land. As for these cases, it is likely that the office of a γεωμέτρης is to be distinguished from that of the ἱστατὸς since the former seems to have been employed by the latter because of his specific technical knowledge, needed for an accurate technical measurement of land.

It does not seem to be a simple coincidence, in fact, that both in the famous Tables from Heracleia in Lucania (end of the fourth century B.C. ? first half of the third ?) (see Sartori, 1967, pp. 62-64) and the record of a
boundary settlement between Ambracia and Charadros (after 167 BC) \( ^{160} \) a kind of land surveying within *plethra* is mentioned. In addition to these, a third much mutilated record from Gonnoi (third century BC), which is commonly supposed to refer to a land dispute settlement (cf. Daverio Rocchi, 1988, pp. 82-83, II. 3-8) mentions a *geomètres* and an operation of "*diagràpsai toûs tòpous*", or "surveying areas of land by lines". Furthermore, a fourth (mutilated) inscription from Atrax, in Thessaly, of about 200-150 BC (see SEG 34 (1984), 477) has to be taken into account: it certainly deals with a boundary or land delimitation. Although there is no conclusive evidence, because of the bad condition of the text, that the settlement there recorded was the outcome of an arbitration, it may be noted that again a measurement within *plethra* and a *geomètres* at lines 9 and 11 are mentioned in the same context.

Therefore, so far as the limited number of the inscriptions where a *geomètres* is mentioned (in connection either with *horistai* or with any land surveying procedure) will allow, the evidence suggests that already in the Greek world the function of who was to survey the land was clearly and carefully distinguished from that of any other person taking part in a settlement of a dispute, the technical nature of which was not circumscribed to a mere settlement or resettlement of a boundary line. This may be strengthened by a further consideration. Our sources tell us nothing about any kind of remuneration given by cities to any judges-*horistai* forming an arbitrating committee (as shown by Daverio Rocchi, 1988, p. 82). On the other hand, the inscription recording the dispute between Ambracia and Charadros mentioned above specifies that the *geomètres* appointed had to be paid by both the contending cities for his technical services (see Daverio Rocchi, 1988, p. 110, B, and her comment upon this text). It therefore seems to follow that Greek 'land measurers' as well may be regarded (well before the Roman Agrimensores' activity) as a body of experts. They could be appointed if a dispute about an area of land implied surveying problems of some complexity.

Surely, we must be careful not to think that such experts existed simply because they had to measure distances of terrain in order that a dispute could be settled. There is, in fact, no evidence whatsoever that they were systematically elected or charged with a peculiar technical task every time a disagreement between cities arose because of conflicting territorial claims.

\(^{160}\) See Daverio Rocchi, 1988, pp. 109-114: in this inscriptions the members of the arbitrating committee are referred to as *termastai*, «boundary settlers».
connected with the necessity of surveying rural or urban areas of land. In other words, such controversies were only one of the occasions when Greek 'land measurers' may have been appointed.\(^{161}\)

Now, according to some modern scholars, the technical knowledge of the *geométraí* might have passed from the Greek colonies of South Italy to the Etruscans and hence to the Romans. Others have suggested an identical type of influence as for the practice of the so-called 'interstate arbitration'.\(^{162}\)

A detailed investigation would lead too far afield. It is nevertheless worth noting, as rightly undelineled by Marshall (1980, pp. 648-650) that, from a legal point of view, there is a marked difference between the Greek and the Roman treatment of territorial cases (either when the Senate itself decided the point of international law in question, or when it delegated the case to appointed arbiters - including Roman magistrates, such as the praetor, a consul or a pro-magistrate).

The controversy to be decided is regularly defined and formulated within quite narrow terms (usually, the configuration of the disputed land to be restored is that of the time the communities at issue entered into amicitia with Rome). On the other hand, according to the Greek practice, it was the arbitrator (or the body of judges) who «settled the point of equity as well as the matter of fact and so judged the legality of a territorial claim without restriction to any fixed historical point in time». Such a suggestion may convincingly explain why some peculiar forms of arbitration during the Hellenistic period and the Roman Republic, survived, as will be seen later, during the Empire.

My concern will be with those inscriptions which, from a technical angle, afford relevant information concerning the nature of the object of the dispute, that of the procedure followed to try the case and what are the technical operations connected with its settlement. Such records will be chronologically divided into two main sections, Republic and Empire. Each of them is subdivided into two groups, for inscriptions from the provinces and Italy respectively.

\(^{161}\) See Dilke, 1985, pp. 87-88; see also Martin, 1973.

\(^{162}\) For the origin of Roman centuriation from Greek experience, see Dilke (previous footnote) and Castagnoli, 1968, pp. 123-125. On the so called 'interstate arbitration, see above, footnote 159.

For the direct influence of the Greek system of 'interstate arbitration' on the Roman procedure, see Abbott and Johnson, 1968, pp. 152-161; Daverio Rocchi, 1988, pp. 100-101. Originality of the Roman practice of arbitrating territorial disputes according to Passerini, 1937.
B Arbitration and boundary disputes in the Republican period

The texts (whether from Italy or from the Greek East) which refer to boundary disputes decided by the Senate, or by a Roman magistrate or a body of arbitrators appointed by the Senate, have been recently discussed by Scuderi, 1991. Some of them are especially important for those who seek to study the nature and development of that peculiar authority a judge had, according to the 'action for regulating boundaries', to adjudicate and award the disputed area of land to either of the contending parties in private law cases. The recorded dispute between Magnesia and Priene (SIG 679 = FIRA III, 162: the middle of the second century BC or thereabouts) centres round the request to appoint some free state as arbitrator who was to be instructed to ascertain which one of the two cities actually possessed the land at the moment when amicitia with Rome was established. It is worth noting that, according to the terminology, the act of granting possession over the area in dispute became official with the settlement of those hória which were supposed to mark the outer boundary.

Two decrees of the Roman senate illustrate the object of the dispute between Samos and Priene (SIG 688: about 135 BC), decided by the senate: an area of territory and its boundaries (peri chóras kài peri horión). The controversy between Narthakion and Melitaea (SIG 674: middle of the second century BC or thereabouts), decided directly by the senate, centred round the possession of a «public area of land» (chóra demosía) and an untilled parcel of territory (chorion éremon). There is no information, in these two inscriptions about the way, from a technical angle, they were settled on the ground.

More interesting is the body of three records illustrating the development of the dispute between Hierapytna and Itanos (SIG 685: 145 to 112 BC). Both the contending parties refer to written documents, shown to the arbitrator, of a particular section of the area at issue. They are indicated as chorographiá ('descriptions of the regions'), containing periorismoi tês chóras ('limitations of land'), based on a system of natural and artificial

163 For the inscriptions which will be presently discussed, see pp. 389-409 (with earlier bibliography). Many of the inscriptions discussed in the present and the preceding chapters of this thesis, have been republished (most of them without any commentary or translation) by Moatti, 1993.

On the possible origin of the judge’s authority to ‘adjudicate’ in the procedure for settling land disputes, see Knüel, 1992, pp. 300 ff. (on Cic., off., I, 10, 33: dispute between Nola ad Naples, 184 BC)
elements of the landscape (roads and so forth). A location of hóroi seems to be connected also with the settlement of the dispute between certain publicani and the city of Pergamon (IGRR IV, 262: 129 BC?).

Of the inscriptions referring to boundary controversies between commonwealths in the Italian peninsula, in the Republican period, decided by the senate (or its delegates), the largest number is represented by those which record the mere settlement of boundary markers (listed now in Scuderi, 1991, pp. 372-389).

On the other hand, the most complete and best known example of a land dispute settlement by means of an arbitral procedure which also gives an accurate description of the division of the territory at issue, is provided by the bronze table from the Val Polcevera, recording the controversy between the Genuates and Viturii Langenses (CIL I², 584 = V, 7749 = ILS 5946 = ILLRP 517: 13/12/117 BC) (see Scuderi, 1991, pp. 380-386, with earlier bibliography). This inscription is interesting because it shows, already in the second century BC, the use of some particular technical expressions, like «in re praesente» (I. 2), «recta regione» (II. 8-9) and «recto rivo» (I. 22: see Sic. Fl., p. 150, 24-25 La = 114, 25-26 Th). The way this text has carefully recorded any of the natural and artificial (including termini) signs of the landscape by means of which the various sections of land (ager privatus, publicus and compascuus of the litigating communities) were surveyed and defined in order to settle the dispute is strikingly similar, as pointed out by modern scholars, to the operation to settle a dispute de iure territorii described in a passage, from the commentary of Pseudo-Urbicus upon kinds of land disputes, attributed by Lachmann and Thulin to (the so-called 'first') Hyginus (p. 114, 11-115, 3 La = 74, 4-19 Th) which will be discussed later. As already seen and as will be presently shown, several examples exist of controversies decided by an arbitral procedure, as in the case of the sententia Minuciorum, by means of delimiting with a system of markers the outer boundary of the land belonging to a commonwealth, according to the line drawn by the arbitrators.

It is worth noting that on one occasion, the operation of re-settling previous boundary markers, performed according to a decree of the senate, refers to termini set up by the Gracchan commission:

164 To the records quoted above may be added also IG IX, 2, 301 (second century BC: see Sherk, 1969, nr. 45, pp. 251-254). For the dispute between Olonte and Lato, see Scuderi, 1991, pp. 404-409. A record concerning the treaty between Lato and Hierapytna (111-110 BC) mentions horothétai («boundary settlers») from Miletus: see van Effenterre and Bougrat, 1969, pp. 28-36.
M(arcus) Terentius M(arci) f(ilius) | Varro Lucullus | pro pr(aetore) terminos | restituentos || ex s(enatus) c(onsulto) coeruit | qua P(ublius) Licinius | A(pius) Claudius, | G(aius) Graccus Illu(i) | a(gris) d(andis) a(dsignandis) i(udicandis) statuerunt.

This inscription (CIL I², 719 = XI, 6331 = ILLRP 474), from the territory of Fano, has been dated either in 82/81 or, less probably, in 75/74 BC. Now, although this is unfortunately the only example of such a document to survive and it does not mention any surveying operation or appointed surveyors, it nevertheless helps to understand why several references to «termini Gracchani» (see Chapter 6) as a kind of boundary marker still in use in some centuriated areas of Italy can be found in the so-called Libri coloniarum.

C Arbitration and boundary disputes during the empire: a) disputes between cities and commonwealths

The earliest document concerning such territorial controversies from the Greek East is the inscription from Cierium (Thessaly). The text (IG IX,2, 261; see Abbott and Johnson, 1968, n. 46), although incomplete, seems to refer to a boundary dispute between two cities. Gaius Poppeius Sabinus, the governor of Moesia from AD 11 to 35 turns to the koinon of Thessaly for a decision. Unfortunately, apart from a generic reference to the argument of the controversy («hypothesis peri hóron»), it remains uncertain how the decision of the koinon of Thessaly was transformed into the actual operation of settling the boundary line.

More interesting, from a technical point of view, is the inscription from Thasos published by Dunant and Pouilloux. According to them, it is a copy of a letter of Lucius (?) Venuleius Pataecius, «epitropos» (= procurator) of the emperor Vespasian (AD 69-79), apparently sent to the «council and people of Thasos» in order to settle the controversy between it

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latter and a colony, probably Philippi. In the record is mentioned a territory along with the dispatch of a soldier and a question «peri tòn horòn». In all likelihood, he is an army surveyor who has to ascertain where and what are the markers to be located, which later the procurator, as he himself affirms, would have inspected (cf. II.6-7):

στρατιώτην ἐδωκα ὑμεῖς. περὶ τῶν ἡρῶν | ὅταν αὐτὸς γένομαι (sic) κατὰ τόπους στῆσω καὶ ἐν οὐδεὶς μέμψε | [σ]θέ

«I gave you a soldier. As for the boundaries, when I am in the place myself, I will erect them, and you will not find fault with anything».

It is true, on the one hand, that such a record does not give any clear information on why a boundary line has to be settled and whether Venuleius Pataicius was the arbitrator of any such boundary dispute or only a new demarcation of the frontier or a section of it had to be settled.

Nevertheless, these lines seem to be consistent with what has previously been seen about the role of the surveyor, who investigates where the boundary markers have to be settled or resettled, and that of the arbitrator, whose decision's accuracy is confirmed by way of this operation. In addition, they also confirm the picture which emerges from D 10, 1, 8, 1 (Ulpian), already discussed:

ad officium de finibus cognoscentis pertinet mensores mittere et per eos dirimere ipsam finium quaestionem ut aequum est, si ita res exigit, oculisque suis subjectis locis.

IG V, 1, 1431 represents an official record of the boundary line between Messenia and Sparta, from the Messenian point of view, established on the 14th of December AD 78 by Ponomitos, an imperial freedman and chorométries at the same time. Such an operation was probably intended to settle the age-long territorial controversy between these two cities, to which Tacitus refers (Ann., IV, 43: AD 25). What survives of this much mutilated text is the survey from the 23rd to the 48th hóros. It has been suggested that the operation was possibly completed measuring the distances from one hóros to the next «with a ten-foot measuring rod»167. This survey, as in

the procedure followed to decide analogous cases, was based on a system of movable stones only where no natural features could define the line of demarcation.

An inscription from Histria (SEG 1, 1926, 329; SEG 24, 1969, 1109: see Abbott and Johnson, 1968, nr. 68) records a ruling of the frontier line which is to mark off the territory of this commonwealth. From its first line, where the «horothésia» by Laberius Maximus, governor of Moesia, is mentioned, we may infer that such a measurement was carried out in AD 100 or thereabouts

"Ωροθεσία Λαβέριου Μακίμου [ὑπατικοῦ ?] | Fines Histrianorum hos esse con[stitui ad insulam Pe] |  | ucem lacsum Halmyridem ad c[ram territorii] | Argamensium, inde iugo summo [collium usque ad c] || on fluentes riuum Pisciculi et Ga[brani, inde ab im] | o Gabrano ad capud eiusdem, inde [ad et iuxta riuum] | Sanpeum, inde ad riuum Turgicula[m et inde recta uia ?] | a riuo Calabeoe, milia passum circuit[er DXVI]

«Boundary settlement by Laberius Maximus, consularis. I established that these are the boundaries of the people of Histria: 'To the island Peuces, the lake Halmyrides, to the limits of the territory of the Argamenses hence from the top of the hills to the confluence of river Pisciculus and Gabranus; thence from the latter's outlet to its source; thence and along] river Sanpeus; thence to the river Turgicus; then in a straight line (?) from the river Calabeus five hundred and sixteen miles in circumference».

Despite of the condition of the text it is clear that the operation of surveying is based on the system of natural features in the area, and no artificial boundary marker is alluded to.

To a similar case, and not to an operation of land surveying connected with a centuriation, as suggested by Lambrino, 1962, belongs the mutilated record from Callatis (near the Black Sea: cf. CIL III, 14214 = IGRR I, 657), possibly of the second half of the second century AD. What survives of the Latin and Greek texts seems to indicate a survey from the twelfth to the twenty-fourth boundary stone:

Fragment A:
[a lapide septimo deci | mo rigore recto ad lapide]m octa<u>um de[ciumum m(ilia) p(assuum) - - - ; a lapide octauo decimo rigo | re recto ad lapidem
nolnum decimum qui [est in flexu inter - - - -; a lapide nonod] decimo
dextrorsum [rigore recto ad lapidem uicensimum m(ili) p(assuum); a lapide
uicensimo rigore recto ad lapidem quin(passuum); a lapide uicensimo | et primo rigore recto] ad lapidem uicensi(mum et secundum qui est in flexu inter || Asbolodina et Sarde.] p(assuum) ICCCC; a lapide uicens[imo et secundum sinistrorsum ? rigore | recto ad lapidem uicensi] mum et tertium p(assuum) || a [lapide uicensimo et tertio rigore
recto ad | lapidem quartum et uicensi] mum p(assuum) || a lapide quarto et
uicensimo rigore recto ad | lapidem uicensi(mum et quin]tum p(assuum) [ - - - - - - - ]

Fragment B:
[- - - - - από τοῦ λιμένος [ - - - | - - - - επί λίθου δωδέκατον, οὗ
έστιν ἐν καμπτῇ μεταξὺ κώμης ΚΕΙ[ - - | - - ]ΣΕ ἀπὸ Καλλάποδος [ - - | - - - - - - απὸ λίθου τρισκαίδεκάτου] ἐπὶ εὐθείᾳ ὀρθὴν ἔπι [λίθου |
tετσαρακαίδεκάτου ποδὶ(ῶν) ...] ἀπὸ τετσαρακαίδεκάτου ἐπὶ εὐθείᾳ ὀρθὴν ἔπι
λίθου <π> εντεκαυ || δέκατον ποδὶ(ῶν) ...] ἀπὸ λίθου τετεκαίδεκάτου ἐπὶ
λίθου εκκαίδεκατον οὗ ἔστιν ἐν καμπτῇ μεταξὺ Οὐαλ[ ... | - - - - - απὸ
λίθου ἑκκαίδεκατον ἐξ ἀριστερῶν ἐπὶ εὐθείᾳ | αν ὀρθὴν ἔπι λίθου
ἐκτεκαίδεκατον ποδὶ(ῶν) ...] ἀπὸ λίθου ἑκτεκαίδεκατον ἐπὶ εὐθείᾳ ὀρθὴν ἔπι
λίθου ἑκτεκαίδεκα | τὸν ποδὶ(ῶν) ...] ἀπὸ λίθου ἑκτεκαίδεκατον ἐπὶ εὐθείᾳ
ὀρθὴν ἔπι λίθου ἑνεκαίδεκατον, οὗ ἔστιν ἐν καμπτῇ μεταξὺ | ἔπι - - - - - ἀπὸ
λίθου ἑνεκαίδεκατον ἐξ δεξιῶν ἐπὶ εὐθείᾳ ὀρθὴν ἔπι λίθον εἰκοστὸν ||
[ποδὶ(ῶν) ...] ἀπὸ λίθου εἰκοστοῦ ἐπὶ εὐθείᾳ ὀρθὴν ἔπι λίθον εἰκοστὸπρῶτον
ποδὶ(ῶν) , α. ἀπὸ λίθου εἰκοστοπρώτου | ἐπὶ εὐθείᾳ ὀρθὴν ἔπι λίθον εἰκοστὸν
dεύτερον , οὗ ἔστιν ἐν καμπτῇ μεταξὺ Ἀσβολοδεινῶν καὶ Σάρδεων π [ποδὶ(ῶν)
] ἑπὶ ἀπὸ λίθου δεύτερου ἐξ ἀριστερῶν ἐπὶ εὐθείᾳ ὀρθὴν ἔπι λίθον
εἰκοστοῦ τρίτου ποδὶ(ῶν) , β. ἀπὸ λίθου εἰκοστοῦ τρίτου ἐπὶ εὐθείᾳ ὀρθὴν ἔπι
λίθον εἰκοστοῦ τετάρτου ποδὶ(ῶν) , β. ἀπὸ λίθου εἰκοστοῦ τετάρτου [ἐπὶ εὐθείᾳ ὀρθὴν ἔπι λίθον εἰκοστοῦ περίπτων ποδὶ(ῶν) - - - - - ].

The controversy settled on the 27th of March AD 101, recorded in a title
from Perrhaebia (AE 1913, 2) follows the traditional pattern of the disputes
decided by means of the Roman administrative practice of arbitration in the
Greek world168:

168 See Aichinger, 1982, p. 196; for the Hellenistic background, see Piccirilli, quoted
above, footnote 167.
In the fourth consulship of the emperor Caesar Nerva Trajan, Augustus, Germanicus, and in the consulship of Quintus Articuleius, on the sixth day before the calends of April, copied and verified from the note-book of Verginius PUBLIANUS (?), the judge appointed by the emperor Trajan, which was produced by CAELIUS NIGER, where there was recorded what was written below: «Since it has been demonstrated to me that in the stone stela, which is located in the forum of Doliche, have been recorded those boundaries consistent with the royal delimitation of AMYTAS, father of Philip between the people of Doliche and the people of Elemiotis, it seems to be right that the boundary line should run from the marker which is in the road above Geranae, between Azzoris, ONOAREAe and PETRae in DOLICHE, along the hill-tops to the field called Pronomae, in order that this should belong in part to the people of Elemiotis, and along the hill-tops […]».

It is worth noting that our text, in this case, deals with the mere resettlement of the previous boundary line according to a public document. Since the text is not complete, it is not possible to infer whether the surveying operation was carried out by agrimensores, as is expressly stated in other inscriptions dealing with the same kind of arbitral procedure and boundary settlement.

Fundamental for the information afforded is the body of inscriptions engraved on the first three orthostates of the South wall of the temple of Apollo in Delphi. They record the settlement of a dispute, probably in AD

169 See Plassart, 1970, pp. 38-60; see also Aichinger, 1982, pp. 200-202. According to DAVENIO ROCCHI, 1988, pp. 135-139, the former boundary lines mentioned in these records have been surveyed as follows: first comes the operation carried out by the hieromnémones, to which NIGNNUS refers, in 140 BC; in 125 BC the sacred council issues a decree about the same boundaries. Therefore, NIGNNUS' reference to MANIUS ACILIUS
114 (between the seventeenth of September and the tent of October),
concerning the boundary between the territory of Delphi, or that of the land
sacred to Apollo, and the adjoining commonwealths: Antikyra and
Ambryssos (Phocian) in the East; Amphissa and Myania (Locrian) in the
North and West. As regards the boundary between this region and
Antikyra, Amphissa and Myania on the other side, the imperial legate,
Gaius Avidius Nigrinus, has to reconfirm the survey carried out by the
hieromnémones in the second century BC and recorded above the
inscriptions dealing with the later survey. As for the frontier between Delphi
and Ambryssos, Nigrinus confirms those boundaries settled by Valerius
Lustus, a surveyor appointed by Gaius Cassius Longinus (proconsul of Asia
in AD 40-41), possibly under the reign of Claudius.

Column I (boundary between Delphi and Ambryssos):

[G(aio) Aui]dio Nigrino leg(ato) Aug(usti) pro pr(aetore) | [ex tabellis
recitata XV] k(alendas) Ocotbr(es).

v v «Cum rerum iudicatarum auctoritas cu[stodienda semper sit, spectari
nunc | oportet Longini decretum quod inter Delphos et Ambrossios in
controversia quam in imperatorem pertulissent, | ediderit, in quo iis
men]sorem dedere| Valerium Lustum, factamque ab eo deter[minationem
phinium (sic)]. || Nam ex epistula eiuj[s apparuit ad Delphos publice scripta
neque Ambr[ossios neque Delphos deter] | mina|tionem abnuisse] postea
per aliquod iam annos. De Longini constit[tis, in controversia inter] |
Dell[phos et Ambros]sios de phinibus (sic), determinazione per Valerium
lust|um facta decernere placet.]» | In co[nsilio adfuel[runt Q(uintus) Ep|pius,
F(auius) Arrianus, G(aius) Pap|ius Habitus, T(itus) J[ius ? - - - -]

Τοῦ ἑμείαν ἐν τοῖς κεκριμένοις V V || ὄντ[ας ἀεὶ] λυσιτελεστάτον καὶ
ἀναγκαιοτάτον, ἐν τῶι παράτητι ἀξία ἐστὶ σκέπτεσθαι ἦν || Κασσίου Λον]γίου
τοῦ ......12......κριῶς ἦν κέρκυρα μεταξὺ Δελφῶν καὶ Ἀμβροσίων, ἐν [τῇ
ἀμφισβητήσει ἦν εἰς τὸν Ἀντικράτορα εἰσήγησκων, ἐν τῇ μετρη[τα]ν Ὀλυμπιόν
Ἱού[σ] | τὸν αὐτοῦ ἄδωκε, καὶ ὁ δομοφόρος ὁ τούτου. Δῆλον γὰρ ἦμων ἐγένετο ἐξ
τῆς ἐπιστολῆς | αὐτοῦ τῆς πρὸς τοὺς Δελφῶς µήτε Ἀμβροσίως µήτε
τῶν Λογγίνου καθεστῶν, ἐν τῇ µ]εταξὶ Δελφῶν καὶ Ἀμβροσίων χερὶ τῶν

Giabrio as the settler of the former boundary line in 190 BC, should be wrong.

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Gaius Avidius Nigrinus (being) legatus pro praetore of Augustus. Declared according to the (public) records on the fifteenth day before the calends of October [17 September]. «Since the authority of matters which have been decided in court must always be acknowledged, it is appropriate on this occasion to follow what Longinus decreed between Delphi and Ambryssos in the controversy they submitted to the emperor, according to which decree Longinus assigned them Valerius lustus as surveyor and a determination of boundaries was carried out by him. According, in fact, to the letter he wrote publicly to the Delphians, it appeared that neither the people of Delphi, nor that of Ambryssos has subsequently refused this settlement, now for some years. It seems therefore right to judge on the basis of what has been decided by Longinus in the boundary dispute between Delphi and Ambryssos, with the boundary survey having been done by Valerius lustus».

Quintus Eppius, Flavius Arrianus, Gaius Papius Habitus, Titus Livius (?) were present in the consilium".

(The Greek version does not present any substantial divergence from the Latin text)

Column II (boundary between Delphi, Amphissa and Myania):


«Cum hieromnemonum iudicio (quod) ex auctoritate Ma[r]ri Acili et senatus facto Op[timus Princeps stari iussit, et prolata sit apud me determinatio per h[i] eromnemonas facta quae etiam Delpes in latere aedis Apollinis incisa est, placet secundum eam deterr[r] minationem: a Trin[apea, quae e]st petra imminens super uallem quam Charadron uocant
in qua e[st] | fons Embat[ea], usque ad eum flonent, quod ad Delphos spectat finium Delphorum esse; ab eo font[e, cum | determinatio ad Astrab[a]nta fines oportere derigi demonstret, placet ad eum ten[minum, || qui in rupe quadam quae Astrab[as u]o[ca]jtur non procul a mari mihi[n] ostensus est, in qu[o tripus | insculptus est, quod proprium esse sa|crae Delphor[ul]m regionis uidetur, fin[jium Delpho] | rum esse; quod ad sinistrum usque ad mare ad Delphos verg[lens demonstratu[m est - - - -]

Column III (same boundary line; Greek version):

Πρ(δ) ι' Καλ(ανδων) ᾨκτωβρίουν Ὑ ἐν ᾨλατεία ᾨ Περὶ τῆς ἀμφιαβητήσεως τῆς Δελφῶν πρὸς Ἀμ ὑ ὕψος ὑι καὶ Μυανείς περὶ τῶν ὄρων, περὶ ἤς ὑ Δέμαγος Ἀυτοκράτωρ ἔκλευσεν ἔ με κρεύνα (Sil.), πλευράκες ἐκατέρω διακούσας καὶ ἔπὶ τῶν τόπων γενομένος καὶ κατομαθᾶν ἔκαστα ἔπὶ τῆς αὐτοψίας κατὰ τὴν ἀμφοτέρων ὑψήτησις, τροσ ἐπὶ δὲ ἔντυχον τοὺς εἰς ἀπόδειξιν ὑπ᾽ αὐτῶν προφερομένους, ὦ ἐπέγνων ταῦ ὑ τῇ ἀποφάσει περιέλαβον. Ὡ Ἐπεὶ τὴν ὑπὸ τῶν ἱερομνημονίων γενομένην κρίσιν | ἐκατὰ τὴν Μανίων Ἀκελίου καὶ τῆς Συγκλήτου γράμμην, ὡς καὶ ὑ Δέμαγος Ἀυ | Ὡ οἰκράτωρ πασῶν μάλιστα κυριάν ἐπήρεαν, συνυπολογηθῇ ταύτῃ ἐνίκη τὴν | ἐν τῶν ἱερῶν τοῦ Ἀπόλλωνος τοῦ ἐπὶ Δελφῶν ἐξ ἐδωρούμενον ἐμῆ ἐκείνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη ἐκεῖνη | ἐπὶ ἐν [Θυραντέας ὁρό]ου, ὅτι ἐκεῖν ἐπειδὴ ἐξείνη ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν ἐξεύρεσιν 

(two major fragments from the Greek version are found in Plassart, 1970, p. 54)

(Latin text) "The tenth day before the calends of October (22 September) in Elatea. (This decree includes all I found out, about the controversy over boundaries lodged by the Delphians against the Amphissians and the people of Myania, about which the Optimus Princeps required me to investigate, after I have devoted several times my attention to both parties, explored and inspected the disputed areas according to the arguments of..."

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both parties and even pondered the documents concerning these matters. Since Trajan required me to follow the judgement of the hieromnéones, passed by the authority of Manius Acilius (Glabrio in 190 B.C.) and the Senate, and the boundary settlement carried out by the hieromnéones was exhibited to me, the same which is engraved on a side of the temple of Apollo, it seems to be right (to determine the boundaries) according to that survey: from Trinapea, which is a rock overhanging the valley called Charadron, where there is the Embateia spring, up to that spring, whatever looks towards the Delphians, belongs to the territory of Delphi. From that spring, since the determination of boundaries shows that the boundary line has to be drawn towards Astrabas (Greek text: "that the second boundary marker is at Astrabas"), it seems to be right that, up to that boundary marker which has been shown to me on a cliff called Astrabas not far from the sea, on which a tripod has been engraved, whatever appears to belong to the holy area of the Delphians, belongs to the territory of the Delphians; whatever has been shown to be running towards Delphi, up to the sea on the left side [- - - -x]

**Column IV (boundary between Delphi and Anticyra):**

Column V (same boundary line; Greek version):

Gaius Avidius Nigrinus (being) legatus pro praetore of Augustus. Declared according to the public records on the sixth day before the Ides of October (10 October) in Eleusis.

« Since the Optimus Princeps (=Trajan) prescribed that the judgement of the hieromnémones is to be followed, by which they determined the sacred territory of Apollo Pythius by the authority of Manius Acilius and of the senate - decision which is also engraved on the side wall of the temple in Delphi -, and since Anticyrenses and Delphians - to whom I have been assigned as judge by Trajan - were not in doubt that that sentence was to be observed, a more careful inspection was necessary, anyhow because of the long-standing nature of the whole question, all the more so as the title over some sites had changed and the names of the areas contained in the judgement of the hieromnémones were not easily recognizable because of the lapse of time and each of the (contending) parties took advantage of this.

Since therefore I was frequently on the spot, after and carefully considered for several days all it was possible to draw from either information from people or existing documents, I embodied within this sentence those elements which appeared to be most consistent with the hieromnémones' judgement. And, although my sentence somewhat disappointed both parties' hopes, it is nevertheless possible to see that I have looked after the interests of the parties, since in the future, by the favour of Trajan, they will have secure and uncontroversial tenure.

It turned out that Opoenta, in the sea which lies towards Anticyra, which is mentioned first in the hieromnémones' judgement, is the promontory which is now called by some Opus, by others Opoenta. It lies, for those who sail from Kirra toward Anticyra, before Naulochos, not far from Salmoussai. From this point, in a straight line, to those hills, which this side of it appears are called as 'Akra Kolophia' in the hieromnémones' sentence, from the fact that in both hills there are natural stones, in one of which there is still a
Greek inscription which indicates that this is a Delphian boundary marker; its age proves its trustworthiness. As for the other, it is clear there was engraved the same inscription, which although the text is deleted, clearly marked the boundary for those coming up from the sea, in such a way, that what lies to their right belongs to Antikyra, what lies to their left to the sacred region of Delphi. From those hills, in a straight line, to the rock which is called Dolichonos there is undoubtedly also a line of demarcation between Delphi and Antikyra - - - - ]"

(the Greek version does not present any substantial divergence from the Latin text).

Now, it is worth noting that the boundary settlement of Nigrinus, which is based on a document laid down by temple-officers (and, therefore, stored in the temple-archive) is not the only example of such cases. A parallel is provided, for instance, by the boundary settlement recorded in an inscription from Dehmit (Lower Nubia: see SEG 30, 1980, 1781: 29 March AD 111), carried out by an official appointed by the prefect of Egypt «katà tén hierán bíblon» («according to the holy writing»). This seems to be consistent with what Frontinus states about the procedure to follow in order to settle disputes concerning 'sacred and religious places' (p. 22, 9-23, 3 La = 9, 13-17 Th):

   de locis sacris et religiosis controversiae plurimae nascuntur, quae iure ordinario finiuntur, nisi si de locorum eorum modo agitur; ut [...] aedium, quibus secundum instrumentum fines restituuntur.

«Very many disputes arise about sacred and religious places. Their terms are fixed according to the procedure prescribed by the law in force, unless it is their area that is at issue, for example, in the case of temples to which the boundaries of their land are restored according to a document».

Urbicus, on the other hand, explicitly states that it is this kind of controversy which falls within the authority of the provincial administrators. In his view, this seems to be one of their most important duties (p. 87, 15-18 La = 48, 4-8 Th):

   locorum autem sacrorum secundum legem populi Rom(ani) magna religio et custodia haberi debent; nihil enim magis in mandatis etiam legati
provinciarum accipere solent, quam ut haec loca quae sacra sunt custodiantur.

«According to the law of the Roman, the respect and custody for the sacred places is to be observed with a great care. For the provincial legates receive in their mandates no indication which is more important than that those areas, which are sacred, should be protected».

Now, it may be interesting to combine together the information afforded by these authors with what Ulpian states at D 10, 1, 8, 1 (quoted and discussed in the previous Chapter).

We have seen that the duties of whoever has to judge in a boundary dispute include «sending surveyors» and, «if circumstances demand», a personal inspection of the disputed land. Therefore, since Frontinus' distinction between disputes settled according to ius ordinarium and those which are not because centring round the modus of such land, does not refer to what should be considered the legal authority to decide this kind of controversies, it means that the technical procedure to bring to an end these controversies always followed a fixed pattern.

In other words, it seems that when disputes «about area» (modus) arise, the point of law is to be settled strictly according to what has been determined in the documents concerning these «sacred and religious areas».

On the other hand, Urbicus assertion seems to be confirmed by various inscriptions dealing with this particular aspect of Roman administrative policy in the provinces, and indeed as early as the first century BC.

A letter from the governor of Asia Vinicius to the magistrates of Cyme, by means of which he directs them to investigate the title of a certain Lysas over the sanctuary of the god Dionysus in the city, refers to a decree of the consuls of 27 BC, Augustus and Agrippa. According to this, all the public places or sacred areas in the city of each eparcheia, if they fell into private possession, are to be restored to the ownership of the city or the god (see Sherk, 1969, nr. 61, pp. 313-320).

Moreover, a body of inscribed boundary stones from Ephesos (see Die Inschriften von Ephesos, VII, 2, Bonn, 1981, Nos 3501-3516) refers to the operation of settling the boundaries of the sacred area belonging to Artemis carried out within a period from Augustus to Trajan. In some cases (Nos 3506-3508; 3010: reign of Domitian; 3511: reign of Trajan) it is recorded not
only that it was the proconsul of Cilicia of that time who was directed by the Emperor to deal with this peculiar boundary settlement, but it is also explicitly stated that such an operation took place «the proconsul being in the place itself» («paróntos epi tôs tôn toûs»).

Further examples of such surveying connected with a boundary settlement are provided by two inscriptions. One records the measurement of the «whole land of the illustrious city of Pessinus», carried out by a primipilars Caracalla appointed in AD 216 (see Devreker, 1971). The second is a mutilated record referring to the boundary settlement between the territory of Caesarea Philippi and the Pan temple, in the reign of Diocletian (SEG 32, 1982, 1949).

Land surveyors are also mentioned in the context of a controversy (AD 127-128) concerning the extent of a part of the territory sacred to the temple of Zeus at Aezani and the area (modus) of those plots (kléroi) into which that land was divided. The aim of this operation was to ascertain what was the actual size of these parcels, the cultivators of which had to pay a proportional rent (the following inscriptions are quoted according to Laffi’s study) (see Laffi, 1971):

A Αυμβύκος Κουηήτος Αιζανεντών ἄρχουσαι βουλή | ὅμως χαίρειν. Ἀμφιαοβήτησες περὶ χώρας τεράς ἢν | τεθείσης πάλαι τῷ Διό, τρειβομένη πολλῶν ἐτῶν, τῇ προνοίᾳ τοῦ | μεγάστον αὐτοκράτορος τέλους ἐπὶχε. Ἐπεὶ γὰρ ἐπέστειλα αὐτῷ δὴ | λαβὼν τὸ πράγμα ὅλον, ἅρμαν περὶ τῷ χρῇ τοῖς (sic), δῶ τὰ μάλιστα την | διαφοράν ὑμῖν κειμοῦντα καὶ τὸ δυσεργεῖ καὶ δυσεύρετον τοῦ | πράγματος παρεκχόμενα, μεῖξας τῶν φιλανθρώπων τὸ δικαίον ἁκόλου | ὅς τῇ περὶ τὰς κρίσεις ἐπιμελεία τὴν πολυχρόνου ὑμῖν μάχην καὶ ύποψί | ἀν πρὸς ἀλλήλους ἔλυσεν, καθὼς ἐκ τῆς ἐπιστολῆς ἦν ἐκεμψεν πρὸς με | μαθηθείσε, ὡς τὸ αὐτόγραφον ὑμῖν (sic) πέταμφα. Ἐπέστειλα δὲ Ἑσπέρω τῷ ἐπὶ | τροπῳ τοῦ Σεβαστοῦ, ὡς γεομέτρας ἐπιτη<δ> [ίοιν δ' ἔκ]λεξάμενος ἑκεύοις | προσχρηταί την χώραν διαμετρῶν κακ [τοῦτον μέτρον] ἐν υμείν (sic) γενήσεται. | Καὶ ἐκ τῶν ιερῶν τοῦ Καίσαρος γραμματών καλέσω, ὡς καὶ δ)ἐδήλωκα, ὦτι δ' ἐν τε | λεῖν ὑπὲρ κοσμοῦ κλήρου κατὰ τὴν [τοῦ Μοδέστου ἢ] | ἄλλοις, ἐὼ ἔς ἢ | μέρας λαβότε τὴν ἐπιστολήν ἐκαστὸς κατὰ τὸ ὑπάρχον | μέρος τῆς ἡμᾶς | χώρας τελέσα, ἵνα μὴ πάλιν τινὲς ἓλεξαντες τοις τελους του | βράδεουν ἀπολαύσει τὴν πόλιν τῆς [προσκούνσης προσόδου παραίτητα] | γέωνται ὁ ἐκ τούτως τὸ µέχρι ἢν ἂν ἄπολεσαν τούτων. Πέτομ | φο δὲ καὶ τῆς πρὸς Ἐσπερον ἐπιστολῆς τὸ
\[\text{\antigrafon kai } \ddot{\text{E}}\text{spereos } \varepsilon \| \\mu \alpha \iota \gamma \varepsilon \gamma \rho \alpha \varepsilon \nu \varepsilon \nu. \\vee \vee \ \text{'E}ρρο\omega\sigma\theta\alphaι \upsilon\alphaς \varepsilon\upsilon\chi\omicron\omicron\nu\mu\alpha\iota].\]

\textbf{B} \text{Exempl(um) epistulæ [Cae]saris scriptæ ad} | \text{Quietum.} | « \text{Si in quantas particulæs quos cleres appellant ager Aezanen} | si lori dicatus a regibus diuisus[sit] non apparat optimum est, | sicut tu quoque existimas, | [mo]<d>um qui in uiciinis ciuitatis | clerorum nec maximus } [\text{[nec minus est observari. Et si, cum]} | Mettius Modestus cons(tituit) ut uectigal pro is pendere | tur, constitit qui es[se]nt c[leru]chici agri, aequom est ex il[i]o | tempore uectigal pendii; si [non] constitit, iam ex hoc tempo | re uectigal pendendi[um] e[st, et]amsi quae morae qu(o) tar | di]us [pendant]nt int[er]aponatur ». 

\textbf{C} \text{Exempl(um) epistulæ Quieti scriptæ ad} | \text{Hesperum.} | « \text{Cum variam esse clerorum mensuram | cognouerim et sacratissimus imp(erator) con | stitutionis suae causa neq(ue) maximi neq(ue)} || [mi]nimi mensuram iniri iussert in ea re | [gione] quae lori Aezanitico dicata dicitur, | [quaeso mi] Hesper carissime, explores qu[ae] maxim um cl[er]i mensura quae minim i | [in uicinia et] in ipsa illa regione sit, et id | [per litteras n]otum mihi facias ». 

\textbf{D} \text{Exempl(um) epistulœ scriptœ Quie} | \text{to ab Hespero.} | « \text{Quedam negotia, domine, non ali} | ter ad consummationem perduci | possunt quam per eos qui usu sunt || eorum p(er)iti. Ob hoc cum mihi in iun | xisses ut tibi renuntiare quae | mensura esset clerorum circa re | gionem Aezani ticam misi in rem | praesentem IEI [- - - -] » 

\textbf{E 1.} \text{Imp(erator) Caesar Traianus Hadrianus} | \text{Aug(ustus) p(ater) p(atiae) co(n)s(ul) III trib(unicia) pot(estate) XII fines lori <G> [e] ni]tori et ciuitati Aezanitarum datos | [a]lb Attalo et Prusia regibus restitu | [e]bam cura agente Septimio Sat | urnino primipilare sicut Prusi | as rex egerat.

\textbf{E 2.} \text{Avtokrɔ\acute{\`a}tor Ka\text{"i}sar} \text{T}raianoς \text{`A}δρ | [\text{\iota}νος Σεβαστός} | \text{[pατὴρ} \text{pατρίδως} | [\text{τό γ' δημαρχικής} \text{έξουσ} | [\text{ίως τό} \text{ιγ'} \text{χώρας Δύ} \text{γενέτορι καϊ} \text{πό} | [\text{λει} \text{Ἀλεξάνδρων} \text{δοθείσας} \text{υτό'Ατ} || \text{tάλου και} \text{Προαίον} \text{Βασιλέων} \text{ἀ} | [\text{ποκατάστασα} \text{ἐπιμεληθήτους} | [\text{Σεπτιμίου} \text{Σατουρνείου}] \text{πρειμουπτ} | [\text{λαρίου καθός} \text{Προυσίας} | \text{βασιλεύς} \text{κατεστήσ} <\text{α}> το.}

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A: "Avidius Quietus to the magistrates, council and people of Aizanoi. Greetings. The disagreement, which has been dragging on for many years about the territory that has been consecrated of old to Zeus, has finally come to an end by means of the providence of our great emperor. For since I wrote to him, explaining the whole question and asked him what it was necessary to do, the two problems which most of all fomented the disagreement among you and represented the difficult aspect to manage and to investigate, having added the justice to humanity in accordance with his concern for legal cases, he brought to an end your long-standing disagreement and mutual suspicion, as you will learn from the letter he directed me, a copy of which I sent to you. In addition, I wrote to Hesperos, procurator of Augustus, to ask that, having chosen suitable land measurers, he employ them to survey the territory. As a result there will be a standard kléros among you. And, according to the sacred letter of our Caesar, I order, as I have also explained, that what has to be paid for each kléros according to the decision of Mettius Modestus, from the time you shall have received the letter, everybody will pay that amount in relation to the portion of sacred land he possesses. This is in order that some people, arguing about this rent, will not again be the cause for your city receiving its proper revenue late. It is, in fact, enough that they they have been enjoying such a benefit up to now. I have also sent you a copy of the letter addressed to Hesperos and of that Hesperos wrote me. Farewell."

B: "Copy of the letter of Caesar written to Quietus. « If it is unclear how wide are the parcels of land called kléroi, into which the parcels of land devoted to Zeus of Aezanoi was divided by the kings, the best solution is, as you think, the size shall be observed which, in the adjoining commonwealths, is neither the largest, nor the smallest. If, when Mettius Modestus decided that for such parcels a rent should be paid, it was clear which were the the cleruchic lands, it is right that the rent to be paid from then. If it was not clear, this rent has to be paid from now, even if they ask for the extention of the payment »."

C: "Copy of the letter of Quietus written to Hesperos. «Since I have established that the size of the kléroi is varying and the most sacred emperor by means of his regulation directed that should be adopted a size
which is neither the largest, nor the smallest in the area which is said to be
dedicated to Zeus of Aezanoi, I ask you, my dear Hesperos, to check the
size of the largest and smallest kléros in the surrounding territory and in this
very area, and to let me know it by letter»

D: "Copy of the letter Hesperos wrote to Quietus. «Some matters, my
lord, cannot be carried to a conclusion other than by those who are skillful
by experience in them. Therefore, since you directed me to let you know
what is the size of the kléroi in the territory of Aezanoi, I dispatched to the
spot [...]»

E: (Inscription from boundary stones: Latin and Greek version) «I, the
emperor Caesar, father of his country, in his third consulship and his
thirteenth tribunicia potestas, restored the land given to Zeus the Begetter
and to the city of Aezanoi by the kings Attalus and Prusias. The operation
was committed to the primipilari Septimius Saturninus, just as king Prusias
dealt with the matter».

First of all, it is worth noting that (although text D is incomplete) the land
measurers needed to survey the extent of the plots in the territory have
been provided by Hesperos, the imperial procurator, and do not come from
the staff of the provincial governor; secondly, that this controversy was not
limited to the mere ascertaining of the 'area' of these kléroi, but also (as
suggested by Laffi) extended to what was the actual extent of the cleruchici
agri belonging to the temple of Zeus and that of the land belonging to the
city of Aizanoi (see text B, II. 7-10). It cannot be excluded, therefore, that
the latter operation was carried out later by Septimius Saturninus, the
primipilarius mentioned in the boundary stones of AD 128 (see text E).
According to Laffi, he came from Rome, dispatched by the emperor, in
order to supervise the final operation of boundary settlement of the whole
area at issue.

A Greek inscription from Phrygia, dating to about AD 253-256 (SEG 32,
1982, 1287), shows that on certain occasions an imperial procurator could
have provided and dispatched land measurers to the spot (in this case also
the 'boundary settler') to decide a boundary dispute between two
commonwealths:
Luke (with) Dionysos, legioinary tribune, according by order of the most excellent procurator of the Augusti, Iulius Iulianus - who has also the charge of administrating these parts of the empire, Phrygia and Caria - having been at the place itself and inspected the accuracy (of the details), settled the boundary, being present also the land-measurer Elianus Earinus. Boundary marker between Tataenes and Sporenes.

Interesting for the information afforded is also an inscription from the archive of Koroneia (Boiotia). Here, as in the Aizanoi case, there is a link between the settlement of a dispute about the title over a common area of land and the operation to ascertain the actual extent of land outside which the municipality adjacent to Koroneia, Thisbe, should pay a rent to the Koroneians. This inscription probably dates to AD 155 (IG VII, 2870 = SEG 32, 468 = AE 1968, 638):170


(trans. Fossey) «Emperor Caesar Titus Aelius Hadrianus Antoninus Augustus, son of the deified Hadrian, grandson of the deified Trajan Prthicus, greatgrandson of the deified Nerva, highpriest, in his eighteen tribunician power, being declared imperator for the second time and in his

four consulate, father of his country, to the magistrates, council and people of the Koroneians. Greetings. I have sent you a copy of the arbitration I made between you and the Thisbeians. I have also sent instructions to Mestrios Aristonymus to measure out for the Thisbians the \textit{plethra} which my deified father decided should be given to them. If the Thesbians should persuade you and keep on grazing outside this land, they shall give you the legal tax; but if they restore the land, (they shall pay) whatever shall be judged as owing for the time which has passed, it being understood that you will return to them the securities. The envoys were Aelius son of Glykon and Dionysos son of Dionysodoros; let them to be given the cost of their journey unless they undertook it free of charge. Farewell.

Now, \textit{mensores} who seem to have been appointed directly by the proconsul in order to decide a normal case of boundary disagreement between two commonwealths, similar to those previously observed, are mentioned in a famous inscription from Lamia, in Thessaly (CIL III, 586 = ILS 5947a):

\begin{quote}
Q(uinto) Gellio Sentio Augurino proc(on)s(ule) decreta | ex tabellis recitata ex Kalendis Martis. Cum Optimus Maximusque | princeps Traianus Hadrianus Aug(ustus) scripserit mihi ut adhibitis menso | ribus de controversiis finium inter Lamienses et Hypataeos cognita causa | terminarem egoque in rem praesentem saepius ac continuus diebus | fuerim cognouerimque praeistentibus utriusque ciuitatis defensoribus, | adhibito a me Iulio Victore euocato Augusti mensore, placet initium | finium esse ab eo loco in quo Siden fuisse comperi, quae est infra con | saepum consecratum Neptuno, indeque descendendentibus rigorem ser | uari usque ad fontem Dercynnam, qui est trans flumen Sperchion, ita ut per | amphispora Lamiensium et Hypataeorum rigor at fontem Dercynn[am supra] | scriptam ducat et inde ad tumulum Pelium per decursum SIR[...] | at monumentum Euryti quod est intra finem Lam[iensium - - - ] | Erycaniorum et Prohemiorum [ - - - | - - - ] thraxum et Sido[ - - - | - - - ] const[ - - - ]

\textit{Quintus Gellius Sentius Augurinus} (being) the proconsul (of either Achallia or Macdonia). Decision declared according to the public records on the first of March. Since our best and greatest prince Trajan Hadrian Augustus instructed me that, having consulted surveyors and examined the case concerning the boundary dispute between Lamia and Hypataea, I
should settle the boundaries; and since I have been so often and for several
days at a time on the spot, and investigated in the presence of the
defensores of both these cities with the land surveyor Iulius Victor, evocatus
of Augustus, present, it seems to be right that the boundary line should start
from the place where I ascertained Side was, which is located below the
hedging consecrated to Neptune, and from there for a straight line to be
observed as one goes down to the spring Dercynna (which is beyond the
river Sperchion), in such a way that the straight line should lead to the
aforesaid spring Dercynna through the amphispora (= land to be sown by
either of these communities) of the people of Lamia and Hypataea; hence
to the mound Pelios through the slope Sir[... ] to the monument of Eurytes
which is within the territory of Lamia - - -.

As for territorial disputes in Italy during the Empire, let alone those
inscriptions recording a mere restitutio of land to municipalities by the
Emperor or local magistrates, the most important document we have
already come across in the first chapter is the letter of Domitian (of about
AD 82), directing the magistrates of Falerio in Picenum how to settle the
dispute between this city and Firmum, concerning the ownership of land
called 'subsiuia' (CIL IX, 5420 = FIRA I², 75).

Two more examples come from Sardinia and Corsica. The first is the well-
known decree of the proconsul of Sardinia, Lucius Helvius Agrippa (see CIL
X, 7852 = ILS 5947 = FIRA I², 59: 18/3/69 AD), which refers to a boundary
dispute between the Patulcenses and Galillenses. From this record we
learn that the Galillenses had seized by force praedia (or fines) Patulcensium. It is worth noting that in this case no survey or examination
of boundaries is required to settle the controversy. Agrippa, in fact, «after
having examined the case» states that, according to the previous sentence
of the procurator M. Iuventius Rixa (the year is not mentioned), «fi i nes
Patulcensium ita servandos esse, ut in tabula ahenea a M(arco) Metello
ordinati essent» (II. 5-8), «the boundaries of the Patulcenses are to be
observed according to the way they have been settled by Marcus Metellus
(in 111 BC) in a bronze tablet». It may be noted that the final sentence was,
in fact, delayed because the Patulcenses wanted to get for the trial a tabula
of the disputed boundaries directly from the tabularium principis (see II. 14-
16)\(^\text{171}\).

\(^{171}\) See Mommsen, 1867 (= 1908); Moatti, 1993, pp. 64-69; 73-78; 111-112.
The second text is represented by a letter sent by Vespasian to the «magistrates and senators of the Vanacini» (see CIL X, 8083 = FIRA I², 72: about AD 72). The central passage is at lines 7-13:

As for the boundary dispute occurring between you and the Mariani, which takes its source from the lands you bought from my procurator, Publilius Memoralis, I have given written instructions in order that my procurator Claudius Clemens shall bring it to an end and I have dispatched a land surveyor.

Now, by means of a closer analysis of the recurrent wording in the inscriptions which record operations of boundary settlement, in many cases representing the conclusion of a territorial dispute, Eck has recently suggested that the emperor, when the contending parties ask for his judgement to settle such disagreements, «aber sah üblicherweise eine adäquate und alle Interessen berücksichtigende Regelung nur vor Ort möglich an. Deshalb verwies er die Klagerführenden an den iudex competens, nämlich der Statthalter, wobei er diesem manchmal oder vielleicht auch regelmäßig entsprechende Direktiven gegeben haben kann»¹⁷². This assumption, in addition to the evidence of the inscriptions mentioned and discussed by Eck, seems strengthened also by the texts cited above. Now, records referring to boundary disagreements seem to fall within either of the following broad groups:

on the one hand, cases of territorial disagreements settled, through factual enquiries, by administrative processes (texts with the formula «ex auctoritate imperatoris», followed by the name of the provincial governor or imperial delegate carrying out the operation of settling the boundaries); in general to be connected with boundaries not definitely determined in the settlement of a province, or areas «where the creation of new municipal organizations gave rise to litigation in the delimitation of territorial possessions», as rightly pointed out by Abbott and Johnson, 1968;

on the other hand, controversies decided by recourse to an arbitration

¹⁷² See Eck, 1990, p. 940; Bignardi, 1983, pp. 147 ff., has suggested that the procedure to settle this kind of territorial disputes by arbitration seems to have been influenced by the uti possidetis-interdict (see above, footnote 162).
procedure (either repeated disagreements in spite of any past decision already pronounced and recorded in documents; cases of boundary settlement «ex conventione» of the adjoining municipalities, acknowledged by the emperor through his delegate: see, for instance, ILS 9378, AD 62-69; IRT 854, AD 86-87; ILS 5954, AD 101; judges «given ex conventione»: CIL III, 2882; ILS 5949, both date to AD 37-41).

In other cases, it is the emperor (Vespasian) who directly intervenes in order to restore public domains of municipalities (see AE 1945, 85 = 1959, 267, AD 76: restoration of «fines agrorum publicorum» at Canosa173); CIL X, 1018 = ILS 5942, AD 79: «loca publica» seized by private individuals are restored to Pompeii, after an investigation and a survey on the spot - causis cognitis mensuris actis), or to restore «land of the Roman people» (see SEG 9, 1944, 352 and SEG 26, 1976-77, 1819 (Claudius, in AD 53 and 56); SEG 9, 1944, 165;166; 167; 360; SEG 26, 1841 (Vespasian, from AD 71 to AD 74)174.

Disagreements belonging to both these groups are tried by way of what has been called by Eck a «konkretes Handeln des Kaisers», which may well be regarded as an arbitral decision. It is, basically, the emperor's own opinion about where it seems right that a line of demarcation or a common boundary has to run. Indications converge that a clear continuity exists between Republic and Empire as regards the procedure to settle territorial disputes connected, in most of the cases, with the determination of the boundaries between adjacent municipalities. The fact that, as shown by our texts, both the senate and the emperor fixed binding guidelines (settlement of the point of equity at issue) in order that the dispute may be brought to an end by the competent magistrate is important.

Marshall (following Partsch) suggested that the senate's administrative system, on this particular matter, indubitably has its roots in the Romans' own legal experience, namely the schemas of the civil law procedure. In other words, the senate's role seems to be similar to that of the praetor, who fixes the point of law during the in iure stage, whereas the magistrates appointed by the senate are the equivalent of the selected iudex175. In

174 Vespasian's policy in Cyrenaica is confirmed also by the (so-called 'first') Hyginus (see cond.agr., p. 122, 15-123, 2 La = 85, 16-88, 2 Th); consequently, we cannot exclude the possibility that: a) his source of information was the imperial archive; b) 'these texts formed part of Hyginus' collection of imperial documents, mentioned at p. 133, 15-16 = 97, 6-8 Th.
175 Marshall, 1980, pp. 648-650. On the other hand, according to Mommmsen (see
addition, as Mommsen pointed out, since it is the emperor who quite often directs the provincial governors about how such cases have to be tried, one comes to the conclusion «dass an sich eine derartige Entscheidung nicht in der statthalterische Competenz lag» (1867, p. 113 = 1908, 336). We have therefore good reason to think that the procedure followed during the Empire to settle territorial controversies is, to some extent, an evolution of the fundamental pattern characterizing the formulary process of the civil law procedure.

Obviously, as for the technical nature of such disputes, the main source of information is, again, the writings of the Roman Agrimensores. In Urbicus' system of «effectus» of land disputes the technical nature of «effectus expositivus» is particularly interesting («explanatory outcome»: p. 69, 3-8 La = 29, 7-12 Th):

«The outcome of a dispute is 'explanatory' when a controversy is wanting proof from boundaries and is in greater need of the parties' reports, by means of which it has to be explained where in the boundary the markers are missing or the judge has to be persuaded of how they are to be replaced».

It may be noted, first of all that Urbicus does not make any kind of distinction between a 'private' and a 'public' nature of the controversy typified by such a procedure and subsequent effectus, although in a later passage (p. 86, 12-14 La = 47, 5-7 Th) he states that:

de his locis (scil. publicis), si r(es) p(ublica) formas habet, cum controversia mota est, ad modum <mensor> locum restituit; sin aute, utitur testimoniis et quibuscumque potest argumentis.

«If a municipality possesses maps of these public places, when a dispute arises the land surveyor restores that place according to its area. In the opposite case, he avails himself of statements or whatever argument he can».

Now, a similar technical procedure and terminology is employed in the dossier from Delphi discussed above. Avidius Nigrinus, in fact, states above, footnote 171), to disagreements between two communities do not apply «die Formen des Civilprozesses», but only a special form of procedure: this is commonly referred to as extraordinaria cognitio.
(columns II, lines 3-4 and III (Greek text), line 4 respectively; columns IV and V (Greek text) lines 8-9) that, before passing his sentence, he «explored and inspected the disputed areas according to the arguments of both parties» and also «carefully considered for several days all it was possible to draw either from information from people (notitia hominum) or existing documents».

On the other hand, a characteristic trait of many of the boundary controversies preserved, both those arising between private individuals and those between two municipalities, settled by means of an arbitral procedure, is a particular kind of survey map. Such a document basically represents the official ratification of the boundary settlement, published for the benefit of the parties in dispute. Detailed information therein concerns the position, number and type of markers: see the records listed above from Cierium, Histria, Perrhaebia, Delphi; Lamia and Callatis for public cases; both Herculaneum and Histonium for private ones. From a technical point of view, it is evident that there is no major difference between documents concerning a boundary settlement-operation which terminates a dispute of a private nature and delimitations of communal possessions. A passage attributed by the editors to (the so-called 'first') Hyginus¹⁷⁶ shows how tight is the connection between the limits of a title over a territory and a boundary settlement (p. 114, 12-115, 3 La = 74, 4-19 Th):

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territorii [aeque] iuris controver sia agitatur, quotiens propter exigenda tributa de possessione litigatur, cum dicat una pars in sui eam fine territorii constituta<\m>, et altera e contrario simili ter. quae res [haec autem controver sia] territorialibus est finienda terminibus, nam invenimus sape in publicis instrumentis significatione inscripta territoria ita ut EX COLLICVLO QVI APPELLATVR ILLE, ET PER FLVMEN ILLUD AD RIVVM ILLVM aut VIAM ILLAM, ET PER VIAM ILLAM AD INFIMA MONTIS ILLIVS, QVI LOCVS APPELLATVR ILLE, ET INDE PER IVGVM MONTIS ILLIVS IN SVMMVM ET PER SVMMVM MONTIS PER DIVERGIA AQVAE AD LOCVM QVI APPELLATUR ILLE, ET INDE DEORSUM VERSVS AD LOCVM
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¹⁷⁶ This paragraph was attributed to Hyginus by the editors because it contains similar concepts as in Siculus Flaccus (p. 163, 20-164, 2 La = 128, 8-18 Th), who, according to Lachmann and Thulin, relied to a large extent on (the so-called 'first') Hyginus work. Hesitant, but without conclusive arguments, Toneatto, 1984, p. 1611, n. 30.

It may be noted that the use to settle boundary disputes by pointing out the outer boundary (represented by natural or artificial boundary markers) of each party's land in the tenth century Italy is still the same as in Hyginus' passage: see E. Mancone (ed.), I documenti cassinesi del secolo X con formule in volgare, Rome, 1980.
A dispute about territorial right arises every time there is a controversy about possession of land because of the taxes which have to be collected. One party, in fact, affirms that possession lies within the boundary of its territory, and likewise the other opposes the same in reply. Such a disagreement has to be decided by the boundary markers of the territory. In public documents, in fact we often find that the territories are recorded with outstanding markers, such as «From the hillock which is called such and such, and along that river to such and such a stream», or «such and such a road, and along that road to the lower slopes of such and such a mountain, which place which has the name such and such, and thence along the ridge of that hill to its top and along its top and along the watershed to the place which is called such and such, and from there downhill to such and such a place; and thence to the cross roads devoted to So and So and thence past the monument of So and So» to the place from which the description first began».

We have already observed that the earliest example attested of exactly the same kind of technical operation to determine the boundaries belonging to a municipal organization is that of the *sententia Minuciorum*, which dates to the late second century BC.

As already seen, Frontinus does not mention explicitly or allude to any of the fifteen types of land disputes he later deals with in his work when he expounds the character of the second of three general «qualitates agrorum» (p. 4, 3-5, 3 La = 1, 18-2, 4 Th). It nevertheless seems that this type of land is the product of a technical operation connected with the settlement of disputes concerning «territorial rights»:

«Land contained in a survey' is land whose entire area has been assigned to a community, as for instance in Lusitania to the Salmanticenses or, as in Hither Spain, to the community of Palentia and in many (other)
The land subject to taxation has been granted, by surveying its outer boundary, to commonwealths on the basis of the entire area. Land belonging to private individuals is surveyed according to the same system.

Like the passage attributed to (the so-called 'first') Hyginus, this paragraph from Frontinus' work refers to the survey of the boundary of land belonging to a community and to taxes ("tributum"). "Tributum" is to be understood as a technical term, belonging to the vocabulary of Roman administrative practice, Frontinus uses to allude to the various forms of taxation levied by Rome on the land which is within the actual boundaries of a certain community. Now, nothing prevents us from thinking that 'ager mensura comprehensus' may be, in some cases, the territory assigned to a local community after the settlement of a boundary dispute with a neighbouring city, the official act of which is the map of the acknowledged boundaries.

In Frontinus' view, in fact, the surveys recording the delimitation of the outer boundary after the settlement of a boundary dispute between communities or private individuals are virtually the same. In other words, both civitates and privati agri, after such disputes, are officially entitled to control the land contained in the survey entered on the maps: the extent of the area of land, which is either granted or allocated, is not distinguishable from the survey of its outer boundaries.

Urbicus, on the other hand, following Frontinus' illustration (see p. 17, 1 ff. La = 7,1 ff. Th), seems to connect disputes about territorial rights with disagreements concerning the extent of the land under the jurisdiction of a res publica, rather than with the technical substance of the procedure to settle such claims (p. 84, 19-21 La = 45, 6-8 Th):

\[
\text{inter res p(ublicas) autem controversiae eius generis mouentur, ut}
\]
\[
guaedam sui territorii iuris esse dicant, quamuis sint intra alienos fines [...].
\]

"Such disputes arise between communities, as soon as they declare that some land belongs to the jurisdiction of their territory, although it is within the boundaries of another commonwealth."

At the same time, according to his view, the technical character of this kind of dispute changes only a little when it arises between a private individual and a community, or between the latter and imperial domains (p. 85, 10-15 La = 46, 2-7 Th):

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When communities are in dispute with private citizens, they have the habit of claiming as if it was by means of 'territorial right'. Moreover, res publicae establish this general condition for any place they are trying to declare as their own. Such disputes arise not only between commonwhealts and privafr9 individuals, but also very often between the former and the emperor, who possesses not a little in the provinces.

In the light of what has been observed so far, it is therefore possible to conclude that territorial claims or disputes can be distinguished from boundary disputes between private individuals only by considering whether determining the legality of the claim of the contending parties depends on the authority of civil or private law institutions. As for the substantive nature of such controversies, the inscriptions analysed so far do not allude to any distinction, from a technical or legal angle, between questions of possession of an area of land and questions about the precise position of a frontier line.

We have, in fact, only examples either of disputes about where the common boundary line was to run or disputes about the ownership of an area of territory contiguous to that of both the communities involved. It is self evident that the latter instance is a mere variation of the former. It is in fact always the operation of settling boundaries which produces not only the delimitation of territorial possessions, but also a change in the legal condition of the land and its inhabitants. There is no passage, in the Corpus Agrimensorum, which seems to point to a distinction between the technical character of the operation to settle these disagreements and those concerning boundary disputes between private individuals on the other hand.

This is not surprising, since the basic elements with which they had to deal, boundary markers and survey-maps, were the same. The extreme case is Urbicus who, in the context of his commentary upon the technical nature of the controversy «about the area» (modus), explicitly affirms that:
In fact, all the aforementioned land disputes (namely, 'about the position of boundary markers', 'about the straight line boundaries'; 'about other boundaries'; 'about the site' and, finally, 'about the area') may happen also to communities.

b) disputes between communities and private individuals

There are some inscriptions recording such disputes and they deserve close attention.

From Rhizenia and Pyranthus, on Crete, come two copies (IC I, 26, 2-3) concerning a surveying and boundary settlement operation carried out by the proconsul of Crete and Cyrenaica in AD 63-64, Lucius Turpilius Dexter, in order to restore to Gortyn public land seized by private individuals. It is worth noting that Dexter was commissioned jointly by Nero and the Roman senate (see Baldwin Bowsky, 1986-87).

From the same island comes an inscription (AE 1969/70, 635) recording the settlement of a boundary dispute, between the colony of Capua and a private citizen, over the land around Cnossos under the jurisdiction of the Italian city (to which this land was granted by Octavianus):


In the year of the tenth consulship of the emperor Domitian, Caesar, Augustus, Germanicus, according to the decision of the emperor Titus Augustus and also a decree of the colony Capua, by mutual agreement of the parties, boundary markers have been placed between the colony Flavia Augusta Felix Capua and Plotius Plebeius, with Publius Messius Campanus, procurator of Caesar, dealing with the matter.

As already emphasized by the editor of this record, it is likely that, in the

first place, both parties appealed to Titus, emperor from AD 79 to 81, for a settlement of the dispute by mutual consent. When Messius Campanus, an imperial procurator, brought to an end the dispute by settling the boundaries in AD 84, Titus' judgement had been already ratified by the council of Capua.

Now, it has been observed in the previous chapter that Urbicus' passage concerning *effectus coniunctivus* (p. 68, 21-23 La = 28, 27-29 Th) possibly contains a reference to the *ex compromisso*-procedure:

«Most people prefer to carry out and confirm (this kind of) settling the outer boundary by a 'mutual agreement', rather than by 'choosing judges by lot'».

We may therefore come to the conclusion that inscriptions containing the formula 'ex conuentione' refer to a peculiar kind of procedure, when the parties settle by agreement.

The following inscriptions, characterized by the typical opening formula 'ex auctoritate' followed by the name of the emperors (and sometimes also the name of the provincial governor or imperial delegate who manages the operation) also refer to the same kind of dispute. CIL III, s. 14206, 4 = ILS 5981 (from Macedonia), dating between AD 98 and 102 records a boundary settlement between the «res publica Philippensium» and Claudius Artemidorus.

AE 1923, 26 = ILT 1653, which dates to AD 105, records a boundary settlement between the community of the Musulamii and Valeria Atticilla. The most interesting document by far about disputes between a private individual and a community comes from the city of Daulis (Phocis) (see IG IX, 1, 61). Its importance lies in the fact that all the stages of the process concerning land of dubious ownership have been carefully recorded:
With good fortune. In the year of the second consulship of the emporor Trajan Hadrian Caesar Augustus and the year of the consulship of Gaius Pedanius Fuscus Salinator, on the ninth day before the Calends of November (24 October AD 118), from Chaeronea. Zopyros, son of Aristion, and Parmenon, son of Zopyros, legal representatives of the city of Daulis testified that a copy has been made of what had been judged by Titus Flavius Eubulus, which runs as follows:

« I, Titus Flavius Eubulus, judge and boundary settler, appointed by Gaius Pedanius Fuscus Salinator, proconsul and keeper of the proconsul's office, for the land dispute between Zopyros son of Aristion and Parmenon of Daulis, and his legal representatives, have made this copy, which runs as follows:

Φλάνιος Εὐβολός, ὁ δοθεὶς κρίτης καὶ δρί | στῆς ἐκ τοῦ Καίσου Μαξιμοῦ | ἀνθυπάτου μετα | ἐν Ζωτίρου τοῦ Ἀριστώνος καὶ Παρμένωνος | τοῦ Ζωτίρου | καὶ Μεμία τοῦ Ἀντίοχου περὶ χώρας | ἀδιαφορημένης, ἀκούσας ἐκατέρου μέρους | ἐφ' ὅσον ἐξουλοσκε | ἐπὶ τὴν αὐτοψίαν ἑλθὼν, | κελεύοντος με | ἀποφήμασθαι Κλωδίων Γρα | παῖν τοῦ κρατιστοῦ ἀνθυπάτου, κρέων (sic) καθὼς | ὑπαγορεύσατο. ἀργοῦ δρυπτίου, ὁν ἡγώρασε | παρὰ τῶν Κλέας | κληρονομὸς Μέμιος Ἀντίο | χος, καταλαβόμενος ἐκ τῶν ἐπι | με κομισθέν | τῶν προσήκειν Ἀντίοχου πλέθρα | Ἀφικά τιλε', ὅσα ἦν εὑρεθῆ πλέω τοιω, | κρείνω εἶναι τῆς Δαυλείως τόλης. ὁμο | ὦς ἀργοῦ εὐξυλίειας πλέθρα υἱ' | κρείνω | εἶναι Ἀντίοχου, τα δὲ λοιπὰ τῆς τόλης εἴ | ναι. χωρίων πλατάνου | καὶ μοσχοτομεῶν | πλέθρα οἷ' κρείνω εἶναι Ἀντίοχου, τα δὲ λοι | τα τῆς τόλης. τὴν ἀρχὴν τῆς μετρῆσεως | κρείνω γενέσθαι τῆς χώρας, ὅπερ ἄν | βου | λῆται Ἀντίοχος ἐν ἐκατέρῳ <ν> | τῶν ἀγρῶν, | δρυπτίῳ καὶ εὐξυλίειᾳ, | ἐν δὲ πλατάνῳ | καὶ μοσχοτομεῶς μὰ ἐπ' ἀμφοτέρους ὄρ | χὴ τῆς μετρῆσεως ἐστα, μετρουμένων | ἀπὸ τῆς δοθείσης ἀρχῆς τῶν ἑφεξῆς, μὴ | ἐλλογουμένων ταῖς μετρῆσεων ἀκτάσιος | μὴτε ἑβίδρων μὴτε ὀνα τραχέα δύνα | καὶ | μὴ δυνάμενα γεωργεῖσθαι ὑπὲρ ἐκα σφύ | ρως ἑστίν. Παρῆσαν (there follow the names of twelve witnesses). Ψηφίσαμες τῆς τόλης.

(right side) ὃδός δὲ ἡ ἐπὶ τῶν | ἀρχαγείτην ἔξεις πλά | τοὺς καλάμους ὅδο. | τα δὲ σημεία καὶ τό[ς] | ὀροὺς τῆς μετρῆσε | ὡς ἐνθαράξουμαι κο[ι]νῆ ἐντὸς τῆς εἰκάδος | τῶν δωδεκάτων μῆ | νός, ἡμῶν ὅταν ἐν | χαρακχθὼν ἐπελευ | σομεὼν αὐτῶν. | Περὶ ἀγροῦ δρυπτίῳ | κατὰ τὴν προκομισθ[α] | σαν χώρα | ἑτο Σερα[πί] | ὁδός Ζωτίρου τοῦ | ἑγήκου καὶ τῶν περὶ | Φιλωνα | Σωσιατράτου | καὶ Δάμων Ζωτοῦ | ροῦ ἀρχόντων | μαίν, εἴ τι λείπει | τῶν ἀρ | ἰμαι ἐκ τῆς ἀποφάσεως τῆς Εὐβούλου | τετρακοσίων τριάκοντα | τῶν πέντε πλέθρων | τούτων ἔχειν ἀπαίτησαν Σεραπίαδα ἐκ τῆς Δαυλείως πόλε | ὡς. Παρῆσαν (there follow the names of twelve witnesses).
Parmenon son of Zopyros on the one side, and Memmius Antiochus on the other, having listened to both parties for as long as they wanted, and after having in person inspected (the disputed places), since Clodius Granianus, the most authoritative proconsul, ordered me to express my opinion, I pass the following sentence.

Of the olive-grove Memmius Antiochus bought from Klea's heirs, as far as I was able to judge from those documents given to me, 435 Phocian plethra belong to Antiochus; all found beyond such an amount, I judge to belong to the city of Daulis. In the same way, I judge that 430 plethra of fine timber land belong to Antiochus, the rest to the city; of the parcel with plane-trees and osier-beds, I judge that 230 plethra belong to Antiochus, the rest to the city. I also judge that the measurement of the aforesaid land should start from whatever point Antiochus wants in each of those plots with olives and fine timber. But in the case of the land with plane-trees and osier-beds there will be only one starting point for the measurement of both lands. They shall be measured one after the other from the given starting point, and in such a survey there will be not included either streams or rugged places which are impossible to cultivate, beyond ten measures'. There were present (nine witnesses). By decree of the city »».

(right side) «The road leading (to the place called) 'the Archegetes' will be two kalamoi wide. They will engrave, by mutual agreement, the markers and the boundaries of this survey within the twentieth day of the twelfth month, with us following them when the markers are engraved. As for the olive-grove, according to the document, produced by Serapias, of Zopyros the legal representative (of Daulis) and the magistrates in the village - Philon son of Sosistrates and Damon son of Zopyros- , we judge that, if something is missing from the amount, according to Eubulus' verdict, of 435 plethra, Serapias is entitled to obtain it from the city of Daulis. There were present (twelve witnesses)».

The first section of this document178 clearly shows that the city of Daulis and a private individual (a Roman citizen ?) were in dispute about the right of ownership over three distinct parcels of land. Both parties appealed to the provincial governor. Consequently, Titus Flavius Eubulus was appointed «as judge and boundary settler» by Cassius Maximus, proconsul

For the office of dikastês or syndikos, see D. Magie, Roman Rule in Asia Minor, II, Princeton, 1950, p. 649, note 79.
of Achaia under Trajan in AD 116. Eubulus held his office also under Maximus' successors: Valerius Severus (proconsul in AD 117) and Clodius Granianus (AD 118). The settlement of this dispute took place, on the twenty-fourth of October AD 118, in Chaeronea, probably in the place of the provincial assize. It is worth noting that the arbitrator, as in those cases of territorial disputes previously discussed, states that he had taken into account both parties' opinion and inspected the disputed areas and the related cadastral documents before passing his judgement. According to it, Antiochus was entitled to possess, for each of his estates, the number of *plethra* Eubulus specifies in his sentence.

And the surveying operation, mentioned soon after in this record, is intended to ascertain the actual extent of Antiochus' estates and to enclose them by new boundary markers. Probably these estates were located close to the land belonging to the city, portions of which, in the course of the time, had been encroached upon by the next owners. It is worth noting that Antiochus' estates will not include portions of untilled land or water streams over a certain limit.

The second part of the inscription, dealing with a technical question connected with the earlier sentence, is an implementation of it. First of all, Antiochus is not mentioned in this section. It has been suggested by Dittenberger (see his commentary on this record in IG) that Serapias, mentioned in this part of the inscription, is the daughter of Antiochus. She may have gone to law anew, with regard to those details which appear in the appendix, so to speak, to the earlier sentence. The first remark prescribes, in the later sentence, the width of a road, possibly between the land which is the object of the dispute and the public land.

It is also interesting that the end of such disputes was the drawing up of a survey-map, where boundaries and boundary markers were engraved. This document is completed by the two parties by mutual agreement, and what is there prescribed is going to be acknowledged only after the official registration of the act. Now, since Eubulus' verdict was given around the end of October, we may conclude that it took two months to complete the measurement of the whole area of land and to settle the new boundaries. Finally, Serapias claims (on the basis of a document written by the same Zopyros, legal representative of Daulis against Antiochus) that she is entitled to obtain back from the city of Daulis the land necessary to complete the number of 435 *plethra of druppis*-land.
It may be, following Dittenberger's and Luzzatto's remarks, that the later dispute was not tried before the proconsul, but was settled under local jurisdiction. Finally, as Marshall has observed, this inscription shows «an unusual intermingling of the procedure of a Roman iudex datus and a Greek arbitral commission» (Marshall, 1980, p. 649, n. 79).

Conclusions

As for the general technical aspects we may note, first of all, that the procedure in use during the empire to settle boundary disputes indubitably represents an improvement on Greek ones. It has been underlined (see Daverio Rocchi, 1988, p. 72 and 83) that both the arbitration of a single individual and a staff of experts in service for the specific task of surveying were alien to the Greek system. Translated into practical terms, a system like this is nevertheless likely to cause immense delays in the settlement of disagreements over land.

As for the epigraphical evidence concerning territorial disputes and the technical procedure to settle them, on the basis of what has been observed it seems likely that no difference emerges, from the writings of the Roman Agrimensores, between this latter class and controversies among private individuals. It cannot be a simple coincidence, in fact, that Urbicus creates the term «publica persona» (see p. 80, 1 La = 40, 1 Th; «persona coloniae»: p. 86, 1 La = 46, 22 Th) aiming only at a practical distinction, rather than a strictly legal one (see Grellle, 1964).

We have also seen that, in disputes settled by arbitration or by administrative procedures, the stages to bring to an end the case are the same. The fundamental operations are, in fact, analysis of the information from both written and oral sources, inspection of the area at issue, intervention of a surveyor in case the sentence has to be implemented by means of technical advice, settlement of the boundary markers and the boundary line.

It has also been underlined how close is the similarity of such a procedure if a disagreement arises either between private individuals or between municipalities. In both instances, in fact, the main purpose of the contending parties is either a survey-map of the area in dispute, or a ratification of a previous map. It may be noted, finally, that the basic office of the arbitrator, whether the senate or the emperors (and their delegates),
who has to try the cases of territorial disputes, is that of establishing where
the line of demarcation has to run within an area of land which may be
sometimes the same as the whole territory of a community.

His authority seems nevertheless based on the same principle on which is
based the authority of a private judge: «When the judge appointed to
regulate boundaries is unable to settle the boundaries, he is allowed to
settle the dispute by adjudication. And if, in order to eliminate long-standing
unceratinity, the judge should wish to trace anew a boundary line in a
different place, he can do this by adjudication and condemnation» (see D
10, 1, 2, 1 (Ulpian)). It is, therefore, clear that a continuum extists between
territorial controversies dealing with the boundary line or a whole area of
land. This continuum is also characteristic of the same kind of disputes
arising between private individuals.
Chapter 6

CONCLUSIONS

In the present state of our knowledge, many of the questions concerning the text and transmission of the writings of the Roman Agrimensores must remain open. In the past pages, in fact, we have seen that it is not possible to go beyond conjectures about the nature and purpose of many of the writings in the Corpus Agrimensorum, or about both the possible relationship between their original framework and the way they have, in some cases, been later epitomized and inserted in the Corpus, or the internal relationship between the treatises which have come down to us and the fields of knowledge they tried to cover. Nonetheless, it seems that some conclusions can be drawn which may represent a constructive approach to the interpretation of this particular kind of literature when further studies are undertaken.

First, after the foregoing minute analysis of Frontinus' and Urbicus' works, there can be no doubt that the latter - as already suggested by Lachmann - accumulated part of his material from the former's writing on surveying. We have also seen that Frontinus' anonymous commentator (who set out to write after either 438 or 535 AD: see above, Chapter 3), undoubtedly the latest author of our Corpus, pillaged and plagiarized the works of his immediate predecessors (Frontinus - whom he cites by name - Balbus, Siculus Flaccus, Urbicus, 'first' and 'second' Hyginus). This seems to indicate that just before larger collections of these texts in the later fifth-sixth century AD (the earliest extant example are the two halves of the Arcerianus, B and A) were established, either individual authorities or a certain number of texts of the literature published earlier could be conflated in writings like those of Urbicus and Frontinus' anonymous commentator. In contrast with the aim of the larger miscellaneous selections, which seem to be designed to be used as reference books or systematic teaching texts for all the technical aspects of the discipline, Urbicus and Frontinus' anonymous commentator still aimed at achieving the mastery of the subject matter by composing a 'unitary' work, the creation of a single writer. In the late miscellaneous collections of texts on surveying (at a later stage transmitted by the manuscripts of the Arcerian and Palatine family: see
above, Chapters 2 and 3) long passages - in some cases almost the entire text - from the original works were arranged in a systematic order, probably for didactic purposes. Because of the large number of instructions there given (concerning the technicalities of boundary markers and land surveying), the list of allocated and centuriated land in Italy and the collections of laws about land disputes, it is the whole collection, and not individual writings or compilations, that bears now the character of the 'new', self-consistent handbook (see Petrucci 1986).

It has been suggested (see Introduction) that short outlines concerning the basic technical terms connected with land surveying were possibly in use for basic teaching purposes already in the late first century BC. Columella, who probably lived in the reigns of the Julio-Claudian emperors, points out that (I, 3; I, 5):

*atque ego satis mirari non possum, quid [...] mensurarum et numerorum modum rimantes placitae disciplinae consectentur ma qistrum (...).*

«I cannot cease to wonder why [...] those who investigate the principles of measuring and mathematics emulate a master of the subject of their choice»;

*adhuc enim scholas [...] geometrarum [...] esse audui [...].*

«For I have heard that there are already schools for 'land measurers'».

It may therefore be assumed that the training of a 'land measurer' was not accomplished without schooling. Consequently, we may speculate on what kind of theoretical instruction and books were used in such scholae.

Quintilian (who wrote under the Flavii), while expounding the importance of geometry among the disciplines training orators have to know, states that (I, 10, 36):

*illa uero linearis ratio et ipsa quidem cadit frequenter in causas, si de terminis mensurisque sint lites [...].*

«Indeed, it is the very science of lines that frequently takes part in a lawsuit, when boundary markers and surveys are the object of the dispute».

The natural conclusion is, therefore, that earlier jejune sets of technical definitions (an example of which seems to have been preserved by Varro)
were later replaced with works like the book Frontinus wrote on surveying. This is perhaps because 'unitary' systematic texts dealing, for the convenience of their readers (as already seen, both laymen and experts), exhaustively with the complexities of this discipline within a few years became a necessary tool.

On the other hand, if it is likely that a regular training programme for land surveyors existed, it is also natural to assume that their theoretical instruction was not based only on the texts a master used in order to have a complete view of the subjects of the craft, but also on the handbooks written by skilled agrimensoris on the basis of their own experience and any useful information gathered from other authorities, in some cases characterized by an orderly systematization of both the technical and legal aspects connected with the subject matter. In other words, as surveying developed as a more and more specialized practice under the influence of public and private disagreements concerning land and the systems by which it was marked out, the theoretical and practical treatment of this subject was performed also through specific manuals (meant as teaching aids provided with demonstration maps, lists of centuriated territories, plans of boundaries and so forth) for both apprentice surveyors and people already working in the field. From such syntheses of practical examples, serving as basic and updated guidelines, they learned not only how to deal with different kinds of cadastration systems and boundary markers (which questions are no doubt closely connected with land disputes) of various areas, but also could find definitions of technical terms entered on earlier maps and records and no longer in use in their own time.

Therefore, nothing prevents us from thinking that such texts, since they served as reference books, afforded informations drawn, to a great extent, from official records concerning both the centuriation of urban centres or the system of boundary markers used, for public and private purposes, in different territories, in Italy and in the provinces. Now, we have seen that Frontinus expounds the main characteristics of the three great classes of land he deals with in the first section of his work on surveying but, as far as we can judge from what we have of his text, it was not his aim to write an exhaustive and systematic handbook on the various centuriation and boundary marker systems used in the first century AD: his perspective, in fact, is only apparently followed by the so-called 'first' Hyginus, who actually deals with great classes of centuriated land. It is, in fact, not a simple
coincidence that scattered and general references to centuriated grids and boundary markers are found in all the different sections of Frontinus' book, whereas they became systematic in the works of later writers, like (the so-called 'first') Hyginus and Siculus Flaccus (not to mention those extracts exclusively «de limitibus», on boundary stones, transmitted under the names of Latinus, Gaius, Vitalis, Faustus and so on). According to (the so-called 'first') Hyginus, for instance, a surveyor has to perform his office by taking into account any possible «usual practice» typifying the area where his intervention is needed (p. 129, 7-11 La = 92, 13-16 Th):

*Sed consuetudines usque regionibus intuendae, ne quid noui a nobis fieri uideatur: ita enim fides professionis constabit, si maxime secundum morem regionis et nostri quaestiones tractauerimus.«

"We have always to observe the usual practices of a region, to avoid the impression that we have performed an novel kind of operation. In fact, [our] profession will be trusted if we also conduct a case basically according to the practice of a region".

A similar concept is expressed by Siculus Flaccus (p. 139, 9-10 La = 103, 9-10 Th; see also p. 149, 19-20 La = 113, 20-21 Th):

*Maxime autem intuendae erunt consuetudines regionum, ut ex uicinis exempla sumenda.«

"We have to pay attention, in particular, to the usual practices of a region, just as examples are to be taken from neighbouring areas".

Therefore, in addition to the knowledge of official records of either *subseciva*-land (*subsiciuorum omnium liber*: see p. 202, 5 La = 165, 4 Th) or of land granted by the emperors (*liber beneficiorum*: see p. 295, 12-13 La), it is natural to assume that especially land surveyors having bureaucratic functions and performing their duties in several different regions had to acquire a competent knowledge of the various ways a territory was marked out and allocated in each area.

Consequently, we may assume that the two lists of colonies and centuriated areas known as *Libri coloniarum* (the first lists cadastres in Italy, Sicily and Dalmatia; the second only centuriated land of communities in part of Italy), containing technical details about the centuriation systems and
boundary definitions of each area with some pretence of completeness, served this particular, practical purpose. If this is true, it follows that there may have existed also handbooks, intended to serve as introductions to the bare records transmitted by the lists of centuriated areas, prepared for the instruction and guidance of those who had to deal with such official technical documents. In a recent study (see Grelle, 1992) of the compilation known as the first Liber coloniarum - a conflation from eight lists of different centuriated areas (transmitted by the Arcerianus under the title Liber Augusti Caesaris et Neronis: p. 209, 1-3 La), based on some manipulated extracts entitled Commentarium Claudi Caesaris (about Tuscia: p. 211, 23 La), Liber Balbi (about Picenum: p. 225, 14 La) and Liber regionum (about civitates Campaniae: p. 229, 12 La) - it has been convincingly argued that the section dealing with the urban centres of Campania, possibly not much earlier than the final compilation to which this extract was attached, was composed around the middle of the fourth century AD for didactic purposes. According to Grelle, also this final compilation, not necessarily to be identified as being a comprehensive list of centuriated areas (in fourth century Italy divided into provinciae) written by imperial officials for bureaucratic purposes, seems to bear the character of a «prontuario per le attività professionali degli agrimensores». Moreover, he points out that the references, in the extract concernig provincia Tuscia - whose heading is Commentarium Claudi Caesaris (C. Iulii Caesaris according to Mommsen, 1852, p. 160, n. 16) - to operations of land assignment by Trajan in the territory of Veii (p.223, 3 La) and a settlement of boundary markers by Hadrian at Veii (p. 222, 1 La; see Boatwright, 1989, pp. 242-245) implies that such lists of centuriated areas had been actually brought up to date before they were combined in the so called first Liber coloniarum. It is worth noting, for instance, that Balbus, under whose name is transmitted an ad Celsum expositio et ratio omnium formarum (pp. 91-108 La), if not also the author of a comprehensive list of centuriated areas of the second century AD Italy (Liber Balbi) which was later built on as the first Liber coloniarum (as suggested by Mommsen,1852, pp. 146 ff.; a different interpretation in Grelle,1992, pp. 70 ff.), seems to have written a work on centuriation and land assignments in Picenum (p. 225, 14 La).

On the other hand, it seems that some references to particular areas of Italy in both Siculus Flaccus' and Urbicus' works on surveying imply an informative list like the so called first and second Liber coloniarum. Urbicus,
for instance, talks about Lucus Feroniae (p. 77, 20 La = 37, 13 Th) mentioned in the Liber coloniarum II (p. 256, 19 La). On the other hand, Siculus Flaccus refers to montes Romani in Picenum and in the territory of Reate (p. 137, 1-3 La = 100, 16-18 Th), which are mentioned in the so called first Liber coloniarum (E 13: p. 239, 20-240,1 La), in the ager Carsolis (see also p. 254, 11-12 La, from Liber coloniarum II). In addition, he refers to the 16 x 25 actus grid of the centuriation of the ager Beneuentanus (p. 159, 22-25 La = 124, 5-8 Th) which is found also in the first Liber coloniarum (210, 1 La) and to the ager Pisaurensis and its river (p. 157, 21-26 La =122, 2-9 Th), mentioned in an extract on Picenum of the Liber coloniarum II (p. 257, 23-25 La) and by Urbicus (p. 52, 10-13 = 44, 20-23 Th). Siculus Flaccus also tries to expound the technical nature of the limitationes Gracchanorum et Syllanorum (p. 165, 10-17 La = 129, 25-130, 4 Th) which are found «in quibusdam etiam regionibus» («in some regions»). According to him, these are a kind of centuriation characterized by those stones «quos Gracchani aut Syllani posuerunt». Besides termini Augustei (e.g. p. 227,16 La), termini Tiberiani (e.g. 218, 10 La ) and termini Claudiani (e.g. p. 227, 5 La), termini, limites or lapides Gracchani are mentioned several times in the Liber coloniarum I (p. 209, 8 La; 209, 16 La; 209, 21 La; 210, 7 La; 211, 3 La; 232, 14 La; 239, 11 La; 242, 7 La; 253, 1 La; 253, 4 La; 261, 1 La), but no limites, lapides or termini Syllani (several times a Lex Sullana: see p. 214, 10 La; 226, 7 La; 230, 13 La and so on). Now, it is worth noting that in an earlier passages Siculus Flaccus refers to Gracchus and illustrates his policy (p. 136, 7-13 La = 99, 23-100, 6 Th). Siculus Flaccus also mentions coloniae, municipia and praefecturae in Italy and explains the historical and administrative character of the first two (pp. 135, 1-138, 2 La = 98, 11-101, 21 Th); coloniae, municipia and praefecturae are listed in the first Liber coloniarum. We cannot, therefore, exclude the possibility that Siculus Flaccus' work on the technicalities of surveying was intended to be a solid practical manual, designed as an introduction for the convenience of those for whom the 'art of surveying', for administrative tasks, principally implied empirical acquaintance with official records of plans of boundaries.

Unfortunately it cannot be proved that Siculus Flaccus provided his work with demonstrative maps and short extracts on cadastres, like the 'Stadtverzeichnisse' in the Libri coloniarum, in an attempt to make the textual meaning more clear, or that he or Urbicus were responsible for the
manipulations of these lists, for instance the Liber Balbi. Nevertheless, Urbicus' name appears at the end of a fragment of the Jena copy of the Arcerianus, attached to the so called Liber coloniarum I (p. 246, 16 La: «ex commentario Urbici edictorum VI [...]»), which is entitled «ex Libro Balbi, ex Libro Caesaris, ex lege triumvirali» (p. 245, 1 La). Moreover, at the end of the list of civitates Campaniae is mentioned again a «Liber Balbi mensoris, qui temporibus Augusti omnium provinciarum et formas ciuitatum et mensuras compertas in commentariis contulit et legem agrarium per diversitatem provinciarum distinxit ac declaravit» (p. 239, 15-19 La): the expression «diversitas provinciarum», be it noted, is used otherwise only by Urbicus (p. 63, 15 La = 24, 5 Th).

Consequently, we may conclude that there is a common trait in the works on surveying written by Frontinus, (the so-called 'first') Hyginus, Siculus Flaccus and Urbicus: the study of the technicalities of land surveying cannot be separated from that of the official records and imperial constitutions which, to their knowledge, play the role of fundamental elements to understand the historical development of the Roman centuriation system (see Gabba, 1992).

The influence of Frontinus' treatment of the subject, therefore, seems to have continued in an unbroken tradition from the first century to the age of Urbicus (see above, Chapter 4).
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