

CHAPTER 4

TRANSLATION AND ANNOTATION

*TYBERIADIS*¹,

A TREATISE ON RIVERS BY MASTER BARTOLUS OF SAXOFERRATO.

IN THIS, THE FIRST PART OF THE TREATISE, THE MANNER IN WHICH ALLUVION SHOULD BE DIVIDED, IS DEMONSTRATED. NOW AT LENGTH CLEANSED BY HERCULES BUTTRIGARIUS², GILDED KNIGHT OF THE SACRED LATERAN³ PALACE, OF NUMEROUS CLOUDING ERRORS DUE TO THE INJURY OF TIME AND THEREAFTER THE CARELESSNESS OF COPYISTS, RESTORED TO ITS PRISTINE, MOST SIMPLE BEAUTY AND ELEGANCE THROUGH THE HIGHEST SCHOLARSHIP AND LABOUR,
IT IS PUBLISHED.

PREFACE

Tyberiadis is a region established next to the Tiber River. The Tiber River is, moreover⁴, distinguished in the territories of Italy. It flows in fact through the city of Rome, Chief City and mistress of all the city-states. Within the district of Rome, it enters the sea and there it is navigable. It also retains its name all the way to the sea. It is called the Tiber after the Roman Emperor Tiberius⁵ from

whom we have some promulgated laws and the river is frequently mentioned by this name in our laws. This river moreover circles that splendid mountain on which the city of Perugia is situated and while flowing a great distance through its district, the river itself is bordered by plains, hills and similar places. These places are also well inhabited, enhanced with many beautiful buildings and luscious orchards bearing lots of fruit. Thus, when I was resting from my lecturing and in order to relax, was travelling towards a certain villa situated near Perugia above the Tiber, I began to contemplate the bends of the Tiber, its alluvion, the islands arising in the river, the changes of the river-bed as well as a host of unanswered questions which I had come across in practice. There were also other matters, which came to mind from my own observance of the river. I began to consider in various ways what the legal position was, not believing that I would take it any further, lest not to spoil my vacation, the reason why I had come. And thus while I slept that night, I had a vision near dawn that a certain man, whose countenance I found gentle, came to me and he said the following: "Write down what you have begun to think about and since there is a need for illustration, provide mathematical diagrams: Look! I have brought you a reed pen to measure and draw circles as well as a ruler to draw lines and to construct diagrams". I told him to spare me from illustrating legal matters with geometrical diagrams, since were I to do that, there would be many more scoffers than supporters. Then, looking at me with a troubled countenance, he said: "Bartolus, I know that you have something (in you) of God, but are you indeed afraid to be ridiculed for your service? It contradicts the life of Christ and all the Saints, for those who do well are not affected by insults, scoffing or injurious words. You also have something (in you) of a highly moral person. This fear, which causes you to shrink away from what is good, is opposed to that moral virtue known as valour. It is truly within you to do well; you should not be concerned with what everyone says". I shamefacedly said: "I agree with you", but led on by my first impulse I responded by also asking him what the direction will be of this work that must be undertaken. He told me: "Begin without fear, seeing that God will be with you in the execution of the work. He will reveal many things that are hitherto unknown to you". I got up and trusting in the good will of Him who had promised that he would be with me in

the execution, I started that work and named the whole treatise the *Tyberiadis* in order not only to discuss problems concerning the Tiber itself, but also many other problems occurring in the region of the Tiber. I reckoned that just as all laws originate from the city of Rome, in like manner, what is said about the Roman river Tiber, could also be applied to all other rivers. I divided it, namely the treatise, into three books. Alluvion is discussed in the first book; in the second, an island arising in a river and in the third, a river-bed. I thought deeply about the diagrams that had to be drawn in the first book of the treatise and I drew the diagrams themselves and explained them. And then, when I started on the diagrams of the second book and some questions had arisen which I had to reconsider more earnestly, a certain brother Guido of Perugia, a well respected theologian, learned in many fields, who had been my tutor and was a teacher in geometry, visited me. He did not intend to stay, but such a heavy rainstorm arose that he was forced to spend the night in my company and to remain the whole day. Then I said: "I understand indeed what I had been told regarding the execution of the work" and I shared with him the above-mentioned story and completed the diagrams of the second book. I also received much religious joy from the religious conversations with him. I mentally stored that which I planned to relate in the third book and when I had returned to Perugia with all this material and had revised it, I composed the book in the form in which it is written below, and delivered it to our university in 1355.⁶

AN EXPOSITION OF THE LEGAL PROVISIONS GOVERNING THE
DIVISIONS OF ALLUVION BY MASTER BARTOLUS OF
SAXOFERRATO

Gaius states in D 41 1 7 1⁷ that what the river adds to our field through alluvion, becomes ours by the law of nations. Addition by alluvion is deemed to be that which is added so gradually that we cannot, at a given moment, discern how much is added. But⁸ if the force of the river has torn away part of your property⁹ and has brought it down to mine, it obviously remains yours. Of course, if it adheres to my estate over a period of time and trees, which it has dragged with it, take root in my land, they are deemed from that time to have become part of my estate¹⁰. Here ends the quotation. It was thought best to minimise in writings the legal provisions pertaining to the law of nations as a range of controversies arise from it. Let us therefore construe the provisions of said law. The law states:

Quod

The word *quod* is understood as non-specific, meaning whatever object as in D 4 9 1 6¹¹. Thus, if the river has added virgin soil or stones mixed with soil to our estate, it becomes ours, even if it had contained jewels or precious stones. And it does not conflict with Inst 2 1 18¹² since in that case stones found on the sea shore which belong to no one are discussed and in this case stones which adhere to our property. Similarly, if the river has added wood, gold, silver or money to our property, then it will be ours. In fact, the law speaks of anything whatsoever: as long as it is added in such a manner that it coheres to the soil. This is clear from the word *adiexit* (it has added), which will be discussed below. Neither will it proportionately belong to the discoverer as in Inst 2 1 39¹³ and D 41 1 31 1¹⁴. In that text, the money, which is termed *Thesaurus* (finding of treasure) in said law, was indeed buried there long ago but in this case money was transferred from an unknown location by the force of the water and added to our property. Nor does it even conflict with D 39 2 9 1¹⁵ and D 47 9 7¹⁶ since I understand that in this case it is unknown to whom the said adhered objects belong, otherwise they would not become our property as will be explained in the proper place and further down.

Per alluvionem

This phrase is explained
by the law itself as will

be evident below.

1. *A field is a place devoid of building.*
2. *A field has three sides.*
3. *A road running between a field and the river does not impede the right of alluvion.*
4. *A river-bank and places sloping towards the river-bank are not to be measured when selling a field unless so agreed.*
5. *Hedges of properties bordering upon public roads are in the same position as river-banks, which are common.*
6. *Ditches situated between the river-bank and an estate, belong to those to whose estates they adhere, however, their use is public.*
7. *(The problem is discussed) in which way ditches situated between a road and an estate should be measured.*
8. *(The problem is discussed) in which way banks situated on an estate should be measured in the same way.*
9. *The hollow of furrows, which exist due to annual cultivation or to divert water, is not measured.*
10. *Pits, belonging to a field are said to be created for perpetual use.*
11. *Mountains are usually uncultivated and of great height.
Hills, however, are of medium height and cultivated. A mountain is, however, distinguished from a hill by an estimation of the surrounding inhabitants.*
12. *A place surrounded by mountains or hills is termed a valley.*
13. *It is called a plain when it is extensive and all parts of it are level.*
14. *A valley should be distinguished from a plain in the same way.*
15. *A plain should be level.
It is termed a plain when it may be said to clearly extend uninterruptedly on one level.*
16. *As for a ditch belonging to fields and shoulders of roads – those, which are situated on a plain, belong to the plain.*
17. *A punitive statute created for the Tiber plain, in fact has application to the ditches of fields, roads and the edges of the plain.*
18. *The question is asked: will something, which was created in a place where the water due to erosion runs down in the direction of the river, be called an offence on the Tiber plain?*

Agro

[1] A field, according to law, is a certain place devoid of building, so termed in D 50 16 211¹⁷ and D 50 16 27 pr¹⁸.

But what if I own a house next to a river and the river added to it in the very same place through alluvion? It will certainly be mine and thus the legislator used the term *ager* to indicate that alluvion occurs in connection with the soil, not the building built upon it. In order to indicate this, the legislator mentions both *ager* and *fundus* in the latter part of the legal passage, which we have referred to above. The terminology is general, even concerning buildings as in D 50 16 60 pr¹⁹, D 50 16 115²⁰ and D 50 16 211²¹. [2] But while three sides of the field constitute the level ground of the actual field, similarly the areas where the river-bank slopes down, namely where the slope first starts to run down from the plain to the water, should be regarded as areas which begin to slope due to the erosion of the water as in D 43 12 3 pr²². Also note the definition of river-bank, that is the portion which holds the river in check while the course of the river-bank retains (the river's) natural direction as in D 43 12 1 5²³. [3] It can be asked how the soil is said to be added, but I respond: "It is enough that it is clearly added to any of the said parts" because should there be a road in between, the right of alluvion is not impeded as in D 41 1 38 pr²⁴. Moreover the gloss²⁵ on Inst 2 1 20 states (in the discussion of the word *adiicit*) "by placing it next to your estate." [4] The question arises whether, when a field is sold, the river-bank and the areas where the bank begins to slope should be measured, which seems not to be the case in D 18 1 51²⁶. It appears that the case in D 33 7 27 4²⁷ constitutes the opposite of what I stated above and take note there that D 18 1 51²⁸ instead mentions sea-shores which are common. The banks of the river, however, are the property of those who own estates near to the banks as in D 1 8 5²⁹. I respond that the above-mentioned banks should not be measured unless it is stated as we said in the case of boundaries of an estate bordering upon a public road as in D 18 6 7 1³⁰. The reason, however, is that the areas stated before, are not sold, but rather accrue to the object of sale which is evident since they cannot be sold *per se*. Since the use of river-banks is common by virtue of the law of nations, it is evident that individual ownership in itself would be useless as the use of another would always prevail as in D 7 1 3 2³¹, yet for that reason it is not assessed *per se*, but rather falls

to another and that is what the text wishes to say in D 18 6 7 1³². [5] From that one may conclude that just as river-banks are regarded as common, so are the hedges of properties bordering upon public roads as in D 18 6 7 1³³. [6] And what was stated above, I understand also to apply to ditches situated between the road and an estate for the same reason. Said³⁴ ditches certainly belong to those individuals to whose properties they adhere and this is evident since the shoulder of the road belongs to the very same people that the boundaries of a property belong to as in D 41 1 38 pr³⁵ and Inst 2 1 4³⁶. Thus a pit situated between that ditch and our estate, is our property as in D 39 3 2 2³⁷. Take note, moreover, that it cannot be called a road here since nobody comes or goes along it, therefore it is not a road as in D 43 8 2 3³⁸. I reckon, however, that its use is public as in the case of roads as was stated above.³⁹ Nor is what was said above inconsistent with D 33 7 27 4⁴⁰, since there, the discussion was concerning mounds and ditches which are situated within the estate itself and therefore the rights are proprietary in nature and the use belongs to the ownership of the estate itself. Accordingly when it is sold, it needs to be measured. [7] But doubt exists about the manner in which those ditches situated on the estate, are measured namely whether the surface on the sides and at the bottom of the pit is measured or whether it is indeed measured together with the whole field as if the pits were full. I respond that according to Hugutio⁴¹ “a field” (*ager*) is derived from the word “driving” (*agendo*) and so from “driven” (*actus*) since cattle and other animals can be lead through it and the word “driven” (*actus*) conveys this meaning. Should the pit thus be so level and its sides so wide that it might be worked or could be worked with oxen, then I say that it should be measured. But if indeed (as frequently happens) the banks of the pit were to be so steep that it is not possible to walk upon it or to drive cattle over it, then the pits should be measured together with the estate as if they were level and this is done in practice in such a manner. Therefore, I state concerning river-banks which might be situated within the estate, that if they can indeed be cultivated with oxen, then their surface needs to be measured. Otherwise, if they were so steep that they cannot be cultivated in such a manner, then the ground which the said bank encloses is indeed measured as if there was some wall on the property. What was stated before, is true by

virtue of the same reason unless it was expressly or tacitly agreed otherwise as in D 18 6 7 1⁴². I say, however, tacitly for example if a certain property which is mountainous or rocky or contains an estuary or river-bank is sold by measure then, although this cannot strictly speaking be done, it will still be measured for it will seem as if it had been done. [9] I state, concerning the hollow of furrows which are intended for annual cultivation or water derivation as in D 39 3 1 3⁴³, that in measuring, account should not be taken of it as it is not the permanent state of the land, but it was constructed for the sake of cultivation. [10] But it is said that pits are constructed for perpetual benefit of the field as in D 25 1 14 pr⁴⁴. What I stated above namely that an estate consisting totally of river-banks or estuaries ought to be measured, seems to contradict another statement made above namely that a river-bank and areas where the river-bank begins cannot be sold *per se*. But I respond that all places, which begin to slope from level ground to the water, ought to be understood to have occurred due to alluvion of the water. Should the river indeed flow between two mountains, then not all the slopes of the mountain will be called banks because it will incline naturally in the direction of the water as should be noted in D 43 12 3 2⁴⁵. [11] For this reason, it needs to be investigated what constitutes a plain, and in order to understand this, notice is taken of those things which are contrasted with a plain like a mountain, valley, hill and the like. A mountain is a place of high altitude as in D 8 2 38 pr⁴⁶ and I will state below what I understand by great height. Now on the other hand it is termed a “mountain” (*mons*) according to Hugutio⁴⁷ and Papias⁴⁸ by way of contrast from “moving” (*movendo*) because it is not moved which I understand to refer not to its immobility, which applies to all land, but because it is not moved namely through tillage, that is, it is not tilled. For soil, which is tilled, is thoroughly moved. A “mountain” thus extends all the way to that place where the cultivation of the slopes begin and therefore it is not included in the definition of mountains as the mountain ends there and we use the term in this manner unless the use of a certain place presents itself differently. Should there, however, be some or other cultivation on mountains, then it is still included in the term “mountain” as the part is designated by the appellation of the whole as in D 6 1 23 5⁴⁹. A “hill” (*collis*) can be said to be of medium height and it is probably termed so from the

word “cultivating” (*colendo*), as if they are medium-sized mountains, since they are cultivated. So the gloss on the Bible explains concerning the verse of the Psalm: “The mountains rejoiced like rams and the hills like the lambs of ewes”⁵⁰. Mountains are indeed of great height and generally uncultivated.⁵¹ I consider as hills those that possess particular height that is not in line with mountains, which are of greater height. Should hills however run continuously, then, if they are cultivated, it would be called the slopes of a mountain as was stated. However, in some parts a place of high altitude, although cultivated, is called a mountain and a place of low⁵² altitude, although uncultivated, is called a hill. Thus a mountain is distinguished from a hill by altitude or cultivation or the opinion of the local inhabitants as in D 43 12 1 1⁵³. [12] But a place surrounded by mountains or hills is called a valley: from the verb: “I, you surround with a rampart” (*vallo, vallas*), which is the same as the verb “to surround” (*circumdare*) and is a flat place of small or medium size. [13] It is called level (*planus*) from the Greek word, *Πλάτος* (*Platos*), which is the same as the word “evenness” (*aequalitas*) according to Papias⁵⁴. There are two requirements. Firstly, that it is extensive and secondly that it has level parts which are totally even so that one part does not project above the other. [14] Thus a valley is distinguished from a plain by its surroundings; a plain can indeed be situated next to the sea, but not surrounded by mountains or other heights. It is, however, not called a valley unless it is surrounded by high land. In the same manner it also differs in width, because if it is a place of small width or surrounded by mountains or hills, then it is called a valley, but if it is of great breadth, then it is called a plain, but it depends upon the opinion of the local inhabitants. It also differs in condition for it is called a valley even if it has a concave whereas a plain requires evenness. [15] Doubt can exist about how even it should be. I regard an area of any kind which slopes, as such, for hardly a place is found which does not at all slope towards some part, at least as flowing water indicates. I therefore state that it is sufficient that it does not slope as was stated in D 43 11 1 pr⁵⁵. It can probably be stated that it slopes noticeably on one side when the water flowing washes away so much of the soil that it deteriorates the use and the cultivation of the soil as in D 39 3 1 23⁵⁶ and D 21 1 1 7⁵⁷. It must be noted that in these matters knowing the opinion of the local

inhabitants counts for much. [16] The ditches of fields and the shoulders of roads belong to the plain itself. I speak, however, here of the plain in total as when the Tiber plain is discussed. Just as ditches which are situated on the estate, belong to the estate, so that which is situated in the totality of the plain, belong to the plain itself as in D 33 7 27 4⁵⁸. And statutes which mention these acts which are committed on the Tiber plain would also apply to those acts which were committed in said pits and would affect acts committed on river-banks. [17] But what if it had been committed in such a place where the water, due to erosion runs in the direction of the river? Would it be said to have been committed on the Tiber plain. It does not seem so as in D 43 12 3⁵⁹ from the phrase “where it begins to slope from the plain” (*ex quo a plano vergere incoepit*), although the word *a* may denote a separation as in the gloss⁶⁰ on D 19 1 3 4. Thus, that place which slopes to such an extent is separate and distinct from the plain. I respond that should it be asked if such a place falls within the definition of *ager meus*, it must be said that it does not because of the reason stated above. But should it be asked if the whole of the Tiber plain falls within the definition, then it ought to be considered whether the plain of the river runs in such a way that it is called the Tiber plain on both sides of the river and if this happens in said place, then it may be said to have been done on the river’s plain. Furthermore, what was indeed done in the river itself, might be said to have been done in such a plain under the total definition of the term. When the river itself, its entries and exits on both sides are included in the definition of a single plain and the stream itself is divided through the middle of the river on other occasions, then there might be not one plain, but more than one as in D 50 16 25 pr⁶¹. It happens and it is a quasi-case since what occurs in the water of the well, seems to have been done on the property itself as in D 43 24 11 pr⁶². Should there be mountains or hills in that part of the river, then that place which slopes due to the erosion of the river will not be part of the definition of a plain, but that place, where the plain ends, yields to the river-bank as in D 43 12 3 2⁶³. Furthermore, the river does not have an access elsewhere as in D 43 17 3 7⁶⁴.

1. *A field is called ours with a view to alluvion, not only with reference to ownership or quasi-ownership, but also the right of pledge or usufruct or on any other ground.*
2. *A road running through a field does not impede the right of alluvion.*
3. *Land belonging to the community, cultivated as if private, has the right of alluvion.*
4. *The question is asked by whom additions through alluvion to a square or training-ground are acquired.*
5. *Additions through alluvion to a holy or religious place or a certain cemetery are not acquired by it as it belongs to no one and is granted to the occupant.*
A holy place situated between (a property and the river) impedes the right of alluvion.

NOSTRO

[1] A field is indeed said to be ours with a view to the present topic, because it pertains to us either on the grounds of ownership, quasi-ownership, the right of pledge, usufruct or on any other ground. If a field indeed belongs to us on the grounds of ownership, then alluvion will belong to us by virtue of the same right as in this case. And the situation will be similar in the case of quasi-ownership as in D 6 2 11 6⁶⁵. The same in the case of the right of pledge as in D 13 7 18 1⁶⁶ and D 20 1 16 pr⁶⁷. The same in the case of usufruct as in D 7 1 9 1⁶⁸. Moreover, should an estate belong to us on the grounds of a certain expectation, then alluvion should belong to us by the same right as in D 30 1 24 2⁶⁹; it is indeed assessed according to the same right as the estate. Similarly, although the term *agro nostro* is used here, Inst 2 1 20⁷⁰ states *agro tuo*; however, I understand⁷¹ it as belonging to someone, that it is his property by virtue of private law. [2] If it belongs to the realm of public law as in the case of a road, then that which adheres to it, does not become subject to public law, but rather the property of those who own estates next to the road as in D 41 1 38 pr⁷² and Inst 2 1 4⁷³. [3] But should there be land of the community which is not in public use, but cultivated by the community as if by a private individual, then it has the right of alluvion, for it is similar to private property as in D 18 1 6 pr⁷⁴. [4] What will you say if, through alluvion, the river adds to a certain training-ground in which the forum or per chance a city square was situated? I respond that those open spaces are squares. *Platea* is indeed according to Hugutio⁷⁵ and Papias⁷⁶ the same as a wide or broad road but, although a road is part of the public law, it does not impede (the right of alluvion)

as was stated in D 41 1 38 pr⁷⁷. [5] But what if the river adds to a certain holy place, religious place, cemetery or another consecrated place? I respond that it is not acquired by it for it is not our field but rather belongs to no one as in D 1 8 1⁷⁸. Neither can it be said that it is acquired by him who owns an estate on the other side for the holy place in the middle impedes the acquisition, although a road as in D 39 3 17 3⁷⁹ and D 8 1 14 2⁸⁰ does not. It cannot, however, be stated that a holy place belongs to an estate in such a way as is stated concerning the road as in D 41 1 38 pr⁸¹. For when a road is destroyed, it will be swallowed up by the neighbouring estate as in D 8 6 14 1⁸² which does not happen in case of holy places. But I reckon that such alluvion belongs to no one, but it is conceded to the occupant as with alluvion which accrues to *agri limitati* as in D 43 12 1 6⁸³.

1. *A river, which flows perennially, is termed a public river. Rivers, however, which only flow in winter and not in summer, are termed private.*
2. *A private river grants nothing by way of alluvion, yet it can add to.*
3. *Why are rushing streams or ditches belonging to fields private?*
4. *Ditches situated on the boundary between two pieces of property are common.*
5. *A ditch existing near the boundary of a property in regard of which original deeds exist in which the owners obtained the properties on the sides, is understood to belong to those who own properties on the sides.*
6. *The question is put whether the right of alluvion has application in small streams.*
7. *If the bank of the river, situated next to a piece of property, broke up in such a manner that the river changed its course, the river-bed is acquired by the property.*
8. *If a stagnant pool of water as well as a lake is private, they do not have the right of alluvion, but the situation is different if they are public.*

Flumen

I speak of a public river and we will clarify the term in such a manner as is evident in that part of the law, which we will define in the third book. Therein is stated that a river pertaining to the public law, is meant. [1] It is accepted that rivers are public when they are perennial as in D 43 12 1 3⁸⁴ and therefore the gloss⁸⁵ on Inst 2 1 2 concerning the text which states that all rivers are public, indicates all of them, that is those which are perennial like the Po and the Rhine. But some are indeed private for example ditches which are situated in a field and which flow from time

to time. These are the exact words of the gloss. [2] Roffredus⁸⁶ in the *libellus super interdicto* on D 43 12 similarly states that rivers, which only flow during winter and not in summer are private and he is correct; such rivers are called torrents as in D 43 12 1 2⁸⁷. Therefore, if they are private, they cannot grant anything to anyone by way of alluvion. And should they change course, the land always remains the exclusive property of him to whom it initially belonged. What I stated, namely that they cannot add through alluvion, you should understand as adding to in such a manner that the property is extended. But it can add through placing on top as when the fertile topsoil of the higher field is added to the lower field as in D 39 3 1 23⁸⁸. [3] Should it be asked why those ditches or torrents belong to private individuals, then I state that it is because they are manufactured. For (if) it can be proved that water streamed through someone's property and created a ditch or that water flowed through the properties of many owners, then the properties and the other ditches should be divided according to the original boundaries. Alternatively if it can be proven how it was possessed from time immemorial (it should be divided thus). But when (as frequently happens) none of the above or other factors can sufficiently be proven, then I reckon that it belongs to those who own property on both sides of anything whatsoever up to the middle. This is the argument concerning an island which has arisen and river bed which has broken up as in D 41 1 7 3⁸⁹ and D 41 1 7 5⁹⁰ and what is also portrayed in the second and third book of this treatise, you will find in D 39 3 2 2⁹¹. Where the text states: "where a ditch is situated on a boundary line" (*si in confinio fossa sit*), the gloss⁹² explains that by the very fact that it is, for example, situated on the border between two pieces of property, the pit is common. [4] And so it is automatically concluded that whatever is situated on the boundary between two pieces of property is common. The text states it even more clearly in the phrase: "that part of the ditch which adjoins your land" (*eam partem; quae tibi accedat*). And so it expressly indicates that it accrues to those who own estates on both sides. I understand this to apply, unless the ditches are in public use, for then they are indeed termed public as in D 43 8 2 1⁹³. It is also formulated in D 43 14 1 5⁹⁴. [5] But what of the instance where original deeds are found in which the owners of the properties obtained the property on the side and a ditch was situated near

the boundary? It seems to belong to them. But we obtain the property itself, not the boundaries inasmuch as they are not part of the estate except that which is enclosed within it as in D 19 1 17 pr⁹⁵. I believe that it ought to be similarly understood to belong to those who own property on the side as was proved above. Nor is it an impediment that the boundaries are not purchased: this I concede, but it is nevertheless possible that it may, for example, accrue to the sold property if I were to buy an estate with the additions and lay down the river-bank as the boundary just as I would lay down the road as a boundary where it borders the property as in D 43 1 38 pr⁹⁶. And it does not conflict with D 19 1 17 pr⁹⁷ since that legal rule which states that nothing is part of the estate unless it is enclosed within it, allows certain exceptions by way of other rules or laws as with an aqueduct which is situated outside a piece of property as in D 18 1 47⁹⁸ and on the boundaries of estates, in roads as was stated above and in such ditches as in D 39 3 2 2⁹⁹. [6] The legal position and the existence of a right of alluvion concerning streams, other types of rivers or those which indicate the course of water will, however, be mentioned in the second book where we will discuss islands since the text of D 43 21 1¹⁰⁰ refers to it there. [7] But I pose the question, what if the boundary of a property extends naturally in the direction of the river because there was per chance a stone quarry which belongs to the owner; concerning this matter there is a discussion in D 24 3 7 13¹⁰¹. And it seems to be evident¹⁰² in Pisa near the mountain of Pisa in the marble quarries or where rivers have been subjected to an earthquake. When the bank, which has been erected, has broken down and has accrued to the estate while remaining in the river bed, has it caused a fallow land in that place? I answer as follows: I reckon that the whole of that place belongs to the owner of the property as if through alluvion. All those accretions which occur through divine nature with no human intervention, are of the same nature as in D 7 1 9 1¹⁰³. And it seems that Azo in his *Summa Institutionum* 2 13¹⁰⁴ felt that the river adds to my estate and because of that simply recedes from it. Nothing accrues to us through the addition as in D 43 1 38 pr¹⁰⁵. However, it recedes not by adding anything, but from the natural impulse. That increase, however, which occurs whenever the river-bank increases naturally, can be called alluvion since the increase is imperceptible. But when it happens due to a collapse or

earthquake, then it can be termed increase of a receding river-bed, which we will discuss in the third book of this work. Certainly, when it flows unexpectedly then it is not alluvion. But it ought to be said concerning a lake and stagnant body of water that when a lake and a stagnant pool are private, then there is no doubt that the water does not detract from one through alluvion, neither adds to another. That place, however, which was inundated by the water of the lake or the stagnant pool, even when it was inundated, remains the property of him to whom it first belonged¹⁰⁶ as in D 41 1 12 pr¹⁰⁷ and D 39 3 24 3¹⁰⁸. But when either is public, that is belonging to the state and fishing is not allowed there except when the state has entrusted it to him as in the Perusine lake, then it is the same as if it were private as in D 18 1 6 pr¹⁰⁹. And when it is public for example in public use and whoever may fish in it as he desires, then the river adds and takes away by way of alluvion as public rivers do in D 50 16 112¹¹⁰ and D 43 14 1¹¹¹.

1. *It is said to be added when it is added in such a manner as to create a union. Whatever is added through alluvion and united with our property, is ours.*
2. *What was thrown out by the river onto our field, is not ours, but is conceded to the first taker.*
3. *Sand added to our estate through alluvion, is ours.*

Adiecit

[1] It is said to be added, when it is added in such a manner as to create a union as in D 6 1 23 5¹¹². It is, however, said to be united when the parts mutually cohere and when it is indeed evident that what is added through alluvion, coheres to the other property. If, however, there should be something which is added in such a manner that it coheres whether it is soil, wood or money, it will be ours. [2] But that which was thrown upon our field by the river, which does not cohere, although it belongs to no one, is, however, not ours but is conceded to the first taker as is evident in the case of bees and honey combs manufactured by bees as in D 41 1 5 2¹¹³ and Inst 2 1 14¹¹⁴. It is also evident here that it does not belong to the property unless it is situated within it, in such a manner that it is fastened as in D 19 1 17 pr¹¹⁵ and D 41 2 3 3¹¹⁶. [3] What will we say about sand, however, the parts of which do not mutually cohere; does it become ours? I respond that since this material is soil-like and it is not evident to whom it belongs, it is said to be mixed with the

property itself just as we say with money mixed with other money as in D 46 3 78¹¹⁷. This is also evident of all additions through alluvion of rivers, which are sandy additions. The gloss harbours the same opinion about the law as I have stated above and this is my opinion.

Iure gentium

This is a right which all nations use as in D 1 1 4¹¹⁸. This law therefore, is also the prerogative of those who have been banished and others who have lost their civil rights as in D 48 19 17 pr¹¹⁹.

1. *Addition by way of alluvion is acquired by us through the (operation of the) law itself, without human intervention.*
2. *Addition by way of alluvion to a field is possessed by the same right through which the field is possessed.*
3. *Alluvion does not have application in agri limitati.*
It is termed agri limitati when it is captured from the enemy and divided amongst the soldiers.
4. *When the ruler divides a district into many subdivisions, then it is called ager limitatus and it does not have the right of alluvion.*
5. *If different districts are given wholly to different individuals¹²⁰, then they are not called agri limitati.*
6. *Alluvion does not grant jurisdiction as it grants ownership of private things⁹ and no.9¹²¹.*
7. *Jurisdiction is part of public law and the question is in which manner it pertains to public law.*
8. *If jurisdiction is divided with reference to the river, then any town or owner has jurisdiction over the river itself up to its middle.*

Acquiritur nobis,

[1] The phrase: “acquired by us” (*acquiri nobis*), I understand to refer to that right by which the field in the first place belonged to us as was stated above when we explained the word *nostro*. And the acquisition occurs through the law of nations itself without human intervention. Whether what is added through alluvion could be said to be acquired in such a manner that we possess it, is doubtful. [2] But when what is added, forms part of an original field, then it does not constitute a new field. I reckon

that what was added, is possessed just as the original field as in D 41 2 3 pr¹²². Even if someone wishes to possess the whole estate, he seems to be subject to the same opinion as in D 30 1 8 pr¹²³ and D 30 1 24 3¹²⁴. [3] What was stated before does not have application in *agri limitati* as in D 41 1 16¹²⁵ and D 43 12 1 6¹²⁶. The jurist explains in the very same place that *ager limitatus* constitutes a field captured from the enemy, divided amongst soldiers so that it is known what was given to whom, what was sold and what remained as public property as in the latter part of D 41 1 16¹²⁷. Therefore, should the ruler assign one whole district to a single person, it will not be *ager limitatus* as is evident here, since it was not divided. And this is what the text means in D 41 1 16¹²⁸. While it states that if the whole field is retained by the state, then it is not *ager limitatus*. [4] Should the ruler, however, divide one district amongst many people, then it is *agri limitati* and it does not possess the right of alluvion as in D 41 1 16¹²⁹ and D 43 12 1 6¹³⁰. The reason for the latter statement can be that after the ruler has decided on a boundary, he wishes that it always be owned along said boundary so that it may always be known how much the owner had due to the benevolence of the ruler and so it cannot be said that he obtained it through the benevolence of fortune. Or you could say that the reasoning is that rivers are regarded as Censors, that is as those officials who on the grounds of the census diminish the right of one person and awards to another. Just as said officials cannot change a concession made by the ruler, in the same manner, neither can the river as in D 41 1 30 3¹³¹. The exposition of Azo, however, contradicts such reason. He makes this exposition in the *Summa Institutionum*¹³² above the phrase *novus autem alveus* where he states that rivers are regarded as Censors, that is as the judges and the rulers or officials with the authority of law. Therefore, it should not have the right of alluvion since it is not conceived to solve disputes with reference to those properties. Therefore rivers are burdened in another way as in C 11 60 3¹³³. Or you could say that the rule ought not be sought after we have a delimitation. Therefore in *agri limitati*, the right of alluvion has no place. [5] But what of the case where many districts should be captured and some or other district should be assigned wholly to various soldiers. I respond that it does not constitute *ager limitatus* just as if one district should be assigned to one individual as was stated in D 45 1 29 1¹³⁴. [6] I ask,

when the district and the jurisdictions of the states and the church are divided and are bordered by the flow of a certain river, if, just as the river diminishes the right of one person and awards to the other according to the right of ownership, it does so according to the right of jurisdiction? And it seems that jurisdictions are not altered for they are boundaries laid down by the ruler, thus they appear to be *agri limitati* as in D 41 1 16¹³⁵. And thus I state and as this is not evident, allow me to say that those boundaries are ancient and that they existed from a time beyond memory, thus they are regarded as laid down by the law through the ruler as in D 43 20 3 4¹³⁶. And boundaries are regarded in such a manner, but such reason is not sufficient. For example should the ruler, however, not divide the districts or preserve them as he found the division, then it is not called *agri limitati* as was stated. Or let us say that jurisdiction does not change because alluvion does not apply to that which is public property D 41 1 38 pr¹³⁷. [7] But it is inconsistent with what was stated above concerning the word *nostro* since that which is public, that is belonging to the city, has the right of alluvion (in public use), for the sake of which, it should be observed whether the jurisdictions belong to public law. And it is a given that it belongs to public law as in D 1 1 2¹³⁸ from the phrase *magistratibus*. In the second place it should be noticed in which manner jurisdictions belong to the public law, i.e. just as that which is in public use or just as that which belongs to the city, are possessed by a private individual. And for this purpose, it ought to be known that just as father and son and master and slave are related, so jurisdiction is a certain relation of the master to the underlings. And just as the father has a right over his son, so the son has certain rights against the father to ask for food and such things; in the same manner in the jurisdiction, underlings have a certain right to ask jurisdiction from their superior and should he refuse it, he transgresses and is punished as in Nov 86 4¹³⁹, (D 27 8) and C 5 75¹⁴⁰ and it is a feature of public law just as those things which are in public use. For someone can petition the magistrate for an equity as was stated in D 1 1 2¹⁴¹. Jurisdiction is considered in another way inasmuch as it is located within the magistracy, the city, and the property of a count or baron and in that way it belongs to the public law. As it is of such nature, the city possesses it as a private person which is evident since some or other person does not use it with respect to

the city, but only a person whom the state allows and only those matters which are taken from there for example penalties, sentences, fines and similar matters of the city itself or pertaining to ownership inasmuch as it is private as in D 43 8 2 2¹⁴². [8] Similarly take note that the jurisdiction of those matters applies to any city whatsoever, or ruler, and in the river itself all the way to the boundary of the middle of the river. And I respond that it is so because everything situated within the border is common to those who possess on both sides of the river as in D10 3 19 pr¹⁴³ and D 39 3 2 2¹⁴⁴ as well as D 41 1 7 13¹⁴⁵. And thus someone has jurisdiction over that whole stretch of land, which borders on the river itself up to the middle of the river. [9] Now that this has been said on the question under review: when the right of jurisdiction in the river itself belongs to the master of the city itself, to the owner of another place or the church only inasmuch as it is a private right and thus inasmuch as with reference to this river belongs to private law, it has to be said without doubt that what is produced by the river through alluvion, that is through addition, is not added or detracted from jurisdiction as was stated above with reference to lakes as in D 18 1 69 pr¹⁴⁶, D 39 3 24 3¹⁴⁷, similarly in D 41 1 12 pr¹⁴⁸ and D 43 20 3 2¹⁴⁹. But the solution is easy when it is carefully inspected.

1. *To understand is not visual comprehension.*
2. *A witness giving a verbal deposition that he understood, does not provide proof unless it is explained that he saw it.*
3. *Alluvion is proved through witnesses giving depositions that they saw minute increase occurring.*
4. *Doors found broken in a house are presumed to have been broken by him who remained to guard it.*
5. *What was done in a meeting is presumed to have been disclosed only by the single person who went out of that meeting.*

Per alluvionem autem id videtur adiici;

It seems to be added through alluvion when it is added so gradually that we cannot discern how much is added at a given moment. These are the words of the law as in D 41 1 7 1¹⁵⁰, the line beginning with *per alluvionem*. The gloss¹⁵¹ describes the phrase: “at a given moment” (*momento temporis*) in the following manner. For when you fix your gaze undisturbed for a whole day, feeble vision cannot carefully assess the subtle increase as can be shown in a drinking cup. Therefore the increase is said to be imperceptible as in Inst 2 1 20¹⁵². [1] These are the words of Azo¹⁵³ and take note that what the text purports to understand, the commentary understands, i.e. that it cannot be comprehended by sight and with reason. For as the supporters of natural law state, there is one intellectual capacity which has understanding and is universal to all men. Man sees with the mediating organ of the eyes and he hears with ears and so on. Although this exposition is in agreement with the words of the legislator, it might not agree with the evidence of some or other witness who, concerning that matter, ought to lay down a deposition that he simply perceived it with his bodily senses as in D 28 1 20 10¹⁵⁴, C 4 20 18 pr¹⁵⁵ and Innocentius’ *Breviarium extravagantium*¹⁵⁶. [2] If a witness should therefore say that something is so and he understood it to happen in such a way, it would not be proof unless he understood what was related, that is that he saw because he could reach this understanding in another way about which he might be interrogated. [3] Doubt, however, occurs here with reason; for if this alluvion cannot be comprehended by a sense of the body, then whatever constitutes alluvion will not be able to be proven by way of witnesses. I state, however, that what the river added, can indeed be seen, but not how much at a given moment just as we see in a growing child. I also say that what can be seen and visually comprehended from the division of a given place, after the increase has taken place, happened through alluvion. When an exposition has been given about the added soil, it is clearly understood by each that it was done bit by bit, that it was done by the river and that it would have been impossible to happen through other

means. Thus I reckon that a witness proves, when he says that he personally saw that the increase was added bit by bit and that he saw that alluvion was added bit by bit by the river. In the same manner, I reckon in whichever subject matter it happens for example if something was done which could not have been made except by one person, that there should be suitable proof that he did it. [4]¹⁵⁷ What if a certain person has been sent away at a certain hour to guard a house and it is a given fact that no one entered and the divides which had been left closed are found broken? Then without doubt he who remained, did it. [5] And what of the case where there were many people gathered together inside the meeting about difficult matters and it is a given fact that nobody left or talked to another with one exception and it is found that the business was known and disclosed? Then without doubt it was done only by him who left the meeting or talked with another, when it is impossible that it could be done by another, just as it is impossible that it could have been added by another than the river.

1. *The word "vis" in singular form is used in the sense of might, violence, necessity and even authority.*
2. *The word "vires" in plural form denotes accomplishment or efficiency as well as bodily strength.*

Quod si vis fluminis,

Here the
text

begins to discuss increase, not through alluvion, in other words not gradually and imperceptibly, but rather visibly and evidently. It therefore mentions the power of the river, which is the might of the river. [1] The word "vis" however, denotes many things. Whenever it is used in the sense of might, as in this case where we colloquially say such a man has great power, that is great influence which ought not be understood with reference to the body, but rather about that which befalls him because of his multitude of friends, vassals or riches. Sometimes it is used in the sense of violence as in D 4 2 2¹⁵⁸ and D 4 2 13¹⁵⁹. Sometimes it is used in the sense of necessity as in D 1 5 4 pr¹⁶⁰ and there take note of the sentence "*nisi..vi*" etc. We colloquially say that I do this by force, that is compelled by necessity as in C 4 44 12¹⁶¹. It is similarly interpreted in the sense of authority as in D 27 3 1

pr¹⁶² and Inst 1 13 pr¹⁶³ and in those cases it only declines in the singular in all cases, the plural form is not used. [2] “*Vires*” is, however, found in the plural and it does not have a singular and is sometimes used as an effect or efficiency for example this stipulation has efficiency as in D 45 1 38 6¹⁶⁴. “*Vires*” is also used as a synonym for virtues as Cato¹⁶⁵ states; the virtues of plants and other things. It is also used in the sense of bodily strength as in that man has great bodily strength. It is also found as an adverb “*vix*”, the meaning of which is used in D 5 1 53¹⁶⁶ and D 16 1 19pr¹⁶⁷.

Partem aliquam de tuo praedio detraxerit

Therefore, just as this provision applies, so it ought to be certain that the portion which the river added to my property, originated from your property. Should it be unknown to whom it belonged, then that which was applied to my soil would become mine instantly as was stated above in the introduction and concerning the word *adiicit*.

1. “*Applicare*” has the same meaning as “*apponere*”.
2. It is said to add to(*adicere*) an estate when it is imperceptible and to fasten to (*applicare*) property when it is visible and evident.
3. The question is asked: when can you reclaim the “*crust*” of your field, which is fastened to my property.
4. The “*crust*” of your field added to my property in such a manner that it is inseparably united, becomes my property

Et praedio meo attulerit

[1] Inst 2 1 21¹⁶⁸ where the text is similar and where the word “*applicaverit*” is referred to which the gloss¹⁶⁹ explains with reference the word “*appulerit*”, for which the synonyms are “*apposuerit*” and “*subiecit*” for instance where the crust of soil was perhaps planted with vines or trees. The gloss therefore states that this

section differs from the preceding discussion in this respect since in that case it adhered from the side whereas in this instance it was deposited on top. It may be true in itself, but I do not reckon that it should be a source of worry whether the crust was added laterally or on top of the property as the legal position remains the same. [2] It therefore differs since in the previous discussion it adhered imperceptibly, but in this case it is visible and evident. It should be ascertained, however, what the text means when it states that it added to or fastened. What is fastened, can exist without union of matter for we state that a ship fastened to the harbour, however it is not united with the harbour. [3] And in this manner, the crust of your field which is fastened to my estate, remains yours without doubt as in this example and it can be reclaimed by you as in D 39 2 9 1¹⁷⁰. [4] Whenever the crust of your field is fastened to my property through a certain unstable union or where it can be easily restored, then the legal position will be the same. Thus the text states that it clearly remains your property as in this case. Soil can, however, in rare circumstances be added above other soil without creating a certain fastening and a union. And therefore this law notably requires that trees have to take root, as we shall see below, when the crust of your field is fastened to my property, so that it is inseparably united. Then it becomes the property of my estate as will be stated below.

1. *The question is asked: within which period a crust fastened to my estate may be said to be united with it and acquired by me.*
2. *That which is set upon my estate, is acquired by my estate and that which is added through alluvion, is acquired by me personally.*
3. *My tree, deposited on your estate, even if it has taken root there, is recovered with an "actio in factum".*
4. *A crust fastened to my estate, after it has been united with it, cannot be reclaimed. Before a tree has taken root, it can be reclaimed by the owner. Before a crust has been united with the property, suit can be filed against the owner, either to remove it or to regard it as derelict property.*

Plane si longiori tempore,

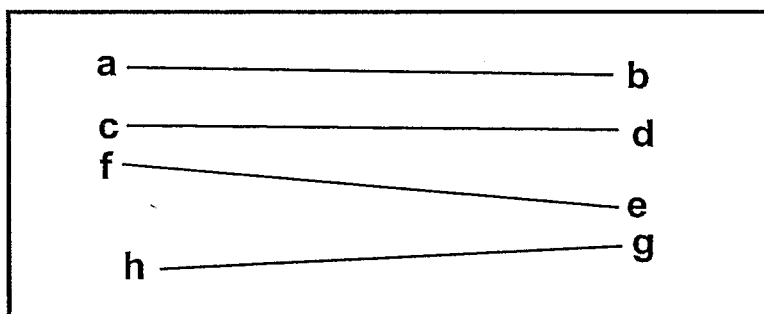
It follows the same argument when a crust is transferred from the start to my field or estate without creating a union. Should a union, however, have existed from the start so that much was united with the soil of my field in such a manner that it can neither be distinguished nor separated, otherwise it would not be my possession as in D 39 2 9 1¹⁷¹. But when such a union had not existed from the start, but the union can take place at a later stage and can be united, then, when it happens, it becomes my property. [1] One example is put forward of how this happens for instance if it adhered to my estate for a longer period of time as is stated in the gloss¹⁷² concerning the phrase *longiore tempore*, where some authors proposed a period of ten or twenty years which the gloss rejects. For it is sufficient that it should remain for such a period of time for a tree to take root in the soil or, should the crust have no trees, that it had stood for such a period of time that if there had been trees, they would have taken root. From the course of such a period, a union is assumed to have been formed with the soil and this is the opinion of this work. I also reckon that should that crust be torn away within a short period of time due to a downpour and then create a union with the soil of my field, that it immediately becomes my property as in D 43 28¹⁷³ and D 39 2 9 1¹⁷⁴. [2] From that time when it is united with the soil, it is said to have been acquired by my estate. It should be ascertained what was stated above on acquisition through alluvion, that it is acquired by us personally; but in this instance it is stated that it is acquired by the property itself. The latter statement is the truth inasmuch as the gloss¹⁷⁵ draws attention to it here, since matter which is placed under the field and acquired by the property itself, is discussed. That which is added to the estate, however, can be possessed through the intention of the owner like an estate separated from the original (property) and so it is rather said to be acquired by the person than the object itself. But by understanding that it is not a right by extension and that the consequences are the same whether it is acquired by us personally or by our property for it is indeed acquired from the start by the

property, we may later possess it separately according to our own intention. [3] For the gloss¹⁷⁶ stipulates about the question whether a tree, when it has taken root can be claimed, that it can indeed be done with an *actio in factum*, specifically the action concerning trees. [4] Should it later form a union with the soil, then such an action cannot be supplied as in D 39 2 9 2¹⁷⁷. Before it has taken root, however, the owner can reclaim it personally insofar as he has supplied surety against pending damage as in D 39 2 9 5¹⁷⁸. But I, to whose disadvantage the crust was torn away, can sue the owner to remove it or to regard it as derelict property as in D 39 2 7 2¹⁷⁹. But when it has formed a union, then I cannot do this as is stated in said law D 39 2 9 2¹⁸⁰ Let us now progress to the diagrams.

**PROPOSITIONS AND ILLUSTRATED DEMONSTRATIONS FOR THE
DIVISIONS OF ALLUVION**

Since I saw many questions surrounding the divisions of alluvial accretions and I reckon that it is impossible to supply an explanation to these questions without the matter being visually inspected, I inserted diagrams as visual demonstration. By means of these diagrams I intend teaching only those aspects commonly ignored. In this attempt I will use various geometrical conclusions. Let nobody regard this as unsuitable since the whole of science is subservient to this principle. It is indeed architecture that sets to order all other matters as Aristotle states in book I of the Ethics¹⁸¹. It therefore should be remembered that accretions by alluvion, however it occurred, namely through the break up of an island or river-bed, is common among those people who own property on the one side of the river according to a lateral division, to the extent that those holdings follow the bank of the river as in D 41 1 7 3¹⁸². The division should indeed take place by drawing a straight line through that section added by alluvion, the shift of an island or river-bed.

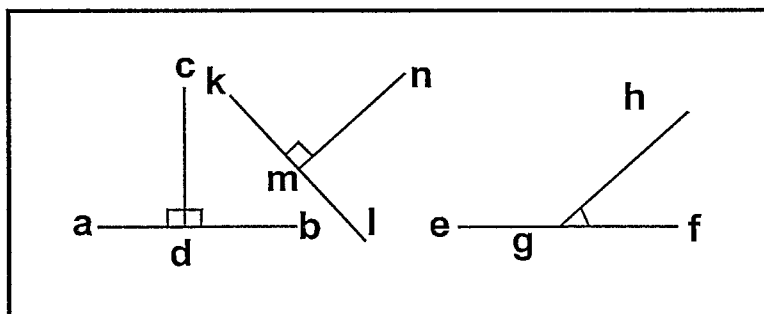
Premise 1, Diagram 1



This diagram was therefore constructed to show whether a straight line is drawn straight. I pose the question whether a line is straight in three ways. Firstly whether a line is straight in relation to itself and more on this matter in the diagram. Secondly whether a line is straight regarding another line intersecting it. Thirdly whether a line is straight regarding a certain point situated in the angle of two lines, that is whether it bisects the angle. Let us look at each of these.

Concerning the first case I state that a line, straight in relation to itself, is a minute extension from one point to another as is evident in the first line placed above where the two points are *a. b.* For should the first line be extended from one point to another, that line will be straight and should a single thread, connected to those points, be extended indefinitely, the whole line will be straight as is evident to reason and as the diagram demonstrates¹⁸³. Likewise it stands to reason that should there be another line above those two points equal in distance from the first points such as *c.d.*, the line will also be straight and should those two lines be extended indefinitely, they will never meet as is clear from the diagram and stands to reason. Should there, however, be two points unequal distances from the first two and should one point be situated nearer to the first line and the other further as is *e.* and *f.*, then by extending the line, it is not straight in relation to itself as the first line, for point *e.* is further removed from line *c.d.* than point *f.* and then by extending the two lines, it is inevitable that they meet. Should the second point, however, be remote as in line *g.h.* (it is indeed a given that point *g.* is nearer to the preceding line and point *h.* is further), then the more those two lines are extended, the more they will be further separated as stands to reason. What has been stated above is very familiar in geometry as is evident in the first book of Euclid¹⁸⁴.

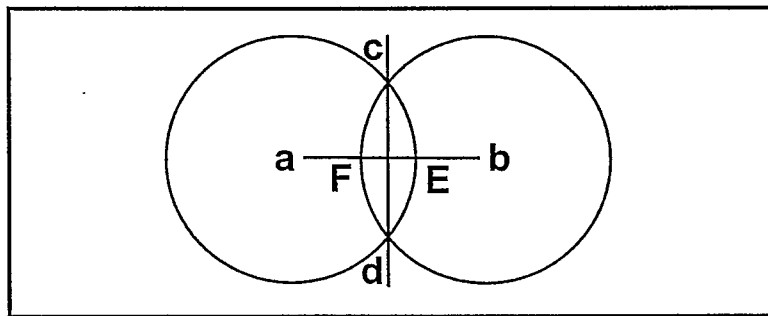
Premise 2, Diagram 2



This diagram was constructed to explain how, if there is one straight line, another straight line should fall upon it straight and perpendicularly on a certain point of the first line. This is understood since where another straight line intersects a straight line perpendicularly, both the angles will be right angles. Should it

however not intersect straight and perpendicularly, then one angle will be acute and the other obtuse and broad as if opening the obtuse angle. As an example of the first statement, let a line ab . be drawn and a point d . placed on it; a perpendicular line $c.d$. be drawn above it, then both angles will be right angles and equal. As an example of the second statement; let a line ef . be placed with a point g . on it. Say a line is drawn above it neither straight nor perpendicular, for instance if it were to diverge in the direction of point f . Let the line be $g.h.$, then the angle is acute on that side to which it leans and obtuse on the other side. Doubt exists, however, when a line kl . is constructed and upon it a point m ., and above it is drawn a line mn . which diverges in neither direction yet to the eye does not seem straight. What will be the case? I respond that the first line kl . is truly straight and that the other line mn . intersects it in a straight manner when considered in relation to itself and not with regards to the quadrants of the map as described, but no attention should be paid to that case, only to the line constructed and the line drawn above it, which is useful to know with regard to many matters which will be stated below.

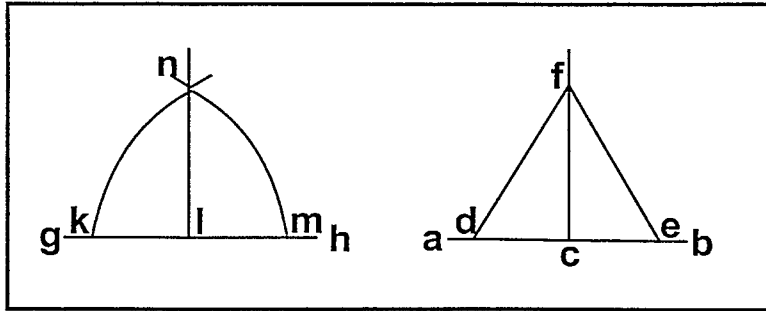
Premise 3, Problem 1, Diagram 3



Since it frequently happens in a division, which we will discuss below, that the divisions occur down the centre, this diagram was constructed to teach and demonstrate this case. Let a straight line ab . therefore be constructed, which we wish to divide through the centre in such a way that it can be illustrated in the specific book to anyone. In the first instance, I shall place the foot of the compass on point a . and construct a circle past the centre of the line as shown by the red

circle *CED*, then I shall place the foot of the compass in point *b*. and construct around it a circle equal to the first as blue circle *cFd* indicates, and these two circles intersect one another in two points *c*. and *D*. as is evident. I shall then construct a straight line from one of the said points where the circles intersect to the other as line *cd*. illustrates. I state that this line divides given line *ab*. down the centre as is evident and it is proved in the following manner¹⁸⁵. If you subtract equal portions from equals, the remainders are equal as Euclid¹⁸⁶ states, but the distance from point *a*. to the circumference of the red circle *CED* is equal to the distance from point *b*. to the circumference of *CFD*, the blue circle. Through line *cd*. this equal distance is equally subtracted from both sides. It is therefore evident that what remains of line *ab*. on both sides, is evidently equal, *AF* to *BE* and thus line *cd*. intersects it through the centre. Similarly from the preceding diagram, an alternative explanation comes to mind. Evidently, should there be no line drawn between *a*. and *b*., but should there only be a space, then that which is situated between points *A*. and *B*. ought to be divided according to the law of proximity in such a manner that said line *cd*. bisects said space straight through the centre so that whatever is situated above, is nearer to *a*. and whatever is situated below is nearer to *b*. even should line *cd*. be extended indefinitely. Another explanation is evident from the said diagram where two circular lines of equal size clearly intersect above a straight line or a base and when from the point of intersection, a line is drawn through the centre of said line or base, then that line intersects perpendicularly and creates right angles on both sides as is evident to the eye and is proven from the preceding diagrams. Should said line divide the space down the centre, then it is evident that it does not diverge in any direction and thus creates right angles on both sides. This is very important for the understanding of what follows.

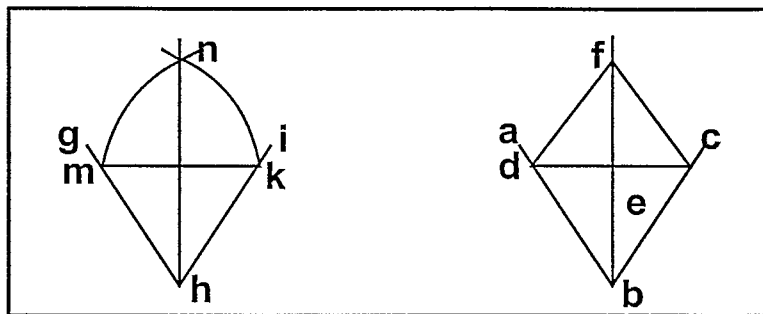
Premise 4, Problem 2, Diagram 4



This diagram was constructed to indicate how, after a straight line has been drawn and a point placed upon it, another straight and perpendicular line may be drawn above that point as is inevitably deduced from what was constructed there. Thus let a line ab . be constructed and a point c . placed upon it above which I want to draw another straight perpendicular line. I will then place on both sides of that point C ., two points d . and e . an equal distance from it. Thereafter I will take two equal lines together with two sticks or cords and place one above point d . and the other above point e . and I will unite both in the form of a triangle in point f . Then I will draw a line from the fixed point c . to point f . Thus I state that the line intersects the given line straight and perpendicularly in the given point as the eye indicates because it creates a right angle on both sides as is proven in the book of Euclid¹⁸⁷. Alternatively there is a shorter explanation: upon a given line gh . place a point l . above which I want to draw a straight and perpendicular line. I will place two points equal in distance from the given point for instance k . and m . and then I will place the foot of the compass in point k . and extend it to point m . and I will revolve it in the direction where I want to draw the line. Then I will place the foot of the compass in point m . and I will extend it to point k . and revolve it in a similar fashion. It follows that those two circular lines will meet each other in point n . I therefore state that if from a given point l ., a line is drawn straight and perpendicularly to point n ., it intersects above the given point l . according to similar reasoning as proven above in the preceding diagram. Whenever two equal circular lines intersect above a straight basis line and a line is drawn from the point of intersection through the centre of the basis line and extended indefinitely

above those two points, then it will always be straight as is evident from what was stated in connection with the first diagram above. It is also evident from what was stated above that the said line creates a right angle on both sides.

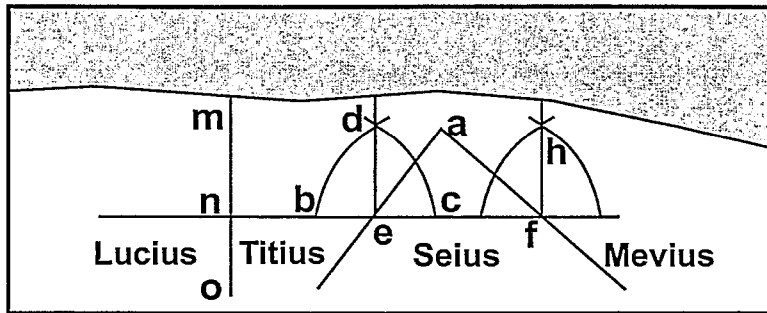
Premise 5, Diagram 5



This diagram was constructed to depict the third question that was posed in the first diagram. This diagram shows what happens when a point is placed in the angle of two lines and I would want to draw a straight or perpendicular line above it. Let two lines be placed namely *ab*. and *bc*. converging in one point *B*. where it creates an angle and where, irrespective of the nature of the angle, I wish to construct a straight line above it. I will therefore place a point on both sides of angle *b*. on those lines namely *d*. and *e*. and lines *df*. and *ef*. are drawn equal in length according to the same method as above and converging in point *f*. I state that if a line is drawn from point *f*. to point *b*., it bisects angle *b*. straight and perpendicularly and this is evident for when another straight line is drawn from point *d*. to point *e*., it is bisected and four right angles are created as is proven in the book of Euclid¹⁸⁸. There are thus two equal angles in angle *b*. Alternatively should you wish to prove and accomplish it in a different manner, place two lines *gh* and *hi* converging in point *h*. above which you want to construct a straight line. I will then place a point *k*. and *m*. on both sides equal in distance from point *h*. on those lines. Next, I shall place the foot of the compass on point *k*. and extend the other leg to *n*. and revolve it in the direction of that section above which I wish to draw a line. Then I shall place the foot of the compass on point *m*. and extend the other to point *k*. and revolve it in the same fashion. Those two circular lines will then intersect at point *n*. A straight line is thus drawn from point *h*. to point *n*. I

state that it bisects point *h*. straight and perpendicularly because of a similar reason as above. Should another straight line be drawn from point *k*. to point *m*., it is bisected by line *nh* and there will be four right angles and similarly in point *h*., two equal angles are created. What was stated before, was provided as proof, let us now progress to the main theme by laying down river-banks, properties and alluvion.

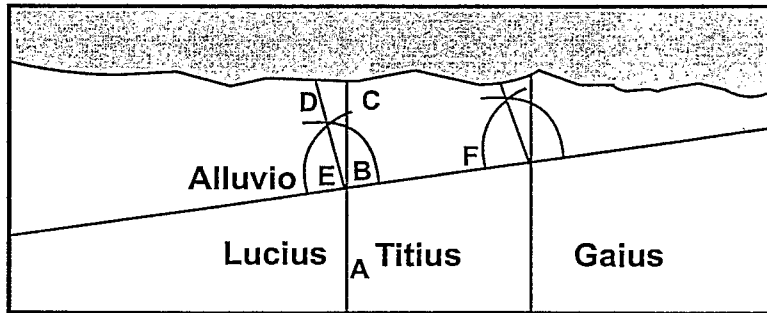
Proposition 1, Diagram 6



I state in advance as evidence of the premises that a river will be denoted by the colour blue and that the source of a river will be on the side where the head of a certain animal¹⁸⁹ will be situated and that it will flow towards that part of the riverfront properties designated by the colour black. That which is situated in the middle between the properties and the river is regarded as alluvion or as having been established through alluvion. In the same manner, the red lines were constructed to divide alluvion. The saffron or yellow lines were constructed for the sake of explaining or calculating and whenever a blue line is constructed, it will be made clear in the same figure to which end it is used. Let us now progress to the diagram at hand and it should be noted that the line, denoting the bank of all the properties, is straight in all respects. In the same manner the borders of the two neighbouring properties are straight to such an extent that the line dividing the properties falls directly onto the line of the bank which is evident seeing that it creates a right angle on both sides. The division is evident in those two properties since the straight line is extended through the alluvion up to the river as red line *mno*. indicates. It is straight in relation to the river-bank and it is united in a

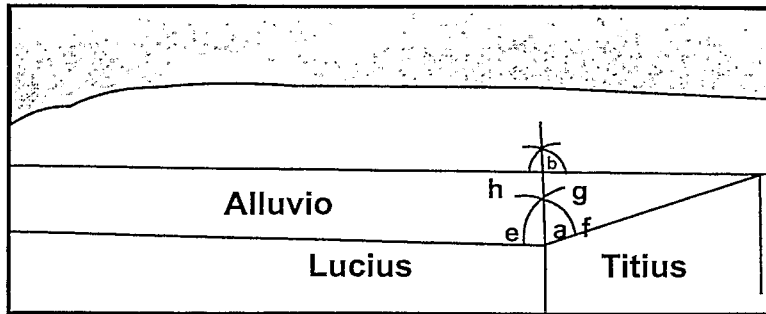
straight manner with the river-bank dividing the properties. It has to be noticed that concerning the river-bank between the property of Titius and Seius as well as between the property of Seius and Mevius, doubt exists because the lines separating the properties, although being straight in relation to themselves, do not intersect the line representing the river-bank perpendicularly as is evident because to the one side an acute angle and to the other an obtuse angle is created. Should I therefore draw a line across the alluvion according to the straight nature of the line, then it would not extend all the way to the river, but will rather converge in point *a*. as yellow lines *AE* and *AF* indicate. Thus the property of Seius having the greatest latitude along the bank of the river, would have the least with regards to alluvion, nor would it extend all the way to the river. It needs to be stated, therefore, that the mode of division is such that the boundary lines are not taken into account, since in said D 41 1 7 3¹⁹⁰ in the latter part, it is stated regarding the division of the latitude to the extent that the property follows the bank. Should there be a division, therefore, then the line representing the river-bank should be taken into account as well as the line where it intersects the boundary line and there one indivisible point *E*. should be assumed as the black lines indicate and on both sides of the point, two points equal in distance *b*. and *c*. should be placed. The foot of the compass should be placed in point *b*., extended to point *c*. and revolved in the direction of the alluvion. It should thereafter be placed in point *c*., extended to point *b*. and revolved in similar fashion in the direction of the alluvion where the two circular lines would converge in point *d*. Thereafter let a straight line be drawn from point *e*. to point *d*. and extended towards the river as red line *DE* indicates. I therefore state that the line intersects the river-bank in a straight line as is shown in the third diagram above and further that it is straight from point *d*. to the said line and irrespective of how far it is extended, it will be straight as said above in the first diagram above. There is a similar division between Seius and Mevius as the drawn lines indicate.

Proposition 2, Diagram 7



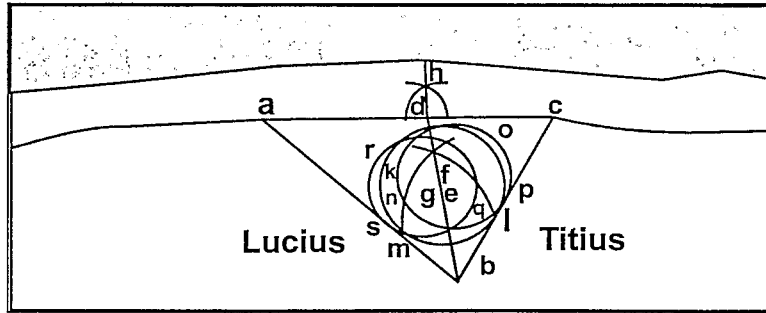
This diagram has a uniform line representing the river-bank and when there is a discussion concerning the division of alluvion, all the rural people extend the line as saffron line *ABC* indicates, drawn according to the straight nature of the line dividing the properties. It is evident, however, that such a division of the rural people is not fair since the straight line ought to be drawn according to the straight nature of the line representing the river-bank as is evident from the preceding figures and which, according to these, is not straight as is evident since the saffron line *ABC* drawn in the direction of the source of the river creates an obtuse angle *EBC* and in the direction of the estuary a sharp angle *CBF* which contradicts the statement that the line is straight. Thus the division of alluvion needs to be done as red line *BD* indicates, drawn above the line representing the river-bank and forming a right angle on both sides and thus falling perpendicular itself as shown above. Should it be said that the line representing the river-bank is not straight, I respond that it is indeed straight in relation to itself, which has to be taken into account. It does not, however, extend according to the straight nature of the boundaries of the properties situated on both sides, which ought not to be taken into account.

Proposition 3, Diagram 8



This diagram differs from the preceding ones because they possessed one straight line whereas this one has two lines in one point creating an obtuse angle as in point *A*. where the boundaries between Lucius and Titius lies. I therefore state that to divide the alluvion between the said two properties, a line should be drawn as red line *AB* indicates, drawn up to blue line *CD*. It is proven to intersect line *AB* straight because of the two points *E*. and *F*. placed equal in distance and the two circular lines *EG* and *FH* drawn above as the yellow lines indicate and from that point *I*., where they intersect, to that given point *A*., a line *AIB* is drawn. This line intersects perpendicularly as was demonstrated in the fourth diagram above. It is indeed proven on the grounds of proximity as will be indicated in the following diagram. That, however, which lies above blue line *CD* ought to be divided as if the bank of the river had been straight as blue line *CD* indicates, because whatever right there is in respect of that which is added to the first estate, the same right applies in the case of that which is added to the addition as in D 41 1 56 pr¹⁹¹. Should the river-bank, however, have had a straight nature from the beginning, then the division would have taken place in the manner shown in the sixth diagram above. This matter will be touched on more clearly and concisely in the following diagram.

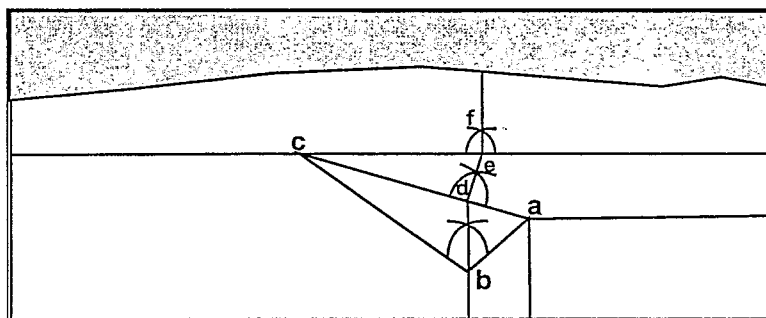
Proposition 4, Diagram 9



I state in advance as proof of this diagram, that where a river silts up in such a way that there are alluvial deposits on both banks as a river increased by alluvion does, then that which is common ought to be divided amongst those property owners who are nearest on both sides as in D 41 1 7 3¹⁹² and D 41 1 7 5¹⁹³. Whenever that which is torn away only has a bank on one side, then it has to be divided amongst those people owning properties on the same side by way of drawing a direct line as in D 41 1 29¹⁹⁴ stated above. It should be noted that laws may state that when a river-bank is situated on both sides of the river, the same principle still applies as where there are two banks on one side in between which the remaining alluvion is confined. After this introduction I state that this diagram contains two straight lines namely *ab* and *bc*, creating a single angle at point *b*. I therefore state that the alluvion distributed between these two said lines has flanks on both sides and thus it should be divided according to the right of proximity. But that which is situated past these two lines, in which way it is evident from itself when a line is drawn from *a*. to *c*., having only a bank on one side, should be divided accordingly in a straight manner. Let a red line *bd* be drawn above point *b*., which is evidently straight as was proven in the fifth diagram. Then I say that whatever is situated above said line *bd* in the direction of the source of the river, belongs to Lucius' property according to the right of proximity. This statement is proven in the following manner: let a point *e* be placed on said red line *bd* and let a red circle *klm* be drawn above it touching in point the river-bank of Titius. I state that the circle touches the river-bank of Titius and Lucius equally, thus the line runs straight through the centre. Then, let there be drawn another point *f*. under the

other said line and let above it be drawn a red circle NOP touching the river-bank of Titius in the points c . and b . I state that this circle does not touch the bank of Lucius and thus it is further removed. Let there be drawn above said red line a point g . and let another circle be drawn above it QRS , touching the river-bank of Lucius ba . I say that it does not touch the river-bank of Titius cb and therefore it is further removed and so it is deduced that the division was done properly. That which is situated above the yellow line ac , however, ought to be divided as if the whole line of the specific bank had been straight which is proven in the following manner. The law which applies to that which was added to the original estate, so also applies to that which was added to the addition itself as in D 41 1 56 pr¹⁹⁵. Should the river-bank, however, have been straight from the beginning, then the division should have taken place through line dh as was stated above in the sixth diagram.

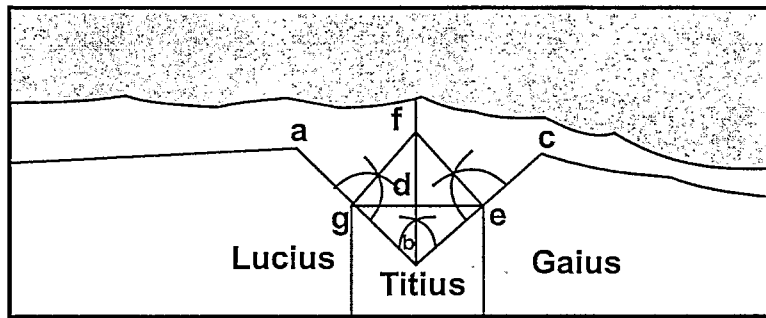
Proposition 5, Diagram 10



In this diagram, there are two straight lines namely ab . and bc ., creating an angle ABC at point b . Line ab . is indeed shorter than line bc . and in this respect, it differs from the preceding diagram. I therefore say that a straight line ought to be drawn from point a . to point c . as yellow line AC indicates. Whatever is situated between said lines undoubtedly has banks on either sides and thus it ought to be divided according to the right of proximity as is evident from the preceding diagrams. And so let a red line be drawn from point b . to line ac , the yellow line in point d ., intersecting through the centre. What is situated above yellow line ac , however, only has a bank on one side along that straight strip as yellow line ac indicates. It therefore ought to be divided by drawing a straight red line from

alluvion is, however, much nearer to the property of Caius; this is evident, since should a point be placed on red line AD which is part of line ADG representing the first alluvion, and it is intersected by yellow line BC , so that a circle with point d as its centre is created, it would touch Titius' property only at one point, but it will occupy a portion of Caius' estate as blue circle AFG indicates. I respond that accretion to another's property on the ground of the right of proximity occurs whenever that over which the legal dispute is being waged, is attached to the property of neither, for example, an island. When it attaches to one and not the other, then it always becomes the property of that to which it adheres and no notice is taken of the proximity to another's property as in D 41 1 56 pr¹⁹⁶.

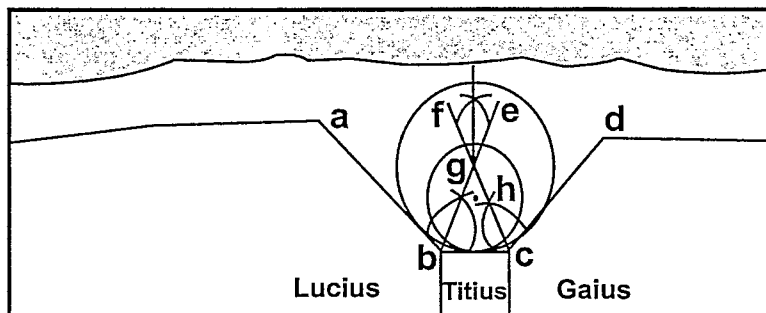
Proposition 7, Diagram 12



This diagram was constructed to indicate that there can be certain properties for which alluvion ought not extend all the way to the river, but rather ends sooner. This is the case where alluvion is enclosed between two lines namely ab and bc creating an angle at point b ., and this angle is situated, as it were, in the middle of Titius' property. Let there first be drawn a red line extending through the centre as line bF , as was shown above in the eighth diagram. From this it is evident that whatever is situated above the line in the direction of the source of the river, belongs to the bank ab and whatever is situated below that line in the direction of the estuary, belongs to bank bc and it is because of proximity as was stated; neither does the property of Titius have to be divided between upper and lower neighbours. But should you look back carefully, then the point dividing the properties falls on the lines that are straight in themselves. It therefore should be divided by drawing a straight line above it as shown in the seventh diagram above,

just as lines *ef* and *gf* indicate. Thus the portion bordering on the property of Titius ends at point *f*. and stops there. Should it extend further or should the line be twisted, or not straight, for example should you turn line *ef*. in the direction of the source of the river or extend it past *bdf*, then you would award more to the first bank than you ought to due to the right of proximity. The laws prohibit this although it is considered that it simply enlarged in such a way through alluvion. But should you place that which accrued first in the whole triangle *gbe* of Titius' property up to the yellow line *eg*, then the division should be made as in the subsequent diagram.

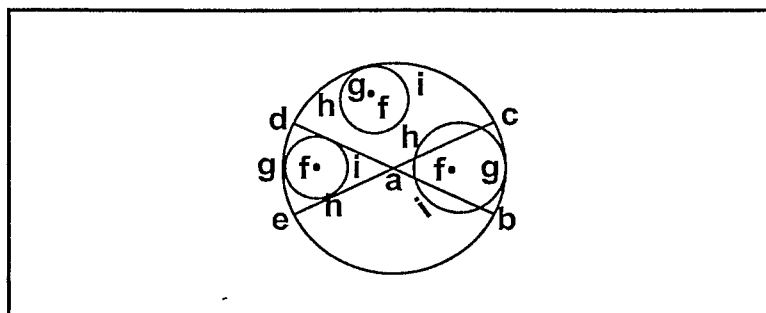
Proposition 8, Diagram 13



This diagram differs from the preceding one because in this instance the river-bank is enclosed by three lines namely *ab.*, *bc.* and *cd.* and it contains two angles namely in point *b.* and point *c.* The whole of the alluvion ought to be divided according to the right of proximity since various sides enclose all of it. Firstly, therefore, let a red intersecting line be drawn bisecting angle *b.* and let the line be called *be.* Let a line then be drawn bisecting angle *c.*, the line will be called *cf* and the two lines will intersect one another in point *g.* I thus state that the portion of the alluvion adhering to the property of Titius is bordered in point *g.*, since should there be a circle above this point (*g*), it would touch the line at a point on both sides. It is therefore that point at which the proximity of both is demarcated. Should you indeed move away and wish to construct a circle beyond point *g.*, then it will be near to one of the areas and further from the other, and whatever is situated within that triangle *bgc*, adheres to the property of Titius due to the right of proximity. This is evident since within this triangle, the centre of the one circle

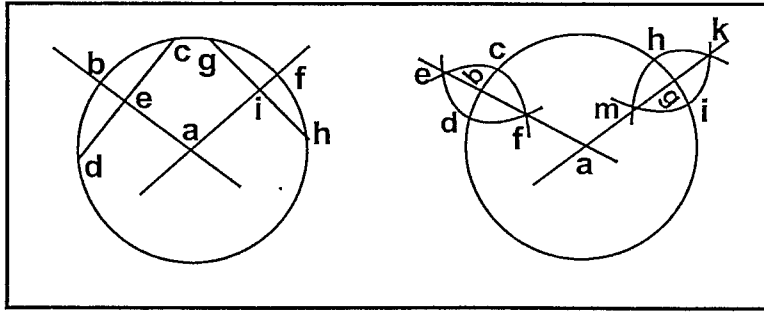
is placed in point *h*. touching the bank of Titius and no one else's bank. The remainder of the alluvion ought to be divided between Lucius and Caius by a straight line drawn up to the river. This is enough about a river-bank containing a line or straight lines. It remains to inspect a river-bank containing circular lines.

Theorem 1, Diagram 14



With a view to clarity of what should be stated concerning a circular figure, it has to be understood that a circle is a flat figure, indeed enclosed by one protracted line known as the circumference in the centre of which is a point from which all other lines extend to the circumference, each equal to the other individually as Euclid¹⁹⁷ states. In this diagram, the centre is *a*. and all four lines extending from it are individually equal in length and should more lines be drawn, it would be the same. In like manner it is evident that all said lines create an angle in the centre. I likewise submit that the whole of that portion in the circle between two lines is nearer to that section of the circumference demarcated by the extremities of those two lines. For example you may take that section of the circumference *bc* and draw straight lines to the centre; they create a triangle *bac*. I state that whatever is situated inside the triangle is closer to that portion of the circumference *bc* than to any other as stands to reason and it can be proven because should centre *f*. be placed in some part within said triangle and above it a blue circle *ghi* should be constructed, it would touch in point *g*, the said part of the circumference *bc*. I state that it will touch no other part of the circumference, therefore it is nearer to it. The same should be said about that which is contained within the triangle *bae* as well as within triangle *ead* and the above triangle *cad* as is evident.

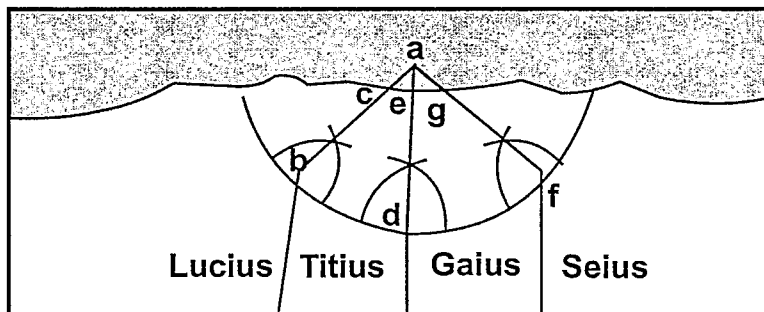
Problem 4, Diagram 15



Since it was stated in the previous discussion that lines should be drawn from the centre to the circumference and when it is uncertain where the centre is located, it is expedient that a line is drawn from the circumference in the direction of the centre or what is established to be the centre. This diagram was therefore constructed which contains two circles and so it shows how it is done in two ways. So firstly, let for example a point b . be placed on the circumference of the circle and let two other points c . and d . be placed on both sides at equal distance. Let a straight line cd be drawn and the centre e . of that line be found. Let a straight line be be drawn. I state that it necessarily intersects the centre in point a . as is shown in the beginning of the third book of Euclid¹⁹⁸. It is evident because in the same way as point f . is placed on another part of the circumference and two other points on both sides equal in distance apart g . and h . and thereafter the centre of said line Gh is found in point i . and a straight line fi is then drawn. I state that the line necessarily intersects the centre of the circle and should line be and fi be extended further, they would intersect in point a . being the centre. It is thus deduced that where said lines intersect, the centre of the circle is necessarily located. The second circle indicates that it may also be done in another manner, attaining the same result. Let a point a . be placed which might be the centre of the circle, but seems not to be the centre and on the circumference of the circle a point b . and on both sides thereof equal in distance two points c . and d . Let the foot of the compass be placed in point c . and extended to point d . and let the compass be rotated over and under. Let the foot of the compass be placed in similar fashion in point d . and extended to point c . and thus two circular lines are constructed intersecting one another outside the circle in point e . and within the circle in point

f. Let the line *ef* be drawn. I state that it necessarily extends through the centre of the circle. In another section of the circle, it would be similar for example should point *g.* be placed on the circumference and points *h.* and *i.*, on both sides at an equal distance and the compass be rotated above *h.* and *i.* As was stated in the preceding example the said lines will intersect in point *k* and *m.* Let the straight line *km* be constructed, then it extends to the centre and thus at the point where line *ef* and *km* will intersect, the centre *A.* will be. With that said as evidence, I state that the river-bank of properties having a circular line sometimes possess that which it surrounds because the alluvion was discharged within the circle and other times it possesses what was surrounded because the alluvion surrounds the whole of the circular river-bank. The following situation will be explained in the next diagrams: If in the first method then, either a river-bank surrounds a circular line more or less a semicircle, or it cannot surround the whole circle because in that way, the river would not have an exit.

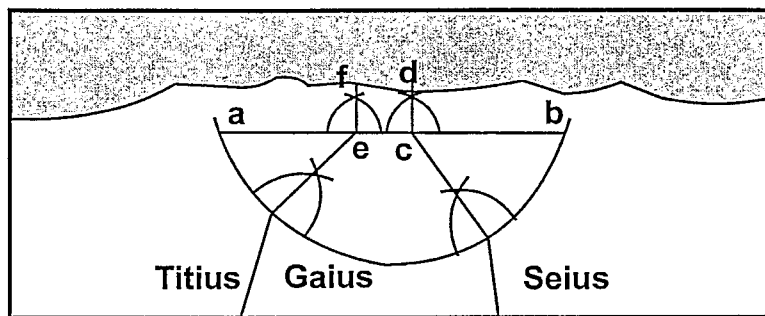
Proposition 9, Diagram 16



Should this diagram be examined, one entire river-bank, which is less than a semicircle, is enclosed and the alluvion is contained by the river-bank itself. The whole of the content is smaller than the bordering area and in respect of the alluvion not so much can be awarded as the bank comprises. In the same manner, although it is only one line, even so, because it is still circular it contains two flanks looking back towards each other and therefore that which is contained between the two, ought to be divided according to the right of proximity as was indicated in the previous diagram. Thus, at whatever point the boundaries of the property end, it is necessary to draw a line extending back to the centre according

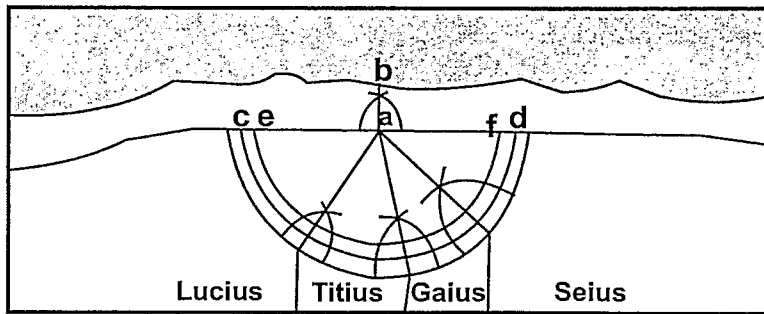
to diagram fourteen. With that done, it is certain that whatever is contained between two lines is closer to that section as shown above in the previous diagram. Seeing that there are two methods to draw a line in the direction of the centre as I stated above in the previous diagram, you will therefore complete it three times here on the three banks by drawing red lines BC , DE and FG to the river. And for this purpose, to be certain, the point to which these lines extend is the true centre and it should be found further into the river at point A . as yellow lines AC , AE and AG drawn past the red lines, indicate.

Proposition 10, Diagram 17



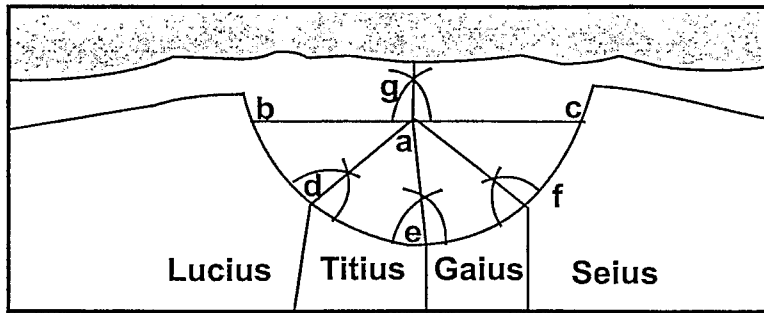
This diagram differs from the preceding one because there the alluvion did not extend beyond the whole content of the circular river-bank, whereas here it did indeed, from where that which is surrounded by the bank itself, ought to be divided in the way in which it was laid down in the previous diagram. That which is situated above blue line ab drawn from point a . to point b . is divided as if the bank had been a straight line there as straight lines CD and EF indicate, and this has often been proven in the previous diagrams.

Proposition 11, Diagram 18



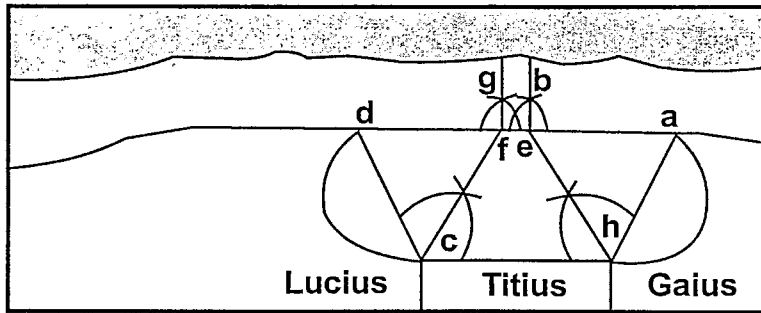
This figure contains a semicircle which is evident since the straight line running through the centre, connects its extremities to both sides of the circumference as is evident from the blue line *cd* through centre *a*. and it is defined in the following way. The semicircle is a flat figure with the diameter of a circle contained within half of the circumference as is stated in the first book of Euclid¹⁹⁹. I therefore state regarding this diagram that all the properties in the centre contained within the semicircle itself, will have a *pro rata* part of the alluvion up to the centre. Above that, they cannot possess anything. The reason being that in the centre, their portion ends at a point which is the end of that slice of land: for the point is not a part of it, but rather above that point drawn from a certain straight line as blue line *cd* indicates. The division ought to be done according to the latitude of each estate as the text states in D 41 1 29²⁰⁰. The latitude is, however, above point *a*. extending to the centre properties namely that of Titius and Gaius as was said. Thus anything situated above centre *A*. belongs to the properties situated on the extremities namely to the properties of Lucius and Seius and a straight line will thus be drawn perpendicularly towards them above the centre as red line *aB* indicates. This is advised if it is simply maintained that the line of the bank is circular and that alluvion simply accrued. It ought to be imagined that alluvion took place in such a circular fashion as yellow lines *CD* and *EF* indicate and thus the two lines were drawn circularly above the same centre *a*. and placed outside it. I reckon that it enlarged in the same manner towards the centre *a*., but should you surmise that alluvion added in one section and later in another, then how the division ought to be made is evident from what was stated before in the tenth diagram.

Proposition 12, Diagram 19

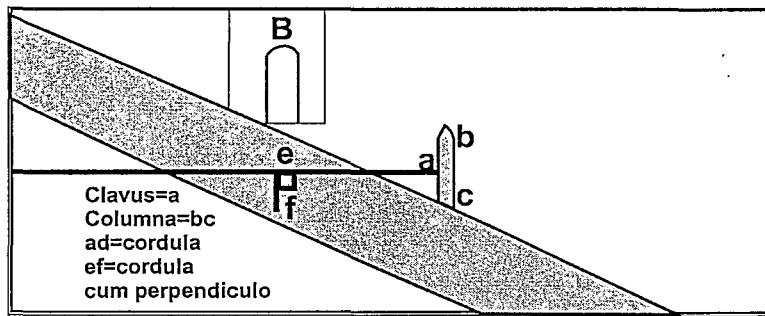


This diagram is more than a semicircle, as is evident, for when a line is drawn from one side of the circumference to the other, the centre, situated in point *a*., remains on that line. It therefore has to be said that all centre properties namely those belonging to Titius and Caius should be divided *pro rata* up to the centre according to the right of proximity as was previously stated. What is situated above the centre, on the other hand, ought to belong to those properties which are situated at the extremity on both sides namely to the properties of Lucius and Mevius as the drawn red lines *aD*, *aE* and *aF* indicate. Should red line *ag*, however, situated above the centre extend through the middle between Lucius and Mevius, it can easily be found. However, as is shown in this diagram, yellow lines were drawn there denoting it thus. Let the foot of the compass be placed in point *b*. and extended similarly beyond the centre and drawn circularly. Next let the foot of the compass be placed in point *c*. and similarly extended and drawn and let it be noted where those two lines intersect one another and a straight line *ag* be drawn from those points. The line will necessarily bisect the area.

Proposition 13, Diagram 20



This diagram differs from all the preceding ones as in those cases, some were enclosed by a single straight line, others by various straight lines and yet others by a single circular line. This diagram, however, is indeed enclosed by three lines, two of which are circular that is ab , which comes first and cd which is at the end. The other line bc lies in the middle. I therefore state at the outset that the whole area contained within the straight yellow line ab . and the original river-bank belongs to the property of Lucius²⁰¹, nothing of it belongs to Titius, neither on the grounds of the right of proximity, nor the right of accession as is evident to reason. In the same way, after the straight yellow line cd has been constructed, that whole area will belong to Caius, but nothing to Titius on the same grounds. Once this has been done, a diagram would remain, enclosed by three straight lines bE , bc and cf and the mode of division is clear from the thirteenth diagram above and red lines BE , CF indicate it. It has to be noticed in general, however, that the hollows situated in the river-bank of one property, when they are so irregular that they do not fall within the scope of the preceding diagrams, ought to be reduced to regular square shapes as was done in this diagram. For ports situated on an island, are assumed to be part of the island itself as in D 39 4 15²⁰². A port is indeed a certain enclosed place or cove in the river-bank as in D 50 16 59²⁰³. Thus coves situated within the river-bank of a property, ought to form part of the property itself. It might be said with reference to irregular shapes, should they be encountered, that they should be reduced to regular shapes since irregular shapes are not enclosed and no scientific method can be proposed for these, except reducing these into regular shapes.

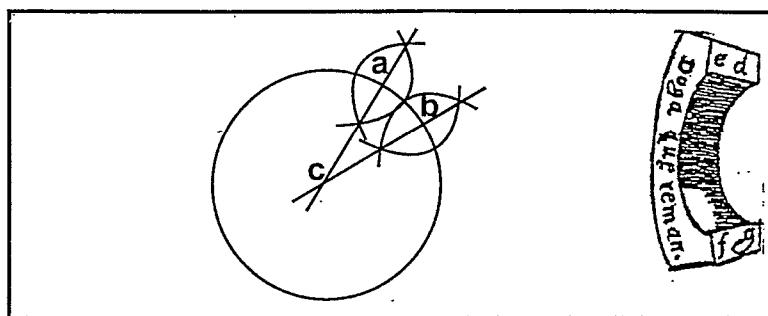


Moreover, that which was said concerning a straight line, also makes clear a frequently occurring factual dispute between the owners of the high-lying mills and the low-lying mills. For there seems to have been a stipulation prohibiting the high-lying mill owner from elevating his milling sluice higher than a certain nail driven into a certain column standing on one side of the river facing the bank itself. It happened, however, that a column could not be found on the other side of the river, nor a nail except the one on the side of the river which was being disputed by the mill owners. It was asked how much higher the owner of the lower-lying mill could or should lift his milling sluice on that side of the river, concerning which there was no dispute. Doubt existed for since only one point was supplied from where a line ought to be drawn namely that nail which was situated only on the one side of the river and on the other side there is no point. It seems that from the other side of the river, where there is neither column nor nail, the owner of the lower-lying mill could lift the milling sluice higher and guide the water along whichever part he wants. It is clear that when nothing is planted on the side of the river to give an indication of the depth at which the river may be guided or even a sluice be positioned, then a comparison cannot be drawn there as in D 35 1 27²⁰⁴. But it is responded that those words which state that a sluice may not be elevated higher than a certain nail, ought to be understood with reference to the total sluice as in D 8 2 23²⁰⁵. And it should be understood inasmuch as the nail reflects upon the whole length and breadth of the sluice after a straight line has been guided over it as in C 8 10 1²⁰⁶ and D 41 1 29²⁰⁷. How a straight line is to be drawn across, will become evident when a rope is extended from the nail in the direction of the other side of the river and a piece of lead is then placed perpendicular above said rope. And should the rope tied to a piece of lead create

right angles on all sides with the rope guided from the nail in the form of a cross, then the line is drawn straight. Should some angles, however, be acute and others obtuse, then the line is either guided too high up or too low down as is evident from what was said concerning the second diagram. In the same manner what was said before creates evidence for another position which occurs quite often in fact, especially in deeds of divisions as is frequently supplied, that one person owns a piece of property from one place to another inasmuch as it extends in a direct line. It seems that doubt sometimes exists concerning the meaning of these words. Thus I state that sometimes a whole piece of property is supplied in a deed through which an extension of the latitude ought to be drawn; sometimes fixed borders are laid down; sometimes one fixed border is laid down and the other is unknown. As an example of the first case, the deed states that whatever is on this side of a specific road or river along which a direct line can be extended, belongs to the first one, but whatever is situated on the other side of it, belongs to the second one. What I have said about straight ought to be understood in the manner that the road or the river extends and although it may not run straight, it may still be termed straight because the direction is straight as in D 27 1 10 3²⁰⁸. An example of the second case: should it be stated that the property extends from a certain border to another, inasmuch as it extends straight, it should belong to such a man: then it is the truth because straightness is an extension from one point to another as was stated in the first diagram. An example of the third case is when a first owner owns from a certain border inasmuch as along a straight line because, although the border may be straight itself and pointy as the parts show, a straight line still cannot be drawn to any of the parts except according to the border which is high or down-hill or broad or narrow or sharp or flat or round in the form of a column or quadrangle. On this subject I state that rocks, placed as boundaries, are usually placed in such a manner that they seem to look back toward a certain part as when the rock is elongated. It ought, however, not to look back from the sides, but rather straight from the sharpest section. I have seen that traditional rustic people say in which places they must stand as in D 32 1 79²⁰⁹ (read together with the *Breviarium extravagantium*²¹⁰). It is thus considered what kind of border is used or where the kind of border is not laid down, then it has to be noted that

should the border be situated near a certain hedge or limit, that a straight line ought to be drawn from those limits, that is one creating a right angle with the river-bank and how it is done, was clearly explained in what has gone before. All the same I consider that whoever draws up such deeds, should take care to explain more clearly. Thus far concerning straight lines, but those statements made concerning circular lines, gives rise to proof and solves an important question which arises and will be cleared up in the following diagram.

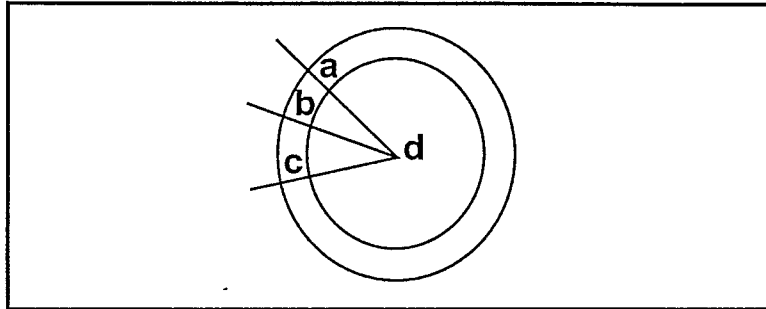
Proposition 15, Diagram 21



This diagram settles an important question which, in fact, frequently occurs. A statute warned that anyone who caused another damage through force to the value of ten golden florins, should be punished with death. It touches upon the instance where someone had gone to the house of another and emptied, by using force, a cask filled with wine, destroying the cask. Only one vessel *A*. remained and there was certainty concerning the quality of the wine, but not the quantity: this is the volume capacity of the cask. I say that certainty could be achieved in the following manner from what was stated above in diagram fifteen. Let the circumference *ed* of said vessel *A*. be drawn in the sand or on paper as black line *ab*. indicates. It is indeed a given that it forms part of the total circumference of the cask. Draw markings above that section to establish the centre as was stated in diagram fifteen and draw two lines intersecting one another. It is evident that the centre is situated in point *c*. Thereafter place the immovable foot of the compass in point *c*. and extend the other leg to line *ab*. and construct a circle as red circle *abd* indicates. I state that it will necessarily be the circumference of the cask. Therefore, having the depth of the one remaining vessel and the circumference

from the circle, any basic geometrician should know how to state the volume, but should the cask have been broader in the middle, it will easily be reduced to equal proportions by ordinary surveyors or illustrators as you will see in shortened form in the subsequent diagram.

Proposition 16, Diagram 22



This diagram was constructed to demonstrate the same principle as stated above only shorter. It is indeed a given that the vessel of the wine-cask contains two circular lines namely the exterior and the interior and the interior is the smaller of the two and both face back toward one centre. In the same manner, the wine barrel has two straight lines namely from the outermost exterior to the interior. But the two exterior points of those lines are mutually further apart than the two interior points and thus should those two lines be extended, it is inevitable that they be united as was stated in diagram one. Therefore, the thickness of one vessel or two is sufficient as lines *ab.* and *bc.* indicate from the exterior circle to the interior. Thus draw the straight lines of the flask from both sides and join them in point *d.*, which is the centre of the inner and the outer circle. Should you draw a circle, you will have the thickness of the wine-casket.

¹ The use of *Tyberiadis* in the nominative case indicates a corruption of a first declension Greek word to a latinised form in the third declension.

² Hercules Buttrigarius of Bologna (1531-1612), descendant of the famous jurist and teacher of Bartolus, Jacob Buttrigarius (Astuti, 1964:v).

³ Lateranense - Individuato dall'appartenenza o dal riferimento alla basilica di San Giovanni in Laterano in Roma e ai palazzi annessi (Vocabulario Illustrato della Lingua Italiana, 1975:1434). The architect of the Lateran palace was Domenico Fontana (1543-1607) and it was built in the period between 1550 and 1600 in the Vatican in Rome (Heydenreich and Lotz, 1974:286).

⁴ Repetitions of conjunctions such as *enim* and *autem* have been omitted in translation where they undermine dynamic equivalence. Nida and Taber (1982:14) indicate that reproducing style on a

formal level usually undermines dynamic equivalence as it does not contribute to the functionality of the translation.

⁵ Tiberius Claudius Nero, son of empress Livia by her first marriage and adoptive son of emperor Augustus (Cary and Scullard, 1992:351). Astuti (1964:iv) indicates that this is one of the examples of naïve etymology, characteristic of the school of the “commentators” and widely criticised by legal humanists.

⁶ Van de Kamp (1936:85) states that treatises of this nature were published by delivering them to the university where they were commented upon by fellow scholars as well as students of the university.

⁷ *Praeterea quod per alluvionem agro nostro flumen adicit, iure gentium nobis adquiretur. Per alluvionem autem id videtur adici, quod ita paulatim adicitur, ut intellegere non possimus, quantum quoquo momento temporis adiciatur* - D 41 1 7 1. Furthermore, what the river adds to our land by alluvion becomes ours by the law of nations. Addition by alluvion is that which is gradually added so that we cannot, at any given time, discern what is added (Mommsen *et al.* IV, 1985:488).

⁸ *Quod si vis fluminis partem aliquam ex tuo praedio detraxerit et meo praedio attulerit, palam est eam tuam permanere. Plane si longiore tempore fundo meo haeserit arboresque, quas secum traxerit, in meum fundum radices egerint, ex eo tempore videtur meo fundo adquisita esse* - D 41 1 7 2. But if the force of the river should detach part of your land and bring it down to mine, it obviously remains yours. Of course, if it adheres to my land, over a period of time, and trees on it thrust their roots into my land, it is deemed from that time to have become part of my land (Mommsen *et al.* IV, 1985:488).

⁹ *Praedium* is translated as a general term meaning property within the context of either *ager* or *fundus*.

¹⁰ *Acquisita* instead of *acquisitas*, as found in LL and LS, is preferred to the obvious corruption in BT.

¹¹ *Ait Praetor: 'quod cuiusque salvum fore receperint': hoc est quamcumque rem, sive mercem receperint. Inde apud Vivianum relatum est ad eas quoque res hoc edictum pertinere, quae mercibus accederent, veluti vestimenta quibus in navibus uterentur et cetera quae ad cottidianum usum habemus* - D 4 9 1 6. The Praetor says: “Where they have received property on the undertaking that it will be safe,” that is, whatever property or merchandise they have received. Hence, Vivianus states that this edict relates also to those things which are additional to merchandise, such as the clothing of those on board the ship and other things which are in daily use (Mommsen *et al.* I, 1985:161).

¹² *Item lapilli, gemmae et cetera, quae in litore inveniuntur, iure naturali statim inventoris fiunt* - Inst 2 1 18. Precious stones, too, gems and other things, found upon the sea-shore, become immediately by natural law the property of the finder (Sandars, 1917:97).

¹³ *Thesaurus, quos quis in suo loco invenerit, divus Hadrianus, naturalem aequitatem secutus, ei concessit, qui invenerit. Idemque statuit, si quis in sacro aut in religioso loco fortuito casu invenerit. At si quis in alieno loco non data ad hoc opera, sed fortuito invenerit, dimidium domino soli concessit. Et convenienter, si quis in Caesaris loco invenerit, dimidium inventoris, dimidium Caesaris esse statuit. Cui conveniens est, et si quis in publico loco vel fiscali invenerit, dimidium ipsius esse, dimidium fisci vel civitatis* - Inst 2 1 39. The Emperor Hadrian, in accordance with natural equity, allowed any treasure found by a man in his own land to belong to the finder, as also any treasure found by chance in a sacred or religious place. But if anyone found treasure without any express search, but by mere chance, in a place belonging to another, the emperor granted half to the finder and half to the proprietor of the soil; and on the same principle he ordered that, if anything was found in a place belonging to the emperor, half should belong to the finder, and half to the emperor. And consistently with this, if a man finds anything in a place belonging to the city or to the *fiscus*, half belongs to the finder, and half to the *fiscus* of the city. (Sandars, 1917:111).

¹⁴ *Thensaurus est vetus quaedam depositio pecuniae, cuius non extat memoria, ut iam dominum non habeat: sic enim fit eius, qui invenerit, quod non alterius sit. Alioquin si quis aliquid vel lucri causa, vel metus, vel custodiae condiderit sub terra, non est thensaurus: cuius etiam furtum sit* - D 41 1 31 1. Treasure is an ancient deposit of money, memory of which no longer survives, so that it is without owner; thus, what does not belong to another becomes the property of him who finds

it. For the rest, if someone should hide something in the ground for gain or out of fear or safekeeping, it is not treasure and to take it would be theft (Mommsen *et al.* IV, 1985:495).

¹⁵ *De his autem, quae vi fluminis importata sunt, an interdictum dari possit, quaeritur. Trebatius refert, cum Tiberis abundasset et res multas multorum in aliena aedificia detulisset, interdictum a praetore datum, ne vis fieret dominis, quo minus sua tollerent auferrent, si modo damni infecti repromitterent* – D 39 2 9 1. The question arises of whether an interdict can be granted relating to things carried onto one's property by the force of a river. Trebatius reports that on an occasion when the Tiber flooded and carried a great deal of property belonging to many people into other people's houses, an interdict was granted by the praetor to prevent force being used against the owners to stop them taking away their possessions, provided that they made undertakings in return against anticipated injury (Mommsen *et al.* III, 1985:382).

¹⁶ *Ne quid ex naufragiis diripiatur vel quis extraneus interveniat colligendis eis, multifariam prospectum est. Nam et divus Hadrianus edicto praecepit, ut hi, qui iuxta litora maris possident, scirent, si quando navis vel inflicta vel fracta inter fines agri cuiusque fuerint, ne naufragia diripiant, in ipsos iudicia praesides, qui res suas direptas queruntur, reddituros, ut quidquid probaverint ademptum sibi naufragio, id a possessoribus recipiant. De his autem, quos diripuisse probatum sit, praesidem ut de latronibus gravem sententiam dicere. Ut facilius sit probatio huiusmodi admissi, permisit his, et quidquid passos se huiusmodi queruntur, adire praefectos, et ad eum testari reosque petere, ut pro modo culpae vel vincti, vel sub fideiussoribus ad praesidem remittantur. A domino quoque possessionis, in qua id admissum dicatur, satis accipi, ne cognitioni desit, praecipitur. Sed nec intervenire naufragiis colligendis aut militem aut privatum aut libertum servumve Principis, placere sibi ait senatus* – D 47 9 7. A wide variety of provisions have been made so that nothing should be snatched from wrecks or that no third party interfere in the collecting of them. For the deified Hadrian also by edict ordained that those holding property near the shore should know that if a ship be dashed against or break up within the boundaries of their lands, they are not to despoil the wreck, else governors will grant actions against them to those complaining that their property has been seized, so that if anything be proved to have been taken from the wreck, it may be recovered from the landholder. But in the case of those proved to have looted, the governor is to inflict a grave penalty as on brigands. To facilitate proof in such cases, the emperor allows those who complain that they have suffered in such ways to approach the prefect and then to state their case and ask that the defendants, in proportion to their fault, either be bound or to provide verbal guarantors and so be remitted to the governor. It is further provided that the owner of the land where this is said to have happened shall give security that he will be present for the hearing. The senate resolves that in the collection of what has been wrecked, there shall participate no soldier, private individual, or freedman or slave of the emperor (Mommsen *et al.* IV, 1985:770).

¹⁷ *'Fundi' appellatione omne aedificium et omnis ager continetur. Sed in usu urbana aedificia 'aedes', rustica 'villae' dicuntur. Locus vero sine aedificio in urbe 'area', ruro autem 'ager' appellatur. Idemque ager cum aedificio 'fundus' dicitur* – D 50 16 211. In the designation "estate", every building and field is included. But in common parlance urban buildings are called "aedes", rural buildings "villae." But a place without a building is called an "area," in the country, however, a "field." And similarly a field with a building is called an "estate" (Mommsen *et al.* IV, 1985:952).

¹⁸ *'Ager' est locus, qui sine villa est* – D 50 16 27 pr. "Land" is a place which is without a building (Mommsen *et al.* IV, 1985:935).

¹⁹ *'Locus' est non fundus, sed portio aliqua fundi: 'fundus' autem integrum aliquid est. Et plerumque sine villa 'locum' accipimus: ceterum adeo opinio nostra et constitutio locum a fundo separat, ut et modicus locus possit fundus dici, si fundi animo eum habuimus. Non etiam magnitudo locum a fundo separat, sed nostra affectio: et quaelibet portio fundi poterit fundus dici, si iam hoc constituerimus. Nec non et fundus locus constitui potest, nam si eum alii adiunxerimus fundo, locus fundi efficietur* – D 50 16 60 pr. A "locus" is not an estate but some part of an estate; a "fundus [estate]," however, is something complete and we mostly regard as a locus something without a villa; but both in our opinion and by *constitutio*, a locus is distinct from a fundus in such a way that a locus can be called fundus if we possess it with the intention of regarding it as a fundus. Indeed it is not the size which distinguishes a locus from a fundus but our intention. And any part of a fundus can be called a fundus if that is what we have decided. And, furthermore, a

fundus can be decided to be a *locus* for if we have joined it to the *fundus* of someone else it will be made a *locus* on his *fundus* (Mommsen *et al.* IV, 1985:938).

²⁰ *Quaestio est, fundus a possessione, vel agro vel praedio quid distet. 'Fundus' est omne, quidquid solo tenetur. 'Ager' est, si species fundi ad usum hominis comparatur. 'Possessio' ab agro iuris proprietate distat: quidquid enim apprehendimus, cuius proprietate ad nos non pertinet aut nec potest pertinere, hoc possessionem appellamus: possessio ergo usus, ager proprietate loci est. 'Praedium' utriusque supra scriptae generale nomen est; nam et ager et possessio huius appellationis species sunt – D 50 16 115. The question arises, what distinguishes a *fundus* from a possession or a field or an estate. A “*fundus*” is anything which consists of land. A “field” exists if a kind of *fundus* is prepared for human use. A “possession” differs from a field by reason of law; for whatever we take, if its ownership does not pertain or cannot pertain to us, we call it possession. So possession is use, a field the ownership of a place. An “estate” is the general name of either the aforementioned things; for both field and possession are types of this kind of designation (Mommsen *et al.* IV, 1985:943).*

²¹ See endnote 17.

²² *Flumina publica quae fluunt, ripaeque eorum publicae sunt – D 43 12 3 pr. Public rivers are those which are always flowing and their banks are public (Mommsen et al. IV, 1985:580).*

²³ *Ripa autem ita recte definitur id, quod flumen continet naturalem rigorem cursus sui tenens: ceterum si quando vel imbris vel mari vel qua alia ratione ad tempus excrevit, ripas non mutat: nemo denique dixit Nilum, qui incremento suo Aegyptum operit, ripas suas mutare, vel ampliari. Nam cum ad perpetuam sui mensuram redierit, ripae alvei eius muniendae sunt. Si tamen naturaliter creverit ut perpetuum incrementum nactus sit, vel alio flumine admixto, vel qua alia ratione, dubio procul dicendum est, ripas quoque eum mutasse, quemadmodum si alveo mutato alia coepit currere – D 43 12 1 5 (in *Vulgata* D 43 11 1 5). A bank is rightly defined as that which contains a river when it is holding the line of its natural course. But when a river is sometimes temporarily swollen by rains or the sea or for any other reason, it does not change its banks. No one, after all, has said that the Nile, which covers Egypt with its flood, changes or enlarges its banks. For when it returns to its usual dimensions, the banks of its channel have to be built up. But if a river has grown naturally, so as to acquire a perpetual enlargement, either by admixture with another river or for some other reason, there is no doubt whatever that it has also changed its banks, just as if it has changed its bed and begun to run another course (Mommsen *et al.* IV, 1985:578).*

²⁴ *Attius fundum habebat secundum viam publicam: ultra viam flumen erat et ager Lucii Titii: fluit flumen paulatim primum omnium agrum, qui inter viam et flumen esset, ambedit et viam sustulit, postea rursus minutatim recessit et alluvione in antiquum locum rediit. Respondit, cum flumen agrum et viam publicam sustulisset, eum agrum eius factum esse, qui trans flumen fundum habuisset: postea cum paulatim retro redisset, ademisse ei, cuius factus esset, et addidisse ei, cuius trans viam esset, quoniam eius fundus proximus flumini esset, id autem, quod publicum fuisset, nemini accessisset; nec tamen impedimento viam esse ait, quo minus ager, qui trans viam alluvione relictus est, Attii fieret; nam ipsa quoque via fundi esset – D 41 1 38 pr (in *Vulgata* l. *Martius*). Attius has a property adjoining a public road; beyond the road lay a river and the holding of Lucius Titius. The river gradually flowed over and ate away the land lying between the road and the river and made away with the road and then gradually receded and, by alluvion, returned to its former bed. The opinion was that the river having destroyed the land and the public road, the land so destroyed became the property of the man who held the land beyond the river [that is, Lucius Titius]; but later, when the river slowly receded, it took the restored land away from the man who acquired it and added it to that of the owner beyond the road [that is, Attius], since his land was nearest to the river; but what had been public, became no one's property. And he said further that the road did not prevent the land again exposed, with the recession of the river, on the other side of the road from becoming the property of Attius, since the road itself was part of his land (Mommsen *et al.* IV, 1985:496).*

²⁵ Gloss m concerning the word *adiecit* – *Adiecit ponendo iuxta tuum praedium (Accursii glossa in Volumen - CGIC XI, 1969:29). Anastatic reprint, Torino 1968 of a 1487 Venice edition.*

²⁶ *Litora, quae fundo vendito coniuncta sunt, in modum non computantur, quia nullius sunt, sed iure gentium omnibus vacant: nec viae publicae aut loca religiosa vel sacra. Itaque ut proficiant venditori, caveri solet, ut viae, item litora et loca publica in modum cedant – D 18 1 51. Shores which adjoin the land sold are not included in its area [worden bij de berekening van de*

oppervlakte niet meegeteld – Spruit III, 1996:440] because they belong to no one, being open to all under the law of nations so also with public roads and sacred or religious places. Hence, for the vendor's protection a *provisio* should be made for the inclusion of shores and public places in the overall area (Mommsen *et al.* II, 1985:521).

²⁷ *Ita legatum est: 'Septiciae sorori meae fundi paterni mei Seiani partem dari volo sic ut est, et alteram partem ita, ut in diem mortis fuerit': quaesitum est, an ex verbis supra scriptis aggeres et praela iam posita parataque, ut immitantur aedificio, item instrumentum urbanum et rusticum cum mancipiis, quae fundi causa erant, ad legatarios pertineant. Respondit: potest haec verba 'sic ut est' ad instructum referri – D 33 7 27 4 (arg.).* A legacy was made as follows: "To my sister, Septicia, I want to be given half of the Seian farm, which was my father's, as it is, the other half as it shall be on the day of my death." It was asked whether, on the strength of the words quoted, the beams and the joists already in position and ready to be fitted into the building; likewise, the urban and rural *instrumentum* with the slaves who served the farm, would belong to the legatees. He replied: The words "as it is" can be referred to *instructum* (Mommsen *et al.* III, 1985:132).

²⁸ See endnote 26.

²⁹ *Riparum usus publicus est iuris gentium sicut ipsius fluminis. Itaque navem ad eas appellere, funes ex arboribus ibi natis religare, retia siccare et ex mare reducere, onus aliquid in his reponere cuilibet libertum est, sicuti per ipsum flumen navigare. Sed proprietates illorum est, quorum praediis haerent: qua de causa arbores quoque in his natae eorundem sunt – D 1 8 5.* The right to use river banks is public by *ius naturale* just as the use of the river itself. And everyone is at liberty to run boats aground on them, to tie ropes on to trees rooted there, to dry nets and haul them up from the sea, and to place any cargo on them, just as to sail up or down the river itself. But ownership of the banks is in those to whose estates they connect. Accordingly, trees growing in them belong to those same proprietors (Mommsen *et al.* I, 1985:25).

³⁰ *Quod venditur, in modum agri cedere debet, nisi si id actum est, ne cederet. At quod non venit, in modum cedendum, si id ipsum actum est, ut cederet, veluti viae publicae, limites, luci qui fundum tangunt: cum vero neutrum dictum est, cedere non debet, et ideo nominatim caveri solet, ut luci, viae publicae, quae in fundo sint, totae in modum cedant – D 18 6 7 1.* What is sold, should fall within the extent of the land unless it be the parties' intention that it should not. But what is not the object of sale should be comprised, only if there is an agreement to that effect, as in respect of public roads, boundaries and groves which adjoin the land. But when nothing is said either way, it should not be comprised. It is, in consequence, customary to provide that groves and public roads, lying within the land, are comprised in its extent (Mommsen *et al.* II, 1985:539).

³¹ *Ne tamen in universum inutiles essent proprietates semper abscedente usu fructu, placuit certis modis extinguere usum fructum et ad proprietatem reverti – D 7 1 3 2.* However, so that bare ownership might not become altogether worthless due to a usufruct being continually outstanding, it has been settled that a usufruct may be extinguished in certain specific ways and revert to the bare ownership (Mommsen *et al.* I, 1985:216).

³² See endnote 30.

³³ See endnote 30.

³⁴ *Illae* as in *LL* is preferred to the obvious corruption *ille* in *BT*. It seems that the siglum has been omitted.

³⁵ See endnote 24.

³⁶ *Riparum quoque usus publicus est iuris gentium, sicut ipsius fluminis: itaque navem ad eas appellere, funes ex arboribus ibi natis religare, onus aliquid in his reponere cuilibet libertum est, sicuti per ipsum flumen navigare. Sed proprietates earum illorum est, quorum praediis haerent: qua de causa arbores quoque in iisdem natae eorundem sunt – Inst 2 1 4.* The public use of the banks of a river is part of the law of nations, just as is that of the river itself. All persons, therefore, are as much at liberty to bring their vessels to the bank, to fasten ropes to the trees growing there, and to place any part of their cargo there, as to navigate the river itself. But the banks of a river are the property of those whose land they adjoin; and consequently trees growing on them are also the property of the same persons (Sandars, 1917:91).

³⁷ *Praeterea si in confinio fossa sit neque purgari vicinus patiat eam partem quae tibi accedat, posse te magis aquae pluviae arcendae Labeo ait – D 39 3 2 2.* Besides this, Labeo says that if a ditch is on a boundary line and the neighbor does not permit the clearing of that part of the ditch which adjoins to your land, you can bring an action *in rem* instead of an action to ward off rainwater (Mommsen *et al.* III, 1985:397).

³⁸ *Publici loci appellatio quemadmodum accipiatur, Labeo definit, ut et ad areas et ad insulas et ad agros et ad vias publicas itineraque publica pertineat* – D 43 8 2 3. The term “public place” should be understood, as defined by Labeo, to apply to public open spaces, tenement buildings, fields, roads and highways (Mommsen *et al.* IV, 1985:574).

³⁹ In LL the following line has been inserted here: “*Idem intelligo de fossis quae sunt inter viam et fundum eadem ratione.*”

⁴⁰ See endnote 27.

⁴¹ Hugutio (also Ugutio) of Pisa, professor at Bologna and bishop of Ferrara compiled a dictionary of terms, the *Liber derivationum* (Haskins, 1968:132; Von Savigny III, 1986:579a). It was an etymological lexicon which included compounds, derivatives and roots of words (Grendler, 1991:113). On the influence of Hugutio, see Smith (1975:31).

⁴² See endnote 30.

⁴³ *De eo opere, quod agri colendi causa arato factum sit, Quintus Mucius ait non competere hanc actionem. Trebatius autem, non quod agri, sed quod frumenti dumtaxat, quaerendi causa arato factum solum excepit* – D 39 3 1 3. Quintus Mucius says that this action is not available with reference to work carried out with a plough for the purpose of cultivating a field. However, Trebatius excludes from the scope of the action not work carried out with a plough for the purposes of cultivating a field, but only work carried out with a plough for the purpose of securing a crop (Mommsen *et al.* III, 1985:395).

⁴⁴ *Impensae necessariae sunt, quibus non factis dos imminuitur, veluti aggeres facere, flumina avertere, aedificia vetera fulcire itemque reficere, arbores in locum mortuarum reponere* – D 25 1 14 pr. Necessary expenses are those which if left undone will reduce the value of the dowry, like those for building dikes, diverting rivers, supporting or rebuilding old buildings, and replacing trees which have died (Mommsen *et al.* II, 1985:732).

⁴⁵ *Secundum ripas fluminum loca non omnia publica sunt, cum ripae cedant, ex quo primum a plano vergere incipit usque ad aquam* – D 43 12 3 2. Along the banks, not all places are public, because the bank begins where the slope first starts to bear down to the water from level ground (Mommsen *et al.* IV, 1985:580).

⁴⁶ *Si aedes meae a tuis aedibus tantum distent, ut prospici non possint, aut medius mons earum conspectum auferat, servitus imponi non potest* - D 8 2 38 pr (in *Vulgata* D 8 2 37 pr). If my house is so far distant from your house that one cannot be seen from the other or if a mountain situated between them blocks the view, a servitude cannot be created between them (Mommsen *et al.* I, 1985:257).

⁴⁷ See endnote 41.

⁴⁸ Papias, an Italian lexicographer of the eleventh century, compiled a dictionary variously known as the *Alphabetum*, *Breviarium*, *Mater verborum* and *Elementarium doctrinae rudimentum*. It was a combined dictionary and encyclopaedia, drawing from the older grammars and glossaries, but containing recent examples (Haskins, 1968:132; Coing I, 1973:534). Modern scholars believe that *papias* is part of the title of the work and that the author remains unknown (Grendler, 1991:113).

⁴⁹ *Item quaecumque aliis iuncta sive adiecta accessionis loco cedunt, ea quamdiu cohaerent dominus vindicare non potest, sed ad exhibendum agere potest, ut separentur et tunc vindicentur: scilicet excepto eo, quod Cassius de ferruminatione scribit. Dicit enim, si statuae suae ferruminatione iunctum bracchium sit, unitate maioris partis consumi et quod semel alienum factum sit, etiamsi inde abruptum sit, redire ad priorem dominum non posse. Non idem in eo quod adplumbatum sit, quia ferruminatione per eandem materiam facit confusionem, plumbatura non idem efficit. Ideoque in omnibus his casibus, in quibus neque ad exhibendum neque in rem locum habet, in factum actio necessaria est. At in his corporibus, quae ex distantibus corporibus essent, constat singulas partes retinere suam propriam speciem, ut singuli homines, singulae oves; ideoque posse me gregem vindicare, quamvis aries tuus sit immixtus: sed et te arietem vindicare posse, quod non idem in cohaerentibus corporibus eveniret: nam si statuae meae bracchium alienae statuae addideris, non posse dici bracchium tuum esse, quia tota statua uno spiritu continentur* – D 6 1 23 5 (in *Vulgata* D 6 1 24 5). Where a thing has been joined or attached to another thing and so merges with the other by way of accession, the former cannot be vindicated by its owner, so long as the two are stuck together. He can, however, sue by the action for production to have it detached and then vindicate it. This is subject to the exception mentioned by Cassius in regard to welding. He says that if an arm of a statue has been joined to the rest of the statue by welding, it is merged in the unified whole of the larger part, and once it has become

another's property cannot, even though later broken off, revert to its former owner. It is not the same with what has been soldered with lead, because welding effects fusion of two things made of the same material, whereas soldering does not have that effect. And so, in all these cases in which neither for an action for production nor for an *actio in rem*, an *actio in factum* is necessary. But in the case of things which consist of a number of individual objects, it is accepted that all of them retain their separate identities, as say, individual men or individual sheep. Thus I can vindicate a flock of sheep, even though your ram is mixed in with them, and you can vindicate the ram. The situation is different where the parts of the whole are stuck together; for if you mix an arm from someone else's statue to my statue, it cannot be said that the arm is yours, because the complete statue constitutes a single whole (Mommsen *et al.* I, 1985:205).

⁵⁰ *Montes exultaverunt ut arietes, et colles sicut agni ovium* – Psalm 114:4 (Bible, 1863). Although the original Latin text of the Psalm could be traced, it remains uncertain to which edition of the Bible, Bartolus refers. Said copy must have contained *glossae* on certain verses. Bloemendaal (1966:86) indicates that two printed editions of the Latin Septuagint were in existence in Italy during Bartolus' life. The printing house *Aldus* produced the first printed edition of the Septuagint in Venice in 1518, while the Complutensian Polygot version of the Bible was produced in 1514 – 1517.

⁵¹ In the LL the following line is inserted here: "*Colles vero mediocris altitudinis et communiter sunt inculti.*"

⁵² A reading of *parvae altitudinis* in LL is preferred here.

⁵³ *Flumen a rivo magnitudine discernendum est, aut existimatione circumcolentium* – D 43 12 1 1. A river is to be distinguished from a stream by its size, or by the opinion of the surrounding inhabitants (Mommsen *et al.* IV, 1985:578).

⁵⁴ See endnote 48.

⁵⁵ *Praetor ait: "Quo minus illi viam publicam iterve publicum aperire reficere liceat, dum ne ea via idve iter deterius fiat, vim fieri veto."* – D 43 11 1 pr (in *Vulgata* D 43 10 1 pr). The praetor says: "I forbid the use of force to prevent such a one from opening up or repairing a public road or way, as long as that road or way is not made worse" (Mommsen *et al.* IV, 1985:577). It is clear from the text citation that either the reference to the *titulus* or the *lex* is corrupt as *l. Ediles* does not appear in the title concerning the repairing of a public road or way. A different *lex* is cited in the 1515 Lyon edition – *l. cum aedes*. The latter citation, however, has no bearing upon the argument in question and seems equally corrupt. D 43 10 1, which is in Greek, is an indication that Bartolus may have used a Latin translation of the Greek sections of the *Corpus Iuris Civilis* as the Greek equivalent of *aediles curules* (ἑστουρικῶν), which was translated by Mommsen as *aediles urbium*, seems to have been used. When this is taken into account, the citation makes perfect sense – the streets must be levelled in such a way that the buildings are not damaged by "rivers".

⁵⁶ *Denique ait condicionibus agrorum quasdam leges esse dicas, ut, quibus agris magna sit flumina, liceat mihi, scilicet in agro tuo, aggeres vel fossas habere: si tamen lex non sit agro dicta, agri naturam esse servandam et semper inferiorem superiori servire atque hoc incommodum naturaliter pati inferiorem agrum a superiore compensareque debere cum alio commodo: sicut enim omnis pinguitudo terrae ad eum decurrit, ita etiam aquae incommodum ad eum defluere. Si tamen lex agri non inveniatur, vetustatem vicem legis tenere. Sane enim et in servitutibus hoc idem sequimur, ut, ubi servitus non in venitur imposita, qui diu usus est servitute neque vi neque precario neque clam, habuisse longa consuetudine velut iure impositam servitutem videatur. Non ergo cogemus vicinum aggeres munire, sed nos in eius agro muniemus: eritque ista quasi servitus, in quem rem utilem actionem habemus vel interdictum* – D 39 3 1 23. Next he says that specific regulations have been imposed by arrangement on certain categories of field, so that, for example, where there are large watercourses in a field I can have dams and ditches, even on your field, but that if no regulation has been imposed affecting a given field, its natural state must be preserved and a lower field must always be under servitude to a higher one, this inconvenience being something that a lower field must suffer vis-à-vis a higher one as a matter of nature and which is compensated by other advantages; for just as the richness of the soil tends towards the lower field, so does the inconvenience of the downward flow of the water. Where, however, no regulation relating to the field in question is to be discovered, he says that established custom takes the place of such regulation. For in the case of servitudes as well, of course, we follow the same rule, that is to say, that where it is discovered that no servitude has been imposed, the person who has for a

long time acted as though there were a servitude and has done so neither by force nor *precario* nor secretly, the person is regarded as having a servitude imposed quasi-legally by reason of prolonged custom. Consequently we will not compel the neighbor to construct dams but will construct them ourselves on his land and this will count as a sort of servitude in respect of which we will have the right to an *actio utilis in rem* or an interdict (Mommsen *et al.* III, 1985:396).

⁵⁷ *Sed sciendum est morbum apud Sabinum sic definitum esse habitum cuiusque corporis contra naturam, qui usum eius ad id facit deteriolem, cuius causa natura nobis eius corporis sanitatem dedit: id autem alias in toto corpore, alias in parte accidere (namque totius corporis morbus est puta φθίσις febris, partis veluti caecitas, licet homo itaque natus sit): vitiumque a morbo multum differre, ut puta si quis balbus sit, nam hunc vitiosum magis esse quam morbosum. Ego puto aediles tollendae dubitationis gratia bis κατὰ τοῦ αὐτοῦ idem dixisse, ne qua dubitatio supereset – D 21 1 1 7 (arg.).* It is to be noted that a definition of a disease as an unnatural physical condition whereby the usefulness of the body is impaired for the purposes for which nature endowed us with health of body appears in Sabinus. Such condition may affect the whole of the body or only part thereof. (Tuberculosis and fever exemplify the former; blindness, even from birth, the latter.) Defect, he says, is very different from disease; stammering for instance is a defect rather than a disease. Personally I am of the opinion that the *aediles* employed a pleonastic expression to preclude any doubt (Mommsen *et al.* II, 1985:602). Although this reference could be traced conclusively, its relevance seems dubious.

⁵⁸ See endnote 27.

⁵⁹ In this case, the whole of the *lex* is cited. *Flumina publica quae fluunt ripaeque eorum publicae sunt – D 43 12 3 pr.* Public rivers are those which are always flowing, and their banks are public. *Ripa ea putatur esse, quae plenissimum flumen continet – D 43 12 3 1.* A bank is held to be what contains a river at its fullest. *Secundum ripas fluminum loca non omnia publica sunt, cum ripae cedant, ex quo primum a plano vergere incipit usque ad aquam – D 43 12 3 2.* Along the banks not all places are public, because the banks begin where the slope first starts to bear down to the water from level ground (Mommsen *et al.* IV, 1985:580).

⁶⁰ See gloss 7 on the phrase *a brundisio – ut licet dictio a separationem denotet (Accursii glossa in Digestum Vetus - CGIC VII, 1969:557)*. Anastatic reprint, Torino 1969 of a 1488 Venice edition.

⁶¹ *Recte dicimus eum fundum totum nostrum esse, etiam cum usus fructus alienus est, quia usus fructus non domini pars, sed servitutis sit, ut via et iter; nec falso dici totum meum esse, cuius non potest ulla pars dici alterius esse. Hoc et Iulianus, et est verius – D 50 16 25 pr.* We rightly describe a “whole” property as being ours even if the usufruct belongs to someone else because usufruct is not part of ownership but is a kind of servitude, like a right of way or passage; nor is it wrong for the “whole” of something to be described as mine of which no part can be described as belonging to someone else. Julian also held this view, and it is the more probable (Mommsen *et al.* IV, 1985:935).

⁶² *Is qui in puteum vicini aliquid effuderit, ut hoc facto aquam corrumpere, ait Labeo interdicto quod vi aut clam eum teneri: portio enim agri videtur aqua viva, quemadmodum si quid operis in aqua fecisset – D 43 24 11 pr (in Vulgata D 43 23 11 pr).* Someone who pours something into a well so as to pollute the water with it is, as Labeo says, liable under the interdict against force or stealth as; for fresh water is part of the land, just as if someone had done work connected with water (Mommsen *et al.* IV, 1985:606).

⁶³ See endnote 59.

⁶⁴ *Sed si super aedes, quas possideo, cenaculum sit, in quo alius quasi dominus moretur, interdicto uti possidetis me uti posse Labeo ait, non eum qui in cenaculo moretur: semper enim superficiem solo cedere. Plane si cenaculum ex publico aditum habeat, ait Labeo videri non ab eo aedes possideri, qui κρύπταξ possideret, sed ab eo, cuius aedes supra κρύπταξ essent. Verum est hoc in eo, qui aditum ex publico habuit; ceterum superficarii proprio interdicto et actionibus a praetore utetur. Dominus autem soli tam adversus alium quam adversus superficarium potior erit interdicto uti possidetis; sed praetor superficarium tuebitur secundum legem locationis; et ita Pomponius quoque probat – D 43 17 3 7 (in Vulgata D 43 16 3 7) (arg.).* But if, above the house that I possess there is an upstairs apartment in which someone else is residing as if he were its owner, Labeo says that the interdict is available to me but not to the resident in the upstairs apartment; for the *superficies* always yields place to the land. Plainly, if an upstairs apartment has the entrance from the public [street], Labeo says the house is possessed not by the possessor of the hidden part, but by the person whose house is above it. This is true of him who has the entrance

from the public [street], otherwise, he will make use of the interdict proper to superficiaries and actions granted by the praetor. But the owner of the ground will be preferred under the interdict for possession of land against a superficiary as against anyone else. However, the praetor will protect the superficiary according to the law of letting, as Pomponius confirms (Mommsen *et al.* IV, 1985:590). A variant of the paragraph citation in LL, *Si supra eas*, could not be traced within the context of Bartolus' argument and given the obscurity of its relevance, the precise reference remains uncertain.

⁶⁵ *Idem ait aedibus emptis, si fuerint dirutae, ea quae aedificio accesserunt huiusmodi actione petenda.* – D 6 2 11 6 (in *Vulgata* D 6 2 13 6). He also says where a house has been bought and destroyed, any accessions to it can be removed by this form of action (Mommsen *et al.* I, 1985:214). In the 1515 Lyon edition the citation is supplied as *Si sponsus § quod tamen per alluvionem*, a corrupt citation according to the *Indices Corporis Iuris Civilis* as such a *lex* does not appear in said title. The subsequent *paragraphus* appears to be the correct citation. *Quod tamen per alluvionem fundo accessit, simile fit ei cui accedit: et ideo si ipse fundus Publiciana peti non potest, non hoc petetur, si autem potest, et ad partem, quae per alluvionem accessit: et ita Pomponius scribit* - D 6 2 11 7. An accession to land by alluvion becomes similar in condition to the land to which it accedes. So if that land cannot be recovered by the Publician, the accession cannot either; if it can be recovered, as Pomponius writes, then [the Publician applies] also to the part which acceded by alluvion (Mommsen *et al.* I, 1985:214).

⁶⁶ *Si nuda proprietatis pignori data sit, usus fructus, qui postea adcreverit, pignori erit: eadem causa est alluvionis* – D 13 7 18 1. If bare title is pledged, the usufruct accruing afterward will also be charged as *pignus*. It is the same with alluvial accretions (Mommsen *et al.* I, 1985:410).

⁶⁷ *Si fundus hypothecae datus sit, deinde alluvione maior factus est, totus obligabitur* - D 20 1 16 pr. If land is mortgaged and then increases by alluvion, the whole is bound (Mommsen *et al.* II, 1985:584).

⁶⁸ The reference to the *paragraphus* appears corrupt as alluvion is only discussed, within the context of Bartolus' argument, in *paragraphus* 4 of said reference. *Huic vicinus tractatus est, qui solet in eo quod accessit tractari: et placuit alluvionis quoque usum fructum ad fructuarium pertinere. Sed si insula iuxta fundum in flumine nata sit, eius usum fructum ad fructuarium non pertinere Pegasus scribit, licet proprietati accedat: esse enim veluti proprium fundum, cuius usus fructus ad te non pertineat. Quae sententia non est sine ratione: nam ubi latitet incrementum, et usus fructus augetur, ubi autem apparet separatum, fructuarium non accedit* – D 7 1 9 4 (in *Vulgata* D 7 1 10 4). Analogous to the above is a point often considered in the case of accession; and it has been settled that the usufructuary is entitled to the usufruct of alluvial accretions. However, if an island arises in the river adjoining an estate, Pegasus states that the usufruct of it does not go to the usufructuary of that estate, although it does accede to the bare ownership. He says that the island forms, as it were, a special estate, the usufruct of which does not belong to you. This opinion is not without justification: the fact is that where the increase is imperceptible, the usufruct is also increased; but, where the accretion is a clearly discernible entity, it is not an accession from which the usufructuary may benefit (Mommsen *et al.* I, 1985:217).

⁶⁹ *Si quis post testamentum factum fundo Titiano legato partem aliquam adiecerit, quam fundi Titiani destinaret, id quod adiectum est exigi a legatario potest (et similis est causa alluvionis) et maxime si ex alio agro, qui fuit eius cum testamentum faceret, eam partem adiecit* – D 30 1 24 2. If anyone after making his will and bequeathing the Titian farm had added to it any part which he intended to belong to the Titian farm, the addition can be extracted by the legatee, and the same applies in the case of alluvion, and especially if the part added was from another field which was his when he made his will (Mommsen *et al.* III, 1985:5).

⁷⁰ *Praeterea quod per alluvionem agro tuo flumen adiecit, iure gentium tibi acquiritur. Est autem alluvio incrementum latens. Per alluvionem autem id videtur adiici, quod ita paulatim adiicitur, ut intellegere non possis, quantum quoquo momento temporis adiciatur* – Inst 2 1 20. Moreover, the alluvial soil added by the river to your land becomes yours by the law of nations. Alluvion is an imperceptible increase; and that is added by alluvion, which is added so gradually that no one can perceive how much is added at any one moment of time [dat u niet kunt waarnemen hoeveel er op een willekeurige moment wordt toegevoegd – Spruit I, 1996:59] (Sandars, 1917:99).

⁷¹ *Intelligo* in LL and LS is preferred to *intellige* in BT.

⁷² See endnote 24.

⁷³ See endnote 36.

⁷⁴ *Sed Celsus filius ait hominem liberum scientem te emere non posse nec cuiuscumque rei si scias alienationem esse: ut sacra et religiosa loca aut quorum commercium non sit, ut publica, quae non in pecunia populi, sed in publico usu habeantur, ut est campus Martius - D 18 1 6 pr.* However, the younger Celsus says that you cannot wittingly buy a freeman or anything, the alienation of which you know to be forbidden; for instance, sacred or religious land or land excluded from private dealings, such as those public lands which are not in private possession but are for public use, such as the Field of Mars (Mommsen *et al.* II, 1985:514).

⁷⁵ See endnote 41.

⁷⁶ See endnote 48.

⁷⁷ See endnote 24.

⁷⁸ It seems that the whole of the *lex* is cited. *Summa rerum divisio in duos articulos deducitur: nam aliae sunt divini iuris, aliae humani. Divini iuris sunt veluti res sacrae et religiosae. Sanctae quoque res, veluti muri et portae, quodammodo divini iuris sunt. Quod autem divini iuris est, id nullius in bonis est: id vero, quod humani iuris est, plerumque alicuius in bonis est, potest autem et nullius in bonis esse: nam res hereditariae, antequam aliquis heres existat, nullius in bonis sunt. Hae autem res, quae humani iuris sunt, aut publicae sunt aut privatae. Quae publicae sunt, nullius in bonis esse creduntur, ipsius enim universitatis esse creduntur: privatae autem sunt, quae singulorum sunt - D 1 8 1 pr.* The main division of things distinguishes them under two heads: some things are subject to divine right, others to human. Those subject to divine right are, for example, sacred things and religious things. Sanctified things (*res sanctae*) also, such as city walls and portals, are in a certain degree subject to divine right. For what is subject to divine right is not anyone's property. But something which is subject to human right does in most cases belong within someone's property, though it can happen that it is not so. For things comprising a deceased person's estate are not in anyone's ownership until someone becomes heir. Those things which are subject to human right are either public or private. Public things are considered to be nobody's property for they belong corporately to the whole community. Private things are things which belong to individuals. *Quaedam praeterea res corporales sunt, quaedam incorporales. Corporales hae sunt, quae tangi possunt, veluti fundus homo vestis aurum argentum et denique aliae res innumerabiles: incorporales sunt, quae tangi non possunt, qualia sunt ea, quae in iure consistunt, sicut hereditas, usus fructus, obligationes quoquo modo contractae. Nec ad rem pertinet, quod in hereditate res corporales continentur: nam et fructus, qui ex fundo percipiuntur, corporales sunt, et id quod ex aliqua obligatione nobis debetur plerumque corporale est, veluti fundus homo pecunia: nam ipsum ius successionis et ipsum ius utendi fruendi et ipsum ius obligationis incorporale est. eodem numero sunt et iura praediorum urbanorum et rusticorum, quae etiam servitutes vocantur - D 1 8 1 1.* Further, some things are corporeal, others incorporeal. Corporeal things are those which can be touched, such as land, a slave, a garment, gold, silver, and in short innumerable other things. Incorporeal things are things which cannot be touched, being of the sort which exists only in contemplation of law, such as the estate of a deceased person, a usufruct, and obligations however taken on. Nor is it relevant that in an estate are contained corporeal things. For the fruits which are gathered from a piece of land are also corporeal, and what we are owed under some obligation or other is mostly corporeal, for example, land, a slave, money. The fact is that the right of succession itself, the right to use and to fruits itself, and the right itself correlative to the obligation is in each case incorporeal. Among this number also are the rights attaching to landholdings both urban and rural which bear the name also of servitudes (Mommsen *et al.* I, 1985:24).

⁷⁹ *Sic et si non proximo meo praedio servitutum vicinus debeat, sed ulteriori, agere potero ius esse mihi ire agere ad illum fundum superiorem, quamvis servitutum ipse per fundum meum non habeam, sicut interveniente via publica vel flumine quod vado transiri potest. Sed loco sacro vel religioso, vel sancto interveniente, quo fas non sit uti, nulla eorum servitus imponi poterit - D 39 3 17 3.* Similarly, even if it is not to a field of mine immediately neighboring his property but to one further off that my neighbor owes a servitude, I will be able to bring an action to establish my right of way in person or with cattle to the said more distant property even though I do not have a servitude for passage through my own property, just as in the case where a public road or a fordable public river intervenes. However, no servitude can be imposed where a consecrated, religious or sanctified piece of land, of the sort that is wrong to use, intervenes (Mommsen *et al.* III, 1985:402).

⁸⁰ *Publico loco interveniente vel via publica haustus servitus imponi potest, aquae ductus non potest: a principe autem peti solet, ut per viam publicam aquam ducere sine incommodo publico liceat. Sacri et religiosi loci interventus etiam itineris servitutem impedit, cum servitus per ea loca nulli deberi potest* – D 8 1 14 2. Should public ground or a public roadway lie between two estates, a servitude giving the right to draw water can still be created, although a servitude giving the right to channel water cannot. It is, however, practice to petition the emperor for permission to lead a watercourse across a public roadway, as long as the public is not inconvenienced thereby. If it is sacred or religious ground that lies between the two estates, this prevents even a servitude of iter being created, because no one can be allowed a servitude over such ground (Mommsen *et al.* I, 1985:251).

⁸¹ See endnote 24.

⁸² *Cum via publica vel fluminis impetu vel ruina amissa est, vicinus proximus praestare debet* – D 8 6 14 1. Where a public roadway is destroyed by a river flooding or by some other disaster, it is the duty of the landowner, whose land is closest to it, to provide for a means of passage (Mommsen *et al.* I, 1985:274).

⁸³ *Si insula in publico flumine fuerit nata inque ea aliquid fiat, non videtur in publico fieri. Illa enim insula aut occupantis est, si limitati agri fuerunt, aut eius cuius ripam contingit, aut, si in medio alveo nata est, eorum est, qui prope utrasque ripas possident* – D 43 12 1 6. If an island comes into being in a public river and something is done on the island, it is not held that it is being done on public property. For the island belongs either to the person who first occupies it if the fields have fixed boundaries, or to the person whose bank it adjoins or if it has come into being in the middle of the channel, to those who possess each bank nearby (Mommsen *et al.* IV, 1985:578).

⁸⁴ *Fluminum quaedam publica sunt, quaedam non. Publicum flumen esse Cassius definit, quod perenne sit: haec sententia Cassii, quam Celsus probat, videtur esse probabilis* – D 43 12 1 3 (in *Vulgata* D 43 11 1 3). Some rivers are public, some not. Cassius defined a public river as a perennial one; this opinion of Cassius, which Celsus also approves, is held to be acceptable (Mommsen *et al.* IV, 1985:578).

⁸⁵ See gloss q on *flumina* – *Flumina aut omnia sunt perpetua ut padus et rhenum; quaedam enim sunt privata ut fossata in agris posita quae quandoque currunt, quandoque non ut ff. de flu. et ne quid in flu. l. i. et in l. ii et ff. eo. nemo* (Accursii glossa in *Volumen* - CGIC XI, 1969:27). Anastatic reprint, Torino 1969 of a 1312 Pisa edition.

⁸⁶ *Flumina quae in hyeme currunt et in aestate non, sunt privata* - *Ad Interdictum ne quid in flumine publico navigare liceat, in fine* (Roffredi Beneventani *Libelli Iuris Civilis* - CGIC VI, 1968:51). Anastatic reprint, Torino 1968 of a 1500 Avignon edition. Roffredus, also known as Roffredus Epiphanius and Roffredus Beneventanus, was born during the latter part of the twelfth century in Benevento, Italy. He studied under Placentinus, Johannes Bassianus, Azo as well as Hugolinus and later became professor of law at the university of Bologna (Van Zyl, 1983:104).

⁸⁷ *Item fluminum quaedam sunt perennia, quaedam torrentia. Perenne est, quod semper fluat, ἀέναος, torrens ὁ χειμάρρους: si tamen aliqua aestate exaruerit, quod alioquin perenne fluebat, non ideo minus perenne est* – D 43 12 1 2. Some rivers are perennial, some torrential. Perennial is what is always flowing; the Greek word is “ever-running”. A torrent is “winter-flowing” in Greek. But if some rivers should dry up in summer which normally flow perennially, they are nonetheless perennial (Mommsen *et al.* IV, 1985:578).

⁸⁸ See endnote 56.

⁸⁹ *Insula quae in mari nascitur (quod raro accidit) occupantis fit: nullius enim esse creditur. In flumine nata (quod frequenter accidit), si quidem mediam partem fluminis tenet, communis est eorum, qui ab utraque parte fluminis prope ripam praedia possident, pro modo latitudinis cuiusque praedii, quae latitudo prope ripam sit: quod si alteri parti proximior sit, eorum est tantum, qui ab ea parte prope ripam praedia possident* - D 41 1 7 3. An island arising in the sea (a rare occurrence) belongs to the first taker, for it is held to belong to no one. An island arising in a river (a frequent occurrence), if indeed it appears in the midstream of the river, is the common property of those who have holdings on either bank of the river to the extent that those holdings follow the bank; but if it lies to one side of the river rather than the other, it belongs only to those who have holdings on that bank (Mommsen *et al.* IV, 1985:488).

⁹⁰ *Quod si toto naturali alveo relicto flumen alias fluere coeperit, prior quidem alveus eorum est, qui prope ripam praedia possident, pro modo scilicet latitudinis cuiusque praedii, quae latitudo prope ripam sit: novus autem alveus eius iuris esse incipit, cuius et ipsum flumen, id est publicus*

iuris gentium. Quod si post aliquod temporis ad priorem alveum reversum fuerit et flumen, rursus novus alveus eorum esse incipit, qui prope ripam eius praedia possident. Cuius tamen totum agrum novus alveus occupaverit, licet ad priorem alveum reversum fuerit flumen, non tamen is, cuius is ager fuerat, stricta ratione quicquam in eo alveo habere potest, quia et ille ager qui fuerat desiit esse amissa propria forma et, quia vicinum praedium nullum habet, non potest ratione vicinitatis ullam partem in eo alveo habere; sed vix est, ut id optineat – D 41 1 7 5. But if, wholly abandoning its natural bed, a river begins to flow along another course, the original bed becomes the property of those with holdings on the former banks to the extent of those holdings along the bank; the new bed, though, acquires the same character as the river itself, that is, it becomes public under the law of nations. But if, after some time, the river reverts to its former bed, the later bed again becomes the property of those with holdings along its bank. However, if the new bed occupies the whole of some person's land, then, even though the river returns to its original bed, the man whose land it was, strictly speaking, has no right in the newly abandoned bed, because the relevant piece of land ceased to exist with the loss of its shape and form, since the erstwhile owner has no neighboring land, he cannot have any interest in the bed by right of proximity; but it is scarcely likely that this argument would prevail (Mommsen *et al.* IV, 1985:488).

⁹¹ See endnote 37.

⁹² See gloss d on *confinio* – *Confinio scilicet duorum fundorum et sic erat communis fovea (Accursii glossa in Digestum Novum - CGIC IX, 1968:34)*. Anastatic reprint, Torino 1968 of a 1487 Venice edition.

⁹³ *Hoc interdictum prohibitorium est* – D 43 8 2 1. *Et tam publicis utilitatibus quam privatorum per hoc prospicitur. Loca enim publica utique privatorum usibus deserviunt, iure scilicet civitatis, non quasi propria cuiusque, et tantum iuris habemus ad optinendum, quantum quilibet ex populo ad prohibendum habet. Propter quod si quod forte opus publico fiet, quod ad privati damnum redundet, prohibitorio interdicto potest conveniri, propter quam rem hoc interdictum propositum est* – D 43 8 2 2. This interdict is for prohibition. It provides for both public and private welfare. For public places serve both public and private uses, that is to say, as the property of the *civitas* and not of each individual, and we have as much right to enjoy them as anyone of the people has to prevent their misuse. On account of this, if any work should be undertaken in a public place that causes private damage, suit may be brought against it under this prohibitory interdict on account of which thing this interdict is available (Mommsen *et al.* IV, 1985:573). It seems as if the first and second *paragraphus* were united in the edition consulted by Bartolus.

⁹⁴ *Fossa est receptaculum aquae manu facta.* – D 43 14 1 5. A canal is a receptacle for water dug by human hands. *Possunt autem etiam haec esse publica* – D 43 14 1 6. These can all be public too (Mommsen *et al.* IV, 1985:581). It seems from the context of Bartolus' argument that these sentences were regarded as one *paragraphus* in his version of the text.

⁹⁵ *Fundi nihil est, nisi quod terra se tenet; aedium autem multa esse, quae aedibus adfixa non sunt, ignorari non oportet, ut puta seras claves claustra; multa etiam defossa esse neque tamen fundi aut villae haberi, ut puta vasa vinaria torcularia, quoniam haec instrumenti magis sunt, etiamsi aedificio cohaerent* – D 19 1 17 pr (in *Vulgata* D 19 1 18 pr). Nothing is part of a farm except when it is attached to the soil. But it must not be forgotten that many parts of a building are unattached to it, for example door bars, keys and locks; while many buried things are not considered part of a farm or farmhouse, for example, the wine receptacles in a pressroom, which, even though they adhere to the structure, belong rather to the equipment (Mommsen *et al.* II, 1985:550).

⁹⁶ See endnote 24.

⁹⁷ See endnote 95.

⁹⁸ *Si aquae ductus debeatur praedio, et ius aquae transit ad emptorem, etiamsi nihil dictum sit, sicut et ipsae fistulae, per quas aqua ducitur* – D 18 1 47. Where the right to draw water pertains to land and the right passes to the purchaser, then, although nothing be said on the point, so do the pipes through which the water is drawn (Mommsen *et al.* II, 1985:521).

⁹⁹ See endnote 37.

¹⁰⁰ The whole of the *lex* is cited (in *Vulgata* D 43 20 1). See Mommsen *et al.* IV (1985:599).

¹⁰¹ *Si vir in fundo mulieris dotali lapicidinas marmoreas invenerit et fundum fructuosiore fecerit, marmor, quod caesum neque exportatum est, mariti et impensa non est ei praestanda, quia nec in fructu est marmor; nisi tale sit ut lapis ibi renascatur, ut quales sunt in Gallia, sunt et in Asia* – D 24 3 7 13 (in *Vulgata* D 24 3 8 13). If a husband finds marble quarries on the land his wife gave

as dowry and they make the land more valuable, the marble which has been quarried but not removed will be the husband's, but the expenses will not be repaid to him, because the marble is not part of the fruits of the land, unless it is the kind of stone which is renewed, as is true of certain types in Gaul and Asia (Mommsen *et al.* II, 1985:718).

¹⁰² *Evidenter* in LL and LS is preferred to the obvious corruption *evidentur* in BT.

¹⁰³ See endnote 68.

¹⁰⁴ The reference is to Azo Porcius' *Summa Institutionum* (Von Savigny V, 1986:27; Van Zyl, 1983:102; Coing I, 1973:206). *Sed ubi flumen multi abstulit meum praedium quod alvei constitutionem deinde redit ad antiquum alveum de iure stricto in praedio quodam meo nihil possum vindicare, cedit enim his quod prope ripam habent praedia* – Azo, *Summa Institutionum* 2 13 *in fine*. Little is known about Azo, one of the most famous glossators. The author was apparently born in Bologna during the first half of the thirteenth century and studied under Johannes Bassianus. Jacobus Balduinus, Roffredus and Accursius studied under Azo at the university of Bologna (Van Zyl, 1983:102).

¹⁰⁵ See endnote 24.

¹⁰⁶ The following phrase is inserted by LL after this sentence: "*Quidam lacus et stagna sunt publica et hoc duobus modis.*"

¹⁰⁷ *Lacus est stagna licet interdum crescant, interdum excrescant, suos tamen terminos retinent ideoque in his ius alluvionis non adgnoscutur* – D 41 1 12 pr. Although a lake or pool may sometimes spread, sometimes dry up, it still retains its bounds and so no right of alluvion is recognized (Mommsen *et al.* IV, 1985:492).

¹⁰⁸ *Lacus cum aut crescerent, aut decrescerent, nunquam neque accessionem, neque decessionem in eos vicinis facere licet* – D 39 3 24 3. When lakes either increase or diminish in size, it is never permissible for the neighbors to do anything to them to increase or reduce the amount of water (Mommsen *et al.* III, 1985:403).

¹⁰⁹ See endnote 74.

¹¹⁰ *Litus publicum est eatenus, qua maxime fluctus exaestuat. Idemque iuris est in lacu, nisi is totus privatus est* – D 50 16 112. The public shore extends as far as the waves reach at their furthest point; and the same legal position exists in respect of a lake, unless it is wholly private (Mommsen *et al.* IV, 1985:942).

¹¹¹ The whole of the *lex* seems to be cited. See Mommsen *et al.* IV(1985:578).

¹¹² See endnote 49.

¹¹³ *Apium quoque natura fera est; itaque quae in arbore nostra consederint, antequam a nobis alveo concludantur, non magis nostrae esse intelleguntur quam volucres, quae in nostra arbore nidum fecerint. Ideo si alius eas incluserit, earum dominus erit* – D 41 1 5 2. Bees, again, are wild by nature and so those which swarm into our tree are, until housed by us in our hives, no more regarded as ours than birds which make a nest in our tree. Hence, if another should house or hive them, he will be their owner (Mommsen *et al.* IV, 1985:487).

¹¹⁴ *Apium quoque natura fera est. Itaque quae in arbore tua consederint, antequam a te alveo includantur, non magis tuae esse intelleguntur, quam volucres, quae in tua arbore nidum fecerint: ideoque si alius eas incluserit, is earum dominus erit. Favos quoque si quos hae fecerint, quilibet eximere potest. Plane integra re, si provideris ingredientem in fundum tuum, potes eum iure prohibere, ne ingrediatur. Examen, quod ex alveo tuo evolaverit, eo usque tuum esse intellegitur, donec in conspectu tuo est nec difficilis eius persecutio est: alioquin occupantis fit* - Inst 2 1 14. Bees also are wild by nature. Therefore, bees that swarm upon your tree, until you have hived them, are no more considered to be your property than the birds which build their nests on your tree; so if anyone else hives them he becomes their owner. Anyone, too, is at liberty to take the honeycombs the bees have made. But of course, if, before anything has been taken, you see anyone entering on your land, you have the right to prevent his entering. A swarm which has flown from your hive is still considered yours as long as it is in your sight and may easily be pursued; otherwise it becomes the property of the first person that takes it (Sandars, 1917:96).

¹¹⁵ See endnote 95.

¹¹⁶ *Neratius et Proculus et solo animo non posse nos adquirere possessionem, si non antecedit naturalis possessio. Ideoque si thesaurum in fundo meo positum sciam, continuo me possidere, simul atque possidendi affectum habuero; quia quod desit naturali possessioni, id animus implet. Ceterum quod Brutus et Manilius putant eum, qui fundum longa possessione cepit, etiam thesaurum cepisse, quamvis nesciat in fundo esse, non est verum; is enim, qui nescit, non possidet*

thensaurum, quamvis fundum possideat. Sed et si sciat, non capiet longa possessione, quia scit, alienum esse. Quidam putant Sabini sententiam veriore esse nec alias eum qui scit possidere, nisi si locu motus sit, quia non sit sub custodia nostra: quibus consentio – D 41 2 3 3. Neratius and Proculus say that there can be no acquisition of possession by intent alone, unless there be a previous physical holding of the thing. Thus, if I know that there is treasure buried in my land, I possess it as soon as I form the intention to possess it, because whatever is lacking in actual holding is made up by my intention. On the other hand, the opinion of Brutus and Manilius that one who acquired ownership of land by long possession thereby also acquired treasure buried in it, although unaware of its existence, is not correct. Indeed, if he does know, he does not acquire it by long possession since he knows it to be the property of someone else. There are those who hold to be more correct the view of Sabinus, namely, that one unaware of the existence of the treasure begins to possess it only when it is removed from the soil because, until then, it is not in his keeping; with these jurists, I am in agreement (Mommsen *et al.* IV, 1985:504).

¹¹⁷ *Si alieni numi inscio vel invito domino soluti sunt, manent eius cuius fuerunt; si mixti essent, ita ut discerni non possent, eius fieri qui accepit in libris Gaii scriptum est, ita ut actio domino cum eo, qui dedisset, furti competeret* – D 46 3 78. Should another's coins be paid, without the knowledge or volition of the owner, they remain the property of him whom they belonged; should they have been mixed, it is written in the books of Gaius [Cassius Longinus] that should the blending be such that they cannot be identified, they become the property of the recipient so that their [former] owner acquires an action for theft against the man who gave them (Mommsen *et al.* IV, 1985:714).

¹¹⁸ *Ius gentium est, quo gentes humanae utuntur. Quod a naturali recedere facile intelligere licet, quia illud omnibus animalibus, hoc solis hominibus inter se commune sit* – D 1 1 4. *Ius gentium*, the law of nations, is that which all human peoples observe. That it is not co-extensive with natural law can be grasped easily, since the latter is common to all animals whereas *ius gentium* is common only to human beings among themselves (Mommsen *et al.* I, 1985:1).

¹¹⁹ *Sunt quidam servi poenae, ut sunt in metallum dati et in opus metalli; et si quid eis testamento datum fuerit, pro non scriptis est, quasi non Caesaris servo datum sed poenae* – D 48 19 17 pr. Some [convicts] are *servi poenae* such as those sent to the mines or to the *opus metalli*; and if anything is left to them in a will, it is treated as though it has not been written, as if it had been left not to Caesar's slave, but to a *servus poenae* (Mommsen *et al.* IV, 1985:850).

¹²⁰ *Diversis* in LL and LS is preferred to the obvious corruption *diversi* in BT.

¹²¹ This was obviously a later insertion referring to paragraph nine in this section of BT.

¹²² *Possideri autem possunt, quae sunt corporalia* – D 41 2 3 pr. Those things can be possessed which are corporeal (Mommsen *et al.* IV, 1985:504).

¹²³ *Si ex toto fundo legato testator partem alienasset, reliquam dumtaxat partem deberi placet, quia etiam si adiecisset aliquid ei fundo, augmentum legatario cederet* – D 30 1 8 pr. If from a whole farm that has been bequeathed the testator has alienated a part, it is held that the remaining part only is due, since, if he had added something to that farm, the increase would pass to the legatee (Mommsen *et al.* III, 1985:2).

¹²⁴ *Quod si post testamentum factum ex fundo Titiano aliquid detraxit et alii fundo adiecit, videndum est, utrumne eam quoque partem legatarius petiturus sit an hoc minus, quasi fundi Titiani esse desierit, cum nostra destinatione fundorum nomina et domus, non natura constituerentur. Et magis est, ut quod alii destinatum est ademptum esse videatur* – D 30 1 24 3. But if, after making his will, he took something from the Titian farm and added it to another farm, it must be seen whether the legatee is to claim that part also or whether he should lose it on the grounds that it has ceased to be part of the Titian farm, since the names and delimitations of farms are established by our intention and not by nature. And it is the better view that what has been annexed to another property should be held to have been adeemed (Mommsen *et al.* III, 1985:5).

¹²⁵ *In agris limitatis ius alluvionis locum non habere constat: idque est divus Pius constituit et Trebatius ait agrum, qui hostibus devictis ea condicione concessus sit, ut in civitatem veniret, habere alluvionem, neque esse limitatum: agrum autem manu captum limitatum fuisse, ut sciretur, quid cuique datum esset, quid venisset, quid in publico relictum esset* – D 41 1 16. In the case of lands measured out, it is generally agreed that the right of alluvion has no place. The deified Pius ruled to this effect and Trebatius says that land granted to defeated enemies on the condition that it becomes civic property does have the right of alluvion and is not measured out; but, in the case of

land taken by force it is measured out so that it might be known what was given to whom, what was sold, and what remained public property (Mommsen *et al.* IV, 1985:492).

¹²⁶ *Si insula in publico flumine fuerit nata inque ea aliquid fiat, non videtur in publico fieri. Illa enim insula aut occupantis est, si limitati agri fuerunt, aut eius cuius ripam contingit, aut, si in medio alveo nata est, eorum est qui prope utrasque ripas possident* – D 43 12 1 6 (in *Vulgata* D 43 11 1 6). If an island comes into being in a public river and something is done on the island, it is not held that it is being done on public property. For the island belongs either to the person who first occupies it if the field has fixed boundaries, or to the person whose bank it adjoins, or if it has come into being in the middle of the channel, to those who possess each bank nearby (Mommsen *et al.* IV, 1985:578).

¹²⁷ See endnote 125 *in fine*.

¹²⁸ See endnote 125.

¹²⁹ See endnote 125.

¹³⁰ See endnote 126.

¹³¹ *Alluvio agrum restituit eum, quem impetus fluminis totum abstulit. Itaque si ager, qui inter viam publicam et flumen fuit, inundatione fluminis occupatus esset, sive paulatim occupatus est sive non paulatim, sed eodem impetu recessu fluminis restitutus, ad pristinum dominum pertinet: flumina enim censitorum vice funguntur, ut ex privato in publicum addicant et ex publico in privatum: itaque sicuti hic fundus, cum alveus fluminis factus esset, fuisset publicus, ita nunc privatus eius esse debet, cuius antea fuit* – D 41 1 30 3. Alluvion restores the land which the river wholly removed. Hence, if land lying between a public road and the river had been flooded by the river, whether gradually or not, but reappeared with the recession of the river waters, it would belong to its original owner; for rivers serve as public functionaries, making public that which was private and private that which was public. Thus, just as this land was public while it formed part of the riverbed, so on becoming private, it should belong to its former owner (Mommsen *et al.* IV, 1985:495).

¹³² *Novus autem alveus eius iuris incipit esse cuius et ipsum flumen id est publicum flumen alveum ubi constituendo agrum privati facit publicum: et publicum facit privatum; ut dictum est. Et ideo dicuntur flumina vice censitorum id est iudicum vel principum uti vel fungi. Iudex eius vel imperator sepe (sic) quod unius est alteri adiudicat vel iuste vel iniuste, vel bona vel mala fide ut ff. c. l. ergo. § alluvio (Azo Summa Institutionum, 2 13 in medio).*

¹³³ *Prata provincialium nostrorum et praecipue rei privatae nostrae perniciosum est militum molestia fatigari, ideoque lege ad amplissimam praefecturam promulgata censuimus, ne hoc deinceps usurpetur. Super qua re universos quorum interest convenire tua magnificentia non moretur, ne permittant possessores vel colonos pratorum gratia qualibet importunitate vexari* - C 11 60 3 (CIC II, 1895:447). Lands belonging to the inhabitants of Our provinces, as well as those of Our private domain, must not be injured or interfered with by soldiers, and therefore, by the present law, which has been promulgated to the Prefecture for execution, We decree that this abuse shall not occur hereafter. Your Highness will not delay to see that all necessary measures are taken, in this instance, for the enforcement of the laws, and you must not permit the owners or tenants of land to be annoyed by any acts of soldiers whatsoever (Scott XV, 1932:221). The abbreviation *fi.* has been taken to refer to the final section of *lex* 3.

¹³⁴ *Si a fure hominem sim stipulatus, quaesitum est, an stipulatio valeat. Movet quaestionem, quod stipulatus hominem plerumque meum videor: non valet autem huiusmodi stipulatio, ubi quis rem suam stipulatus est. Et constat, si quidem ita stipulatus sim: "quod ex causa conditionis dare facere oportet?," stipulationem valere: si vero hominem dari stipulatus fuero, nullius momenti esse stipulationem. Quod si postea sine mora decessisse proponatur servus, non teneri furem conditione Marcellus ait: quamdiu enim vivit, condici poterit, at si decessisse proponatur, in ea conditione est, ut evanescat conditio propter stipulationem* – D 45 1 29 1. If I take a stipulation of a man from a thief, it is asked whether the stipulation is valid. This poses a question, because I seem to have stipulated for a man who was for the most part mine; a stipulation of this type, in fact, where someone stipulates for his own property, is not valid. It is also clear that if I stipulate in these words: "Do you promise me what you ought to give and to do by reason of a *conditio*," the stipulation is valid; but if I have stipulated that the man should be given, the stipulation is null and void. But if it is supposed that the slave died immediately afterward, Marcellus says that the thief is not liable by the *conditio*; for as long as he is alive, he can be the subject of a *conditio*, but if it is supposed that he has died, the stipulation is such that the *conditio* loses its effect

because of the stipulation (Mommsen *et al.* IV, 1985:653). The *paragraphus* citation appears corrupt as no second paragraph of said title exists in the critical edition.

¹³⁵ See endnote 125.

¹³⁶ *Ductus aquae, cuius origo memoriam excessit, iure constituti loco habetur* – D 43 20 3 4 (in *Vulgata* D 43 19 3 4). Drawing off of water which goes back beyond anyone's memory is held as if constituted by right (Mommsen *et al.* IV, 1985:598).

¹³⁷ See endnote 24.

¹³⁸ *Huius studii duae sunt positiones, publicum et privatum. Publicum ius est quod ad statum rei Romanae spectat, privatum, quod ad singulorum utilitatem; sunt enim quaedam publice utilia, quaedam privatim. Publicum ius in sacris, in sacerdotibus, in magistratibus consistit. Privatum ius tripartitum est; collectum etenim est ex naturalibus praeceptis aut gentium aut civilibus* - D 1 1 2. There are two branches of legal study; public and private law. Public law is that which respects the establishment of the Roman commonwealth, private that which respects individuals' interests, some matters being of public and others of private interest. Public law covers religious affairs, the priesthood, and offices of the state. Private law is tripartite, being derived from principles of *ius naturale*, *ius gentium*, or *ius civile* (Mommsen *et al.* I, 1985:1).

¹³⁹ *Εἰ μέντοι συμβῆ τινα τῶν ἡμετέρων ὑπηκόων κατ' αὐτοῦ τοῦ λαμπρᾶτου τῆς χώρας ἄρχοντος ἀδικθῆναι, κελεύομεν αὐτὸν προσελθεῖν τῷ ὀσιωτάτῳ τῆς πόλεως ἐκείνης ἐπισκόπῳ, καὶ αὐτὸν διακρίνειν τὰ μεταξὺ τοῦ λαμπρᾶτου ἄρχοντος καὶ τοῦ οἰομένου ἀδικεῖσθαι παρ' αὐτοῦ καὶ εἰ μὲν συμβῆ τὸν ἄρχοντα νομίμως καὶ δικαίως κατακριθῆναι παρὰ τοῦ ὀσιωτάτου ἐπισκόπου, τὸ ἰκανὸν αὐτὸν ποιεῖν παντὶ τρόπῳ τῷ ἐντυχόντι κατ' αὐτοῦ. εἰ δὲ παραιτησεται ὁ ἄρχων τοῦτο ποιῆσαι, καὶ ἔλθῃ εἰς ἡμᾶς ἢ αὐτῇ δικῇ, εἰ μὲν εὖρομεν ὅτι δικαίως καὶ κατὰ τοὺς νόμους κατακριθεὶς παρὰ τοῦ ὀσιωτάτου ἐπισκόπου τὰ κριθέντα οὐκ ἐποίησε, ταῖς ἐσχάταις ὑποβληθῆναι τιμωρίαις τοῦτον κελύομεν, ἐφ' οἷς ὀφείλων ἐδικεῖν τοὺς ἀδικουμένους αὐτὸς ἀδικῶν εὐρίσκειται* – Nov 86 4 (CIC III, 1895:421). Where, however, anyone of Our subjects sustain injury at the hands of the Governor of the province, We order him to have recourse to the most holy bishop of the city, and the latter to decide between the said illustrious Governor of the province and the person who is alleged to have been injured by him. If the most holy bishop should legally and justly decide against the judge, the latter must, by all means, satisfy the litigant who has complained of him. But if the judge should refuse to do this, and the controversy should be referred to Us, and We should find that the judge, after having been regularly and legally notified by the most holy bishop, did not comply with the decision rendered against him, We direct that he shall be punished with death, because while it was his duty to relieve the oppressed, he himself is found to have been guilty of oppression (Scott XVI, 1932:318). Gerbenzon (1981:15) indicates that *Authenticum* refers to the *Novellae*, while *Authentica* refers to extracts from the *Novellae*, inserted after the relevant *Codex* text. A compilation of all the *initia* of the *Authenticae* is supplied on pp. 510 - 513 of the 1843 Leipzig edition of the *Codex (pars altera)*. This *Authentica* citation was traced from available information relating to C 5 75 and D 28 7. It was cross-referenced with Groenewegen's *Tractatus de legibus abrogatis et inusitatis in Hollandia vicinisque regionibus*, a work which supplies a commentary on individual titles of the *Corpus Iuris Civilis*, from where it was concluded that this citation was inserted after C 3 1 16.

¹⁴⁰ It seems that the whole of the *lex* is cited. See Krueger, P. 1892. *Corpus Iuris Civilis (editio stereotypa nona, volumen secundum – Codex Iustiniani)* 237.

¹⁴¹ See endnote 138.

¹⁴² *Hoc interdictum prohibitorium est et tam publicis utilitatibus quam privatorum per hoc prospicitur. Loca enim publica utique privatorum usibus deserviunt, iure scilicet civitatis, non quasi propria cuiusque, et tantum iuris habemus ad optinendum, quantum quilibet ex populo ad prohibendum habet. Propter quod si quod forte opus in publico fiet, quod ad privati damnum redundet, prohibitorio interdicto potest conveniri, propter quam rem hoc interdictum propositum est* – D 43 8 2 2. This interdict is for prohibition. It provides for both public and private welfare. For public places serve both public and private uses, that is to say, as the property of the *civitas* and not of each individual, and we have as much right to enjoy them as anyone of the people has to prevent their misuse. On account of this, if any work should be undertaken in a public place that causes private damage, suit may be brought against it under this prohibitory interdict on account of which thing, this interdict is available (Mommsen *et al.* IV, 1985:573). As is evident from the *Indices Corporis Iuris Civilis*, numerous passages with the *initia* "*Hoc interdictum*" occur

in the cited *liber*, however in this instance the word *secundo* has been taken to refer to the second *paragraphus*.

¹⁴³ *Arbor quae in confinio nata est, item lapis qui per utrumque fundum extenditur quamdiu cohaeret fundo, e regione cuiusque finium utriusque sunt nec in communi dividundo iudicium veniunt; sed cum aut lapis exemptus aut arbor eruta vel succisa est, communis pro indiviso fiet et veniet in communi dividundo iudicium; nam quod erat finitis partibus, rursus confunditur. Qua re duabus massis duorum dominorum conflatis tota massa communis est, etiamsi aliquid ex prima specie separatam maneat: ita arbor et lapis separatus a fundo confundit ius domini* – D 10 3 19 pr. If a tree has grown up on a boundary, likewise if the stone spans the boundary between two farms, so long as they remain attached to the soil, the portion which is vertically above each farm belongs to that farm, and they are not covered by the action for dividing common property. But when the stone is extracted from the ground or the tree is dug up or cut down, it becomes indivisibly common and is covered by the action for dividing common property; for its parts used to be distinct, but now they are confused. On the same principle, if two lumps of metal belonging to two owners are melted down together, the whole lump is common, even if the original lumps are to some extent still distinct; so when a tree or stone is removed from the ground, the rights of ownership over it are blurred (Mommsen *et al.* I, 1985:327).

¹⁴⁴ See endnote 37.

¹⁴⁵ *Si alienam plantam in meo solo posuero, mea erit; ex diverso si meam plantam in alieno solo posuero, illius erit; si modo utroque casu radices egerit: antequam enim radices ageret, illius permanet, cuius et fuit. His conveniens est, quod, si vicini arborem ita terra presserim, ut in meum fundum radices egerit, meam effici arborem: rationem enim non permittere, ut alterius arbor intellegatur, quam cuius fundo radices egisset. Et ideo prope confinium arbor posita, si etiam in vicinum fundum radices egerit, communis est* – D 41 1 7 13. If I plant someone else's cutting in my land, it will be mine; conversely, if I plant my own cutting in someone else's land, it will be his, provided, in each case, that it roots itself. For until it takes root, it remains the property of its former owner. It follows that if I so pack earth around a neighbor's tree that it puts forth its root into my land, the tree becomes mine; for reason does not tolerate the idea that a tree should belong to anyone other than the person in whose land it is rooted. Hence, a boundary tree, if it extends its roots into the adjoining land, belongs to both neighbors in common (Mommsen *et al.* IV, 1985:489).

¹⁴⁶ *Rutilia Polla emit lacum Sabatenem Angularium, et circa eum lacum pedes decem: quaero, numquid et decem pedes, qui tunc accesserunt, sub aqua sint, quia lacus crevit, an proximi pedes decem ab aqua Rutiliae Pollae iuris sint? Proculus respondit: ego existimo, eatenus lacum, quem emit Rutilia Polla, venisse, quatenus tunc fuit, et circa eum decem pedes qui tunc fuerunt, nec ob eam rem, quod lacus postea crevit, latius eum possidere debet quam emit* – D 18 1 69 pr. Rutilia Polla bought the lake Sabatenis Angularius and ten feet of land around the lake. I ask whether, when the ten feet around the lake at the time of sale are submerged because the lake has spread, the next ten feet legally belong to Rutilia Polla. Proculus replied: "I think that the lake purchased by Rutilia Polla was sold as it then was with the ten feet then around it and that she is not to have more than she bought, by reason of the fact that the lake has spread." (Mommsen *et al.* II, 1985:523).

¹⁴⁷ *Lacus cum aut crescerent aut decrescerent, numquam neque accessionem neque decessionem in eos vicinis facere licet* – D 39 3 24 3. When lakes either increase or diminish in size, it is never permissible for the neighbors to do anything to them to increase or reduce the amount of water (Mommsen *et al.* III, 1985:403).

¹⁴⁸ *Lacus et stagna, licet interdum crescant, interdum exarescant, suos tamen terminos retinent; ideoque in his ius alluvionis non adgnoscur* – D 41 1 12 pr. Although a lake or pool may sometimes spread, sometimes dry up, it still retains its bounds and so no right of alluvion is recognized (Mommsen *et al.* IV, 1985:492).

¹⁴⁹ *Si aquam ex flumine publico duxeris et flumen recesserit, non potes subsequi flumen, quia ei loco servitus imposita non sit, quamvis is locus alveus sit. Sed si alluvione paulatim accesserit fundo tuo, subsequi potes, quia locus totus fluminis serviat ductioni. Sed si circumfluere coeperit mutato alveo, non potes, quia medius locus non serviat interruptaque sit servitus* - D 43 20 3 2 (in *Vulgata* D 43 19 3 2). If you draw water from a public river and the river recedes, you may not follow up to the river, because a servitude is not imposed on that place even if that place is the riverbed. But if it has by degrees silted up with alluvion from your farm, you may follow up to

the river, because the whole place of the river is under the servitude for drawing off water. But if the river changes its bed and begins to flow round, you may not, because the middle ground is not under the servitude and the servitude is interrupted (Mommsen *et al.* IV, 1985:598).

¹⁵⁰ See endnote 7 *in fine*.

¹⁵¹ See gloss e on *momento temporis* – *Nam et si tota die figas intuitum, imbecillitas visus tam subtilia incrementa perpendere non potest, ut in cucurbita ostendi potest: Unde dicitur latens incrementum ut Inst eo. § preterea [2 1 20] (Accursii in Digestum Novum - CGIC IX, 1968:114). Anastatic reprint, Torino 1968 of a 1487 Venice edition.*

¹⁵² See endnote 70.

¹⁵³ *Nam et si tota die figas intuitum imbecillitas visus tam subtilia incrementa perpendere non potest: ut in cucurbita et similibus ostendi potest (Azo, Summa Institutionum 2 11).*

¹⁵⁴ *Sed si dententi sint inviti ibi testes, putant non valere testamentum* – D 28 1 20 10. But if the witnessess have been kept there against their will, they [the old jurists] think that the will is not valid (Mommsen *et al.* II, 1985:817).

¹⁵⁵ *Testium facilitatem, per quos multa veritati contraria perpetrantur, prout possibile est, resecantes omnibus praedicimus, qui in scriptis a se debita rettulerunt, quod non facile audientur, si dicant omnis debiti vel partis solutionem sine scriptis fecisse velintque viles et forsitan redemptos testes super huiusmodi solutione producere, nisi quinque testes idonei et summae atque integrae opinionis praesto fuerint solutioni celebratae hique cum sacramenti religione deposuerint sub praesentia sua debitum esse solutum, ut scientes omnes ita ea statuta esse non aliter debitum vel partem eius persolvant, nisi vel securitatem in scriptis capiant vel observaverint praefatam testium probationem: his scilicet, qui iam sine scriptis debitum vel partem eius solverunt, praesenti sanctione merito excipiendis* – C 4 20 18 pr (in *Vulgata C 4 20 14*) (CIC II, 1895:160). With a view to curtailing as much as possible the ease with which witnessess are obtained, by means of whom many violations of the truth are perpetrated, we order all those who state that they have contracted debts in writing shall not be heard, if they say that they have paid all, or a portion of their indebtedness, without having obtained a written discharge of the same; and if they attempt to produce witnessess of low character, or who perhaps have been bought to prove a payment of this kind, no attention shall be paid to them, unless five respectable witnessess, who are citizens of the highest reputation, and were present at the payment of the money, state under oath that the debt was paid in their presence; so that everyone may know that it has been decided that persons cannot make payment of a debt either wholly or in part, unless they have the fact committed to writing or can prove it by the above-mentioned oral testimony. It is, however, but reasonable to expect from the provisions of the present law those who have already paid a debt, or a portion of the same (Scott XIII, 1932:39).

¹⁵⁶ The abbreviation *extra* refers to an abridged version of Pope Innocentius' IV commentary on the *Liber Extra* compiled by Bernard of Pavia and commonly known as the *Breviarium extravagantium* (Bryson, 1975:58; Gerbenzon, 1981:23; Schrage, 1987:108). It is also commonly referred to as the *Compilatio prima* and contains the decretals of Alexander III as well as references to other, older compilations (Schrage, 1987:90).

¹⁵⁷ The numbering of paragraphs 4 and 5 seems to have been erroneously altered to 5 and 6 respectively in BT.

¹⁵⁸ *Vis autem est maioris rei impetus, qui repelli non potest* – D 4 2 2. Moreover, force is the attack of a more powerful agent [is een zeer enstige druk van omstandigheden – Spruit I, 1996:333] which cannot be repelled (Mommsen *et al.* I, 1985:113).

¹⁵⁹ *Extat enim decretum divi Marci in haec verba: "Optimum est, ut, si quas putas te habere petitiones, actionibus experiaris. Cum Marcianus diceret: vim nullam feci, Caesar dixit; tu vim putas esse solum, si homines vulnerentur? Vis est et tunc, quotiens quis id, quod deberi sibi putat, non per iudicem reposcit. Quisquis igitur probatus mihi fuerit rem ullam debitoris vel pecuniam debitam non ab ipso sibi sponte datam sine ullo iudice temere possidere vel accepisse, isque sibi ius in eam rem dixisse; ius crediti non habebit."* – D 4 2 13. For there exists a decree of the divine Marcus in these words: "It is best that where you think you have a claim, you bring an action. When Marcianus said, 'I have used no force,' the emperor replied, 'do you think that force is used only when men are wounded?' There is also force whenever someone demands what he thinks is due to him without going to court. Therefore, if I receive proof that anyone rashly possesses or has taken without a court order any property of his debtor or money owed to him which has not

been voluntarily given by the debtor himself and to have taken the law into his own hands in this matter, such person will not have the right to what he lent" (Mommsen *et al.* I, 1985:116).

¹⁶⁰ *Libertas est naturalis facultas eius quod cuique facere libet, nisi si quid vi aut iure prohibetur* – D 1 5 4 pr. Freedom is one's natural power of doing as one pleases, save insofar as it is ruled out either by coercion or by law (Mommsen *et al.* I, 1985:15).

¹⁶¹ *Non idcirco minus venditio fundi, quod hunc ad munus sumptibus necessariis urgentibus non vilioris pretii vel urgente debito te distraxisse contendis, rata manere debet. Illicitis itaque petitionibus abstinendo ac pretium, si non integrum solutum est, petendo facies consultius* – C 4 44 12 (CIC II, 1895:180). The sale of land in question is none the less invalid because you allege that you dispose of it because you had a pressing need for the money in order to satisfy a public claim, and did not sell it for less than it was worth. Therefore, while abstaining from any unlawful demands, you had better demand the price, if it has not been paid in full (Scott XIII, 1932:102).

¹⁶² *In omnibus, quae fecit tutor, cum facere non deberet, item in his quae non fecit, rationem reddet hoc iudicio, praestandum dolum, culpam, et quantam in rebus suis diligentiam* - D 27 3 1 pr. The tutor is called to account in this action for all that he has done which should not be done and for that which he has not done, answering for fraud, negligence, and the standard of care shown in his own affairs (Mommsen *et al.* II, 1985:795).

¹⁶³ *Transeamus nunc ad aliam divisionem. Nam ex his personis, quae in potestate non sunt, quaedam vel in tutela sunt, vel in curatione, quaedam neutro iure tenentur. Videamus igitur de his, quae in tutela vel in curatione sunt: ita enim intellegemus ceteras personas, quae neutro iure tenentur. Ac prius dispiciamus de his, quae in tutela sunt* – Inst 1 13 pr. Let us now proceed to another division. Of those who are not in the power of an ascendant, some are under a tutor, some under a curator, some under neither. Let us treat, then, of those persons who are under a tutor or curator; for we shall thus ascertain who are they who are not subject to either. And first of persons under a tutor (Sandars, 1917:54).

¹⁶⁴ *Hi, qui sunt in aliena potestate, his, in quorum sunt potestate, habere licere stipulari possunt ea ratione, qua cetera quoque his possunt stipulari. Sed si servus fuerit stipulatus sibi habere, quaesitum est, an recte stipulatus videatur. Et ait Iulianus libro quinquagesimo secundo digestorum, si servus stipuletur sibi habere licere aut per se non fieri, quo minus habere stipulatori liceat, promittat: stipulatio, inquit, non committitur, quamvis auferri res ei et ipse auferre eandem possit: non enim factum, sed ius in haec stipulatione vertitur. Cum vero stipulatur per promissorem non fieri, quo minus sibi ire agere liceat, non ius stipulationis, inquit, sed factum versatur. Sed videtur mihi, licet iuris verba contineat haec stipulatio 'habere licere', tamen sic esse accipiendam, ut in servo et in filio familias videatur actum esse de possessione retinenda aut non auferenda et vires habeat stipulatio* – D 45 1 38 6. Those who are in the power of another can stipulate that those in whose power they are be allowed to have a thing by reason of the fact that they can stipulate other things also for these persons. But if a slave stipulates that he is allowed to have a thing, it is asked whether he is deemed to have made a proper stipulation. Julian says in the fifty-second book of the Digest that if a slave stipulates that he should be allowed to have a certain thing or promises that nothing will be done by him to prevent the stipulator's being allowed to have it, a stipulation, he says, is not made, although property can be taken from him and he can take away the same property; for it is a matter not of fact, but of law which is under consideration in this stipulation. But when he stipulates that nothing should be done by the promisor to prevent his being allowed rights of way, it is not the law of stipulation, he says, which is being examined, but an act. But it seems to me, granted this stipulation retains the legal wording "be allowed to have," that it should be treated just as what is done by a slave or a son-in-power in retaining possession or not making it away seems to have been properly done, and that the stipulation should have effect (Mommsen *et al.* IV, 1985:655).

¹⁶⁵ Bartolus refers to Marcus Porcius Cato's (234 – 149 B.C.) *De Re Rustica* 61 1.

¹⁶⁶ *Vix certis ex causis adversus dominos servis consistere permissum est: id est si qui suppressas tabulas testamenti dicant, in quibus libertatem sibi relictam adseverant. Item artioris annonae populi Romani, census etiam et falsae monetae criminis reos dominos detegere servis permissum est. Praeterea fideicommissam libertatem ab his petent; sed et si qui suis nummis redemptos se et non manumissos contra placiti fidem asseverent. Liber etiam esse iussus si rationes reddiderit, arbitrum contra dominum rationibus excutiendis recte petet. Sed et si quis fidem alicuius elegerit, ut nummis eius redimatur atque his solutis manumittatur, nec ille oblatam pecuniam suscipere velle dicat, contractus fidem detegendi servo potestas tributa est* – D 5 1 53. Permission for slaves

to go to law against their masters is granted with reluctance and only for specific reasons, that is, if any allege that the pages of a will in which, they claim, they were left their freedom have been suppressed. Likewise, slaves are allowed to expose their masters charged with forcing up the price of the Roman people's grain also with a false census declaration and with counterfeiting coins. Furthermore, they will claim their freedom from their masters if it has been left to them by *fideicommissum*, as will those who assert they have been bought with their own money and not manumitted, contrary to the spirit of their agreement. The slave too, who has been given his freedom by will on condition he presents his accounts, has the right to ask for an *arbiter* in his dealings with his master for sorting out his accounts. Also if a slave has relied on someone's good faith to buy him with his own money and manumit him when this has been repaid, and the purchaser refuses to take the money when proffered, the slave is given the opportunity of bringing to light the spirit of their agreement (Mommsen *et al.* I, 1985:171).

¹⁶⁷ *Tutor pupilli decesserat herede instituto Titio: cum de adeunda hereditate dubitaret, quoniam male gesta tutela existimaretur, persuadente matre pupilli, ut suo periculo adiret, adiit stipulatusque de ea est, indemnem se eo nomine praestari. Si ex ea causa Titius pupillo aliquid praestitisset isque matrem conveniret, negavit exceptioni senatus consulti locum esse, quando vix sit, ut aliqua apud eundem pro eo ipso intercessisse intelligi possit* – D 16 1 19 pr. The tutor of a *pupillus* had died after having instituted Titius heir. Although he was uncertain concerning the acceptance of the inheritance because the tutelage was thought to have been badly performed, in view of the persuasion of the mother of the *pupillus* to the effect that he would enter at her risk, he entered and took a stipulation from her that on this account he would be indemnified for loss. If in relation to this matter Titius had paid anything to the *pupillus* and had brought an action against the mother, it was said that there was no cause for the defence of the *senatus consultum* since it can scarcely be that any woman can be understood to have interceded with the same [Titius] on behalf of that particular person [pupillus] (Mommsen *et al.* II, 1985:463).

¹⁶⁸ *Quodsi vis fluminis partem aliquam ex tuo praedio detraxerit et vicini praedio appulerit, palam est eam tuam permanere. Plane si longiore tempore fundo vicini haeserit arboresque, quas secum traxerit, in eum fundum radices egerint, ex eo tempore videntur vicini fundo adquisitae esse* – Inst 2 1 21. But if the violence of the river should bear away a portion of your land, and unite it to that of your neighbor, it undoubtedly still continues to be yours. If, however, it remains for a long time united to your neighbor's land, and the trees, which it swept away with it, take root in his ground, these trees from that time become part of your neighbor's estate (Sandars, 1917:99).

¹⁶⁹ See gloss p on the word *appulerit* – *Applicaverit alias appulerit idest apposuerit ut subiecit, puta crustam terrae forte vineatae et arboratae. (Accursii glossa in Volumen - CGIC XI, 1969:29)*. Anastatic reprint, Torino 1969 of a 1312 Pisa edition.

¹⁷⁰ See endnote 15.

¹⁷¹ See endnote 15.

¹⁷² See gloss f on the phrase *longiore tempore* – *Tanto ut coaluerit in terra mea ut supra in l. hoc amplius § Alphenus [D 39 2 9 2] Azo. Alii dicunt x vel xx anni in argumento infra pro em. l.ii. § sed si fundi [D 41 4 2 6] (Accursii glossa in Digestum Novum - CGIC IX, 1968:114)*. Anastatic reprint, Torino 1968 of a 1487 Venice edition.

¹⁷³ *Ait praetor: "Glandem quae ex illius agro in tuum cadat, quo minus illi tertio quoque die legere, auferre liceat, vim fieri veto"* – D 43 28. The praetor says: "I forbid the use of force to prevent such one from gathering and taking away on the third day, the acorns which fall from his field into yours" (Mommsen *et al.* IV, 1985:615).

¹⁷⁴ See endnote 15.

¹⁷⁵ See gloss d on the phrase *acquiritur nobis* – *Nobis ut et C. de allu. l.i. in fi.[C 7 41 1] et supra de usufruct. l. item si fundi § huic [D 7 1 9 4], sed fallit infra et eodem l. in agris [D 41 1 16 pr] ac (Accursii glossa in Digestum Novum - CGIC IX, 1968:114)*. Anastatic reprint, Torino 1968 of a 1487 Venice edition.

¹⁷⁶ See gloss g on the phrase *aquisitas esse* – *dicite arbores et terra. Potes tunc utili in rem vindicare ut in argumento supra de rei vendic. l. si frumentum § de arbore [D 6 1 5 3]. Sed tu dic in factum tibi dari ut ibidem dicimus (Accursii glossa in Digestum Novum - CGIC IX, 1968:114)*. Anastatic reprint, Torino 1968 of a 1487 Venice edition.

¹⁷⁷ *Alfenus quoque scribit, si ex fundo tuo crusta lapsa sit in meum fundum eamque petas, dandum in te iudicium de damno iam facto, idque Labeo probat: nam arbitrio iudicis, apud quem res prolapsae petentur, damnum, quod ante sensi non contineri, nec aliter dandam actionem, quam ut*

omnia tollantur, quae sunt prolapsa. Ita demum autem crustam vindicari posse idem Alfenus ait, si non coaluerit nec unitatem cum terra mea fecerit. Nec arbor potest vindicari a te, quae translata in agrum meum cum terra mea coaluit. Sed nec ego potero tecum agere, ius tibi non esse ita crustam habere, si iam cum terra mea coaluit, quia mea facta est – D 39 2 9 2. Alfenus also writes that if marble work falls off your property on to mine and you seek to get it back, a *iudicium* relating to the injury already done must be granted against you. Labeo approves this view. For the injury that I have already suffered is not covered by the decision of the judge before whom the claim is made for the material that has fallen off and an action is to be granted only for the removal of everything that fell off. The same Alfenus says, however, that a *vindicatio* of the marble can be made only if it has not coalesced with or become part of my land. A tree which has been carried into a field of mine and has coalesced with my land cannot be made the object of a *vindicatio* by you. But I will not be able to bring an action against you to deny your right to have the marble if it has not already coalesced with my land (Mommsen *et al.* III, 1985:382).

¹⁷⁸ *Celsus certe scribit, si aedium tuarum usus fructus Titiae est, damni infecti aut dominum repromittere aut Titiam satisdare debere. Quod si in possessionem missus fuerit is, cui damni infecti cavendum fuit, Titiam uti frui prohibebit. Idem ait, eum quoque fructuarium, qui non reficit, a domino uti frui prohibendum; ergo si de damno infecto non cavet dominusque compulsus est repromittere, prohiberi debet frui – D 39 2 9 5.* Celsus certainly writes that if the usufruct of your house belongs to Titia, then either the owner must make an undertaking against anticipated injury, or Titia must give security against the same. But if the person who ought to have received a *cautio* is granted *missio in possessionem*, he will prevent Titia from enjoying her usufruct. Celsus also says that a usufructuary who fails to make repairs is to be prevented by the owner from enjoying his usufruct. Therefore, if the usufruct fails to give a *cautio* about anticipated injury and the owner is compelled to make an undertaking, the former must be prevented from enjoying the usufruct (Mommsen *et al.* IV, 1985:383).

¹⁷⁹ *Unde quaeritur si, ante quam caveretur, aedes deciderunt, neque dominus rudera velit egerere. eaque delinquat, an sit aliqua adversus eum actio. Et Iulianus consultus, si prius, quam damni infecti stipulatio interponeretur, aedes vitiosae corruissent, quid facere deberet is, in cuius aedes rudera decidissent, ut damnum sarciretur, respondit, si dominus aedium, quae ruerunt, vellet tollere, non aliter permittendum, quam ut omnia, id est quae inutilia essent, auferret, nec solum de futuro, sed et de praeterito damno cavere eum debere: quodsi dominus aedium, quae deciderunt, nihil facit, interdictum reddendum ei, in cuius aedes rudera decidissent; per quod vicinus compelletur aut tollere, aut totas aedes pro derelicto habere – D 39 2 7 2.* Therefore there arises the question whether, if a house falls down before a *cautio* is given and the owner does not wish to remove the rubble, but abandons it, there is any action that can be brought against him. The case in which a ruinous house collapsed before a stipulation against anticipated injury had been introduced was put to Julian, and he was asked what the person in whose house the rubble had fallen, ought to do to secure reparation. He replied that if the owner of the house that had collapsed wished to take away the rubble, this should be permitted only if he took away everything, that is, including the useless material, and that he should give a *cautio* about not only future but also past injury; but that if the owner of the house which had fallen down did nothing, an interdict should be granted to the person onto whose house the rubble had fallen by means of which his neighbour would be compelled either to remove the rubble or to regard the whole house as abandoned (Mommsen *et al.* III, 1985:382).

¹⁸⁰ See endnote 177.

¹⁸¹ The *Oxford Companion to Classical Literature* (1989:59) indicates that Aristotle wrote two ethical treatises to which he gave the title *Ethika*, 'matters to do with character', known as the Nicomachean and the Eudemian Ethics. *ἐπεὶ δ' ἡ οἰκοδομικὴ τέχνη τίς ἐστὶ καὶ ὅπερ ἕξις τις μετὰ λόγου ποιητικῆ, καὶ οὐδεμία οὔτε τέχνη ἐστὶν ἣτις οὐ μετὰ λόγου ποιητικῆ ἕξις ἐστίν, οὔτε τοιαύτη ἢ οὐ τέχνη, ταῦτον ἂν εἴη τέχνη καὶ ἕξις μετὰ λόγου ἀληθοῦς ποιητικῆ* - Aristotle, Nicomachean Ethics 6 4 3. Now architectural skill, for instance, is an art, and it is also a rational quality concerned with making; nor is there any art which is not a rational quality concerned with making, nor any such quality which is not an art. It follows that an art is the same thing as a rational quality, concerned with making, that reasons truly (Aristotle, 1956:335). It is evident from the preface that Bartolus was initially reluctant to include geometry as a supporting science to discuss legal principles. Walther (1992:895) indicates that Bartolus was

well versed in Aristotelian philosophy and used these principles to promote an equitable balance between theory and practice.

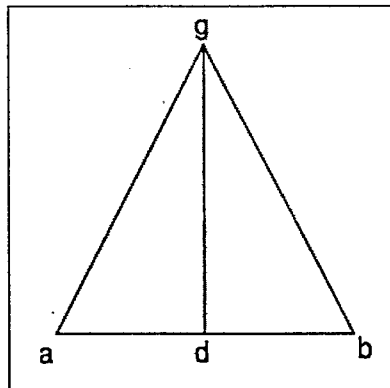
¹⁸² See endnote 89.

¹⁸³ Proclus (1970:88) states that the definitions of a straight line by Plato, Aristotle and Euclid all express the property which the straight line has by virtue of being simple and exhibiting the single shortest route from one extremity to the other.

¹⁸⁴ Bartolus refers to the thirteen books of the *Elements of Geometry*, written by the famous Greek mathematician, Euclid. *Linea recta est ab uno puncto ad alium extensio, in extremitates suas utrumque eorum recipiens – Elementa I, def. 4* (Busard, 1983:31). A straight line is a line which lies evenly with the points on itself (Heath XI, 1952:1). *Angulus planus est duarum linearum alternus contactus, quarum expansio supra superficiem applicatoque non recta – Elementa I, def. 8* (Busard, 1983:31). A plane angle is the inclination to one another of two lines in a plane which meet one another and do not lie in a straight line (Heath XI, 1952:1). *Equidistantes lineae sunt quae in una superficie collocatae (sic), et in aliquam partem protrahente, non coniunguntur etiam si in infinita protrahantur – Elementa I, def. 23* (Busard, 1983:31). Parallel straight lines are straight lines which, being in the same plane and being produced indefinitely in both directions, do not meet one another in either direction (Heath XI, 1952:2).

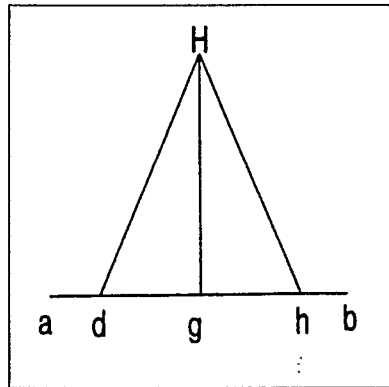
¹⁸⁵ Proclus (1970:216) indicates that a certain Apollonius of Perga, a mathematician of the third century B.C., used the method indicated by Bartolus to bisect a finite straight line by constructing two equal circles and drawing a line from the one point of intersection of the two circles to the other, which line bisects the given line. It is contrasted to the method employed by Euclid whereby an equilateral triangle is constructed.

¹⁸⁶ *Nunc demonstrandum est quomodo linea assignata in duo media dividatur. Sit linea assignata ba fiatque super eam equalium laterum triangulus agb. Angulus cuius in duo media per lineam gd dividatur. Quoniam igitur lineam ga lineae (sic) gb equalem ostendimus, lineamque gd communem, erunt lineae ag et gd lineis bg et gd vicissim equales. Angulusque agd sicut angulus bgd, alkaida itaque ad sicut alkaida bd. Lineam igitur ab supra punctum d in duo media divisimus. Quod demonstrare proposuimus – Elementa I, prop. 10* (Busard, 1983:41). It will now be demonstrated how to bisect a given line. Let the given line be *ba* above which an equilateral triangle *agb* is constructed. Let the angle of the triangle be bisected by line *gd*. Since we have therefore indicated that *ga* is equal to *gb* and line *gd* is common, lines *ag* and *gd* will be equal to lines *bg* and *gd* respectively. Angle *agd* is equal to angle *bgd* and base *ad* is therefore equal to base *bd*. We have therefore bisected line *ab* in point *d*, which we set out to prove (Own translation).

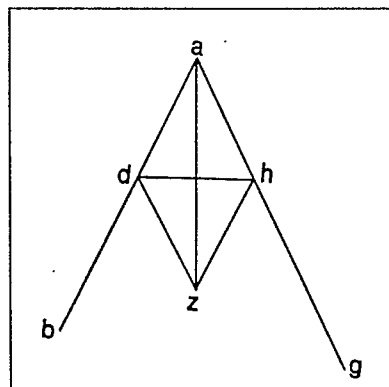


¹⁸⁷ *Nunc demonstrandum est quomodo linea assignata perpendicularem ei de puncto assignato in illa extrahamus ex utraque parte, cuius anguli quidem equales erunt et recti. Sit linea ab punctusque assignatus g. Ponatur itaque supra lineam ag punctus d et supra lineam bg punctus h. Sitque linea gh sicut gd, fiatque supra lineam dh triangulus equalium laterum dHh coniungaturque H cum g, linea Hg. Sicque manifestum est quia linea dg lineae gh aequalis, lineaque gH communis, lineae dg et gH lineis hg et gH unaqueque se respicienti equalis. Basisque dH basi Hh equalis. Angulus ergo dgH angulo hgH equalis. Cum autem linea lineae supervenerit, fuerintque anguli ex utraque parte lineae equalis, erit uterque eorum rectus. Anguli itaque dgH et*

ghH recti. Linea ergo Hg lineae dh superstans duos rectos efficit angulos. Sic igitur lineae ab assignate de puncto g in ea assignato perpendicularis extracta est, scilicet, Hg duobus rectis angulis superstans. Quod demonstrare proposuimus – Elementa I, prop. 11 (Busard, 1983:42). It will now be demonstrated how to draw a perpendicular line, whose angles are right and equal, upon a given line from a given point on said line. Let the line be ab and the given point, g . A point, d is then placed upon line ag and a similar point h , on line bg . Let line gh be equal to gd and let an equilateral triangle dHh be constructed on line dh . Let H be connected with g in a line Hg . Thus it is evident that since line dg is equal to line gh and line gH is common, lines dg and gH are equal to hg and gH . The base dH is further equal to Hh . Thus angle dgH is equal to hgH . But when a straight line, set upon another straight line makes adjacent angles equal to one another, each of the equal angles will be right. Thus angles dgH and hgH are right. Thus line Hg above line dh creates two right angles. Therefore, on the given line ab in a given point g , a perpendicular line has been constructed, that is Hg with two right angles, which we set out to prove (Own translation).



¹⁸⁸ *Nunc demonstrandum est quomodo angulus assignatus in duo media dividatur. Sit angulus assignatus bag. Superaddaturque lineae ab punctus supra quem d lineaeque ag punctus supra quem h fiatque ah sicut ad. Iungaturque h cum d fiatque super eam equalium laterum triangulus dhz. Iungaturque a et z. Unde dico angulum bag in duo media divisum esse. Rationis causa: Quoniam lineam da sicut lineam ah iam ostendimus. Lineamque az communem, erunt lineae da et az lineis ah et az equales, alkaidaque dz sicut alkaida hz. Sicque angulus daz sicut angulus haz. Ita igitur angulum bag assignatum in duo media divisimus lineaque az. Et hoc est quod demonstrare proposuimus – Elementa I, prop. 9 (Busard, 1983:41).* It will now be demonstrated how a given angle is bisected. Let the given angle be bag . Let a point d , be placed on line ab and a point h on line ag . Let ah be equal to ad . The point h is then joined with d and an equilateral triangle dhz is constructed above it. The points a and z are connected. Therefrom I say that angle bag is bisected. The reason: since we have already indicated that line da is equal to ah and line az is common, then lines da and az will be equal to ah and az and base dz equal to base hz . Thus angle daz is equal to haz . We have therefore bisected angle bag through line az and this is what we set out to prove (Own translation).



¹⁸⁹ In hand written manuscripts of the *Tyberiadis*, the source of the river is represented by a stream of water flowing from the head of an animal, see Walther (1992:890).

¹⁹⁰ See endnote 89.

¹⁹¹ *Insula est enata in flumine contra frontem agri mei, ita ut nihil excederet longitudo regionem praedii mei: postea aucta est paulatim et processit contra frontes et superioris vicini et inferioris: quaero, quod adcrevit utrum meum sit, quoniam meo adiunctum est, an eius iuris sit, cuius esset, si initio ea nata eius longitudinis fuisset. Proculus respondit: flumen istud, in quo insulam contra frontem agri tui enatam esse scripsisti ista, ut non excederet longitudinem agri tui, si alluvionis ius habet et insula initio propior fundo tuo fuit quam eius, qui trans flumen habebat, tota tua facta est, et quod postea ei insulae alluvione accessit, id tuum est, etiamsi ita accessit, ut procederet insula contra frontes vicinorum superioris atque inferioris, vel etiam ut propior esset fundo eius, qui trans flumen habet* – D 41 1 56 pr. An island arose in a river, so facing the frontage of my land that its length did not extend beyond the frontage of my land; subsequently, the island gradually grew and extended opposite the frontage of both my superior and lower neighbors. My question is whether the accretion is mine, because it has been added to what is mine, or is it in the same position at law that it would have been if the island had been its present length when it arose? Proculus replied: if that river in which, you write, an island arose, not exceeding the length of your frontage, is subject to the right of alluvion and the island arose nearer to your land than that of the owner on the other bank, the whole island is yours, and the subsequent accretion to it, by alluvion, is also yours, even though it be such as to extend the island beyond the frontages of your neighbors on either side or even to bring it nearer to the land of the owner on the other bank (Mommsen *et al.* IV, 1985:499).

¹⁹² See endnote 89.

¹⁹³ See endnote 90.

¹⁹⁴ *Inter eos, qui secundum unam ripam praedia habent, insula in flumine nata non pro indivisio communis sit, sed regionibus quoque divisis: quantum enim ante cuiusque eorum ripam est, tantum, veluti linea in directum per insulam transducta, quisque eorum in ea habebit certis regionibus* – D 41 1 29. An island arising in a river does not become the undivided property of those who hold lands on the one bank of the river, but is divided according to their particular areas. For each of them will hold it in appropriate areas to the extent that each previously held the bank, as though a straight line were drawn through the bank (Mommsen *et al.* IV, 1985:494).

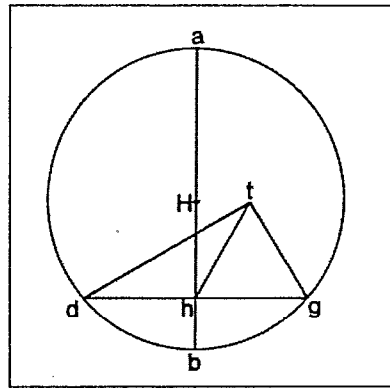
¹⁹⁵ See endnote 191.

¹⁹⁶ See endnote 191.

¹⁹⁷ *Circulus est figura plana, una quidem linea contenta que (sic) circumferentia nominatur, in cuius medio punctus a quo omnes lineae ad circumferentiam exeuntes sibi invicem sunt aequales* – *Elementa* I, def. 15 (Busard, 1983:32). A circle is a plane figure contained by one line such that all the straight lines falling upon it from one point among those lying within the figure are equal to one another (Heath XI, 1952:1).

¹⁹⁸ *Nunc demonstrandum est quomodo circuli assignati centrum reperiri queat. Exempli gratia: sit circulus ab. Fiat itaque in eo linea quolibet modo cadens cuius summitates circumferentiam utrobique tangant. Sitque gd. Eaque in duo media supra punctum h dividatur. Producatique de puncto h linea supra angulum rectum sitque linea ha etiam usque ad b producta dividaturque ab in duo media supra punctum H. Dico quia H circuli centrum esse necesse est. Rationis causa: aliter enim esse impossibile est. Quod si fuerint possibile punctum t sit centrum esse. Iungaturque t cum g et h et d. Erat autem gh sicut hd. Sit vero ht communis. Quare gh et ht sicut dh et ht. Atqui basis gt sicut basis td. Angulus ergo ght sicut dht. Cum vero linea lineae supervenerit fuerintque duo anguli utrobique aequales, rectos esse necesse est. Anguli itaque ght et dht recti. Quoniam ergo anguli dht et dha recti aequales, maior minori. Quod contrarium est impossibile. Non est itaque t centrum circuli ab sed neque alius nisi punctus H. Est igitur H centrum circuli ab. Unde datur intelligi quia nulle due linee infra circulum supra angulos rectos sese per media secant nisi ille que per centrum transierint. Et hoc est quod demonstrare proposuimus* – *Elementa* III, prop. 1 (Busard, 1983:89). It will now be demonstrated how the centre of a given circle may be established. For example; let the circle be *ab* and let a line be drawn through it at random, the ends thereof touching the extremities of the circle. Let the line be *gd* and let it be bisected at point *h*. Let, from point *h*, a line be constructed at right angles and let line *ha*, extended to *b*, bisect line *ab* in point *H*. I say that *H* is necessarily the centre of the circle. The reason: it is indeed

impossible that it could be any other point. Should it be possible, then let point t be the centre. Let t be joined with g and h with d . Line gh is equal to hd and ht is common. Therefore gh and ht are equal to dh and ht and base gt is equal to base td . Thus angle ght is equal to dht . But when a straight line, set upon a straight line makes adjacent angles equal to one another, each of the angles will be right. Therefore angles ght and dht are right. Since angles dht and dha are both right, the greater to the lesser, it is impossible. Thus t is not the centre of the circle ab , nor is any other point except H . H is therefore the centre of the circle ab . From this it can be understood that no two lines within a circle can intersect at right angles without one passing through the centre. And this is what we set out to demonstrate (Own translation).



¹⁹⁹ *Semicirculus est figura diametro circuli et medietate circumferentie conclusa* – *Elementa* I, def.18 (Busard, 1983:32). A semicircle is the figure contained by the diameter and the circumference cut off by it (Heath XI, 1952:1).

²⁰⁰ See endnote 194.

²⁰¹ It seems from the diagram that the author is confusing the property of Gaius and Lucius. The area enclosed within line ab in fact belongs to Gaius, not Lucius.

²⁰² *Caesar cum insulae Cretae cotorias locaret, legem ita dixerat: 'ne quis praeter redeptorem post idus Martias cotem ex insula Creta fodito, neve eximito neve avellito.'* *Cuiusdam navis onusta cotibus ante idus Martias ex portu Creatae profecta vento relata in portum erat, deinde iterum post idus Martias profecta erat. Consulebatur, num contra legem post idus Martias ex insula Creta cotes exisse viderentur. Respondit, tametsi portus quoque, qui insulae essent, omnes eius insulae esse viderentur, tamen eum, qui ante idus Martias profectus ex portu essent et relatus tempestate in insulam deductus esset, si inde exisset non videri contra legem fecisse, praeterea quod iam initio evectae cotes viderentur, cum et ex portu navis profecta esset* – D 39 4 15. When Caesar leased the whetstone quarries on the island of Crete, he laid down the following rule: 'After the Ides of March, no one except a lessee is to excavate, remove or take away any flint from the island of Crete.' A ship belonging to a certain individual set out from the port of Crete before the Ides of March loaded with flints but was driven back to port and later set out again after the Ides of March. Advice was sought as to whether the flints should be considered to have been illegally exported after the Ides of March. He replies that although all the ports which are on an island are held also to belong to that island, nonetheless, a person who sets out from the port before the Ides of March and was carried back to the island by a storm should not be held to have broken the law if he then left again, the grounds being that the flints should be considered to have been exported at the outset, since the ship also left the port then (Mommmsen *et al.* III, 1985:406).

²⁰³ "*Portus*" appellatus est conclusus locus, quo importantur merces et inde exportantur: eaque nihilo minus statio est conclusa atque munita. Inde "*angiportum*" dictum est – D 50 16 59. A "harbor" is the name of an enclosed space where goods are imported and whence they are exported; and any enclosed and walled-in place may equally have the same name. Whence one talks about *angiportum* (Mommmsen *et al.* IV, 1985:938).

²⁰⁴ *In testamento quidam scripserat, ut sibi monumentum ad exemplum eius, quod in via Salaria esset Publii Septimii Demetrii, fieret: nisi factum esset, heredes magna pecunia multare et cum id monumentum Publii Septimii Demetrii nullum repperiebatur, sed Publii Septimii Damae erat, ad quod exemplum suspicabatur eum qui testamentum fecerat monumentum sibi fieri voluisse, quaerebant heredes, cuiusmodi monumentum se facere opporret et, si ob eam rem nullum*

monumentum fecissent, quia non repperirent, ad quod exemplum facerent, num poena tenerentur. Respondit, si intellegerentur, quod monumentum demonstrare voluisset is qui testamentum fecissent, tametsi in scriptura mendum essent, tamen ad id, quod ille se demonstrare animo sensisset, fieri debere: sin autem voluntas eius ignoraretur, poenam quidem nullam vim habere, quoniam ad quod exemplum fieri iussisset, id nusquam extaret, monumentum tamen omnimodo secundum substantiam et dignitatem defuncti extruere debere – D 35 1 27. A man wrote in his will that he wished to be erected to himself a monument like that of Publius Septimius Demetrius in the Via Salaria; should this not be done, he imposed a large fine on his heirs. When it was discovered that there was no monument of Publius Septimius Demetrius but that there was one of Publius Septimius Dama, which it was suspected that the testator intended as the model of his own memorial, the heirs asked what sort of monument they should erect and, assuming that they erect none because they could not identify the intended model, whether they would incur the penalty. The reply was that if it could be discerned which monument the testator sought to identify, even though he misdescribed it, they should build on the model which he thought that he had identified; if, however, the testator's intention could not be ascertained, the penalty would be ineffective because the model never existed which he bade them to copy; still they would certainly have to erect a monument appropriate to the wealth and standing of the deceased (Mommmsen *et al.* III, 1985:185).

²⁰⁵ *Si servitus imposita fuerit: 'lumina quae nunc sunt, ut ita sint' de futuris luminibus nihil caveri videtur: quod si ita sit cautum: 'ne luminibus officiat' ambigua est scriptura, utrum ne his luminibus officiat quae nunc sint, an etiam his quae postea quoque fuerint: et humanius est verbo generali omne lumen significari, sine quod in praesenti sive quod post tempus conventionis contigerit – D 8 2 23.* If a servitude is created with the words: 'lights to remain as they are now' the correct interpretation seems to be that there is no provision in respect of future lights. However, if the undertaking is framed in the words: 'lights are not to be obstructed' this term does not make it clear whether only those lights which exist at present are not to be obstructed or whether future lights are included too. The more liberal interpretation is that as the term is a general one, it includes all lights, whether those presently in existence or those which came into existence after the date of agreement (Mommmsen *et al.* I, 1985:256).

²⁰⁶ *Et balneum, ut desideras, instruere et aedificium ei superponere potes, observata tamen forma, quae ceteri super balnea aedificare permittuntur, id est ut concamaratis superinstruas et ipsa concameres nec modum usitatum altitudinis excedas – C 8 10 1 (CIC II, 1915:333).* You can, as you desire to do, construct a bath, and place a building above it, provided, however, that you observe the law enacted with reference to those who build above a bath; that is to say, you must erect the superstructure as well as the bath upon arches, and do not raise it above the ordinary height (Scott XIV, 1932:244).

²⁰⁷ See endnote 194.

²⁰⁸ *'Ενιαυτός δὲ συνημένων ἡμερῶν ἐξετασθήσεται, ἐξ ὅτου τις ἐπανήλθεν εὐθείαν ὁδὸν εὐθύων ἢ διευθύνειν γε ὀφείλων, οὐχὶ τὴν ἐκ περιόδων – D 27 1 10 3.* The year will be reckoned in consecutive days from the time when he returned *via* the most direct route or at least the route he would have taken without a detour (Mommmsen *et al.* II, 1985:785).

²⁰⁹ *Si chorus aut familia legetur, perinde est quasi singuli homines legati sint – D 32 1 79 pr (arg.).* If a choir or a staff of slaves should be bequeathed, it is just as if the individual men were bequeathed (Mommmsen *et al.* III, 1985:95).

²¹⁰ See endnote 156.