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Imperial Power, Legislation, and Water Management in the Roman Empire

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IMPERIAL POWER, LEGISLATION, AND WATER MANAGEMENT IN THE ROMAN EMPIRE*

The intellectual rigour of the legal system created by the Romans had no parallel in the ancient Mediterranean world nor in the Near East. A large body of legal texts and interpretations by jurists covered practically every aspect of human life. In this contribution the focus is on legislation on water use. The article begins by giving a general overview of the various ways in which legislation was created. I am concerned in particular with the role of the Roman emperor. He was powerful, but there was scope also for local decision making. As the imperial period progressed (from 31 BCE), the emperor took over more and more of the legislative functions, although he had trained lawyers or jurists to assist him. Eventually, the mass of Roman legislation (going back to the beginning of the current era or beyond) became too difficult to master, and in Late Antiquity compilations of relevant legislation were made on imperial order. It is almost exclusively thanks to these collections that Roman law survived. The Codex Theodosianus came into force in 438 CE, and the Codex Justinianus and the Digest in 534 CE. Roman private law had always been concerned with the use of water in agriculture (especially for irrigation), but the Codex Theodosianus contains nothing in this regard; the few clauses on water management it contains show concern only for the aqueducts supplying major cities. There is more on agricultural water use in the code of the emperor Justinian, and especially so in the Digest. This article asks whether these differences derive from certain technical factors that regulated how in particular the Theodosian code was compiled, or if we are dealing with real differences in imperial policy.

Introduction

The author Robert Harris has enjoyed a well-earned success with his historical novel *Pompeii*.[1] In the gripping narrative of the book, the water supply of the towns along the Bay of Naples plays a major role in the final days before the fatal eruption of Vesuvius in 79 CE. Harris based his novel on thorough research, and many of the details are familiar to those of his readers who are acquainted with the ancient sources (ancient texts, inscriptions or archaeological remains). It is, for instance, a fact that an ancient aqueduct ran along the coast, past Pompeii and all the way to the naval base at Misenum, just as Harris describes. The aqueduct is indeed called the Aqua Augusta in ancient sources and its original construction was surely financed by the emperor Augustus.[2] Harris uses a rare Latin word to refer to the aqueduct, calling it the matrix. The word appears in a late antique source and there it means 'water main made of lead,'[3] which does not quite apply to the Aqua Augusta, the channel of which was made of waterproofed concrete, but conceivably *matrix* may have had a different meaning among the staff that supervised the aqueduct in Campania, the region in which Pompei, Naples and Misenum lay.

Where Harris and the ancient historian part company, however, is when he describes how the management or supervision of the Aqua Augusta was organised. We find an aquarius in charge of the aqueduct, sent down from Rome and working under the supervision of the *curator aquarum* of Rome, the Water Commissioner of that city.[4] If that were the case, we would be well informed about the principles according to which the Aqua Augusta was managed and

its water distributed, because Rome's water supply is described in great detail by Sextus Iulius Frontinus, *curator aquarum* at the turn of the first century CE. In Frontinus' work on the aqueducts of ancient Rome, called *De aquaeductu urbis Romae*,[5] we are told how the emperor not only financed but also controlled the water supply and distribution in Rome. If the Roman *curator aquarum* exercised his power in Campania as well, it would mean that every person who wanted to install a private conduit for drawing water from the public supply, for instance in Pompeii, would have had to approach the emperor in Rome, as did those who lived in Rome or along the courses of Rome's eleven aqueducts.[6]

The emperor in Rome certainly wielded enormous power, but there were limits to the kind of micromanagement that he and his government would engage in. There is no indication that Rome's *curator aquarum* would have held any power outside Rome and the catchment area of the capital's aqueducts. And there is positive evidence that townships in Italy handled day-to-day management and distribution of their hydraulic resources independently of Rome and the emperor. We see that, for instance, in a well-known document from the reign of Augustus, known as the Edict on the Aqueduct of Venafrum (a town in southern Latium, not too far from the region of Campania, in which Pompeii was situated):

> Whatever water comes, flows, is brought to the town of Venafrum, it pleases (the emperor Augustus) that the duumvir (or the duumvirs), the praefect (or the praefects) of the township (*colonia*) shall have the right and power to distribute, sell or impose or establish a fee on it, according to a decision by a majority of the town councillors, which decision shall be made under the conditions, that at least two thirds of the councillors will be present, and that they shall have the right and power to establish a regulation for it, based on a decision of the town council, which (decision) shall be made under the above conditions.[7]

If the sources, then, do not bear Harris out in regard to the postulated central supervision (in creating this scenario he was obviously merely exercising his poetic licence, for the benefit of his readers), it should be said that occasionally one finds similar authority attributed to the imperial power also in modern scholarship. There appears to be a certain lack of clarity about the emperor's role when it comes to water distribution, and the right to draw water in the Roman world. The model of Rome looms large, perhaps too large, for the capital was after all an exception.[8]

In the following, the emperor's legal powers in relation to water use and distribution, and the legal context in which he acted, will be the topic. This is a wide subject, and my discussion cannot be but incomplete. If the treatment inspires further investigations or serves for comparative studies, then it has served a purpose.

Roman Law as an Intellectual Construct

In his *Institutes*, a handbook on Roman law written in the mid second century CE, the jurist Gaius lists the following sources of Roman law:[9]

> The laws of the Roman people are based upon acts, plebeian statutes, resolutions of the Senate, imperial enactments, edicts of those having the right to issue them, and answers given by jurists (Gaius, *Inst.* 1.2).

There were thus many ways in which new laws could be created, and this situation persisted for many centuries. When we talk about Roman law, we really refer to material that was created from roughly 100 BCE to well into the 500s CE, even past the fall of the western empire which is commonly dated to 476 CE. In the context of the ancient Mediterranean,

including the Near East, the situation in the Roman world was very unique in regard to how law and legal thinking was developed. Among the Romans, law became a system of thought. Other ancient societies too had their laws, even collections of laws. The oldest legal code known to us, and surely the most famous one, is the Code of Hammurabi (of Babylon), from shortly before 1750 BCE. Discovered in the first years of the nineteenth century, the code contains a number of paragraphs but it is quite simple in structure. One could probably learn it by heart without too much trouble, cf. §55: 'If a man has opened his trench for irrigation (and) has been slack and so has let the waters carry away (the soil on) his neighbour's field, he shall pay corn corresponding to (the amount of the crop which) his neighbour (has raised).'[10]

We have collections of laws from other ancient societies as well, which contain clauses on water management.[11] And the word of the ruler normally had to be obeyed in early states such as Egypt, Assyria and Persia, and this allows us to establish that such pronouncements had legal force. The various Greek states had their own collections of laws as well; Athens is most famous in this respect.[12] But nowhere did a legal science develop as it did among the Romans. In their world, law became a hugely complicated intellectual construct, like it is today in every western nation.

Sources for Water Law

In order to situate the role of the Roman emperor in its proper context in regard to the creation of law, we shall next look at how the various sources of Roman law, listed by Gaius, contribute to our knowledge of hydraulic legislation. This means surveying what has survived from among the different kinds of Roman laws and statutes and other legal material on water.

- one law by the Roman people on water management is known in full, namely the *lex Quinctia* from 9 BCE; it concerns the water supply of the city of Rome.[13]

- we know several decisions by the Roman senate; practically all of them were enacted in 11 BCE and concern the city of Rome.[14]

- next on Gaius' list are rulings by various magistrates, the praetor in Rome in particular, and of this we only have scattered evidence (some of it in inscriptions).[15] There are some laws concerning water use in the city of Rome dating to the republican period that Frontinus mentions, and they may derive from edicts of magistrates.[16]

- there is also a type of legislation that Gaius did not single out in his definition, but which modern observers would likely consider as a separate category of laws, namely city statutes. Technically, such statutes originated either through a decision of the assembly in Rome, or as an edict by a magistrate, wherefore they could be included in the two previous categories.[17] Yet once they had been established, such city statutes represented local law and empowered local organs to hand out justice, for instance regarding water management. The statutes from a Spanish town, the *lex coloniae Genetivae Iuliae* (or *lex* of Urso, as the town is also called) may illustrate this:

> If any colonist [resident of the town] shall wish to bring overflow water [from a fountain] into private hands and he shall have appeared before a *duumvir* [one of the two highest elected magistrates] and shall demand that he raise the matter with the decurions [city councillors], then that *duumvir*, of whom it shall have been so demanded, is to raise the matter with the decurions, when no less than forty shall be present. If the decurions, the majority of those who shall then have been present, shall have decided that the overflow

> water is to be brought into private hands, there is to be right and power for him to use that water in that way, insofar as there be no damage to private individuals.[18]

Here again we see no signs of imperial micromanagement. To complete the picture of how power was exercised at the local level and in what kind of legal context, it should be added that there were also agreements between communities on water management and sharing, as has become clear after the recent discoveries of bronze tablets from Spain, with more or less influence from Roman legal thought (or from Roman officials).[19]

- then, if we follow Gaius' list, there are the enactments of the Roman emperors (*constitutiones*); basically any written pronouncement by an emperor which he intended to have legal force.[20] There is much material on water that belongs here, as we shall see below.

- finally, there are the opinions of the jurists, and here there is a very wide body of evidence. To illustrate what we are dealing with, we may take a legal figure which concerns neighbourhood relations, both in urban and in rural environments: the *actio aquae pluviae arcendae*. This is an 'action for warding off rain water.' If, in a situation where the owner of a property was causing a neighbour damage because of allowing rainwater to overflow onto his neighbour's land, the conditions were such that the *actio a.p.a.* applied, the damaged party could bring a legal action. A crucial question here is obviously which situations the Roman jurists considered sufficient for the *a.a.p.a.* to apply. There was much debate among Roman jurists in this regard, which is reflected in our surviving legal sources. The Digest, the Roman legal code (on which more below), contains twenty six sections on this, covering a total of three-and-a-half pages of very small print. Since water flows downhill, the owner on the lower lying land can expect to receive water from above. That is in the natural order of things, and is therefore as such not cause enough for the *a.a.p.a.* But if the owner of the higher lying land does something to make rain water flow differently, so as to damage the crop or something else below, then there is the possibility that the *a.a.p.a* can be employed. Yet certain changes were allowed, because a landowner must be allowed to farm his land in an efficient and profitable fashion, while other changes were not. But what work did the Roman jurists think the owner of the superior field was allowed to carry out? The fact that many jurists participated in the discussion, over a period of several centuries, does not make it easier to resolve the question. In the last sixty years there have been three monographs exclusively dedicated to this topic (all in Italian, today the most important modern language for studying Roman law), which has also been discussed in many other books and articles.[21] In this case we are dealing with attempts to limit the negative effects of water, not, as is normally the case, with its potential benefits, as when discussing water supply and distribution.

Trying to Create Order in Roman Legislation

Legal statutes did not, to be sure, remain in force for ever; old laws became null and void in the Roman world when a new law was passed on the same subject. But it must often have required much work to establish whether a newer law existed, and in what regard it nullified or perhaps only complemented an old one. Unavoidably, the question, how anyone could keep track of what constituted Roman law, imposes itself.

Indeed, eventually even the Romans themselves could no longer master their enormous legal edifice, and a major revision and reform became necessary. One can understand that imperial commissions of legal experts were created, who were given the task to collect the essential legal statutes. The first major one was set up in 429 CE by the emperor Theodosius II (whose co-ruler was Valentinianus III). The task of that commission was, first, to collect all the most

recent imperial constitutions or enactments, namely from the accession of Constantine I (312 CE)[22] onwards, in a single volume. Then, in the next and final phase, the commission was to combine the new *Theodosianus* and two earlier codes, the *Codex Gregorianus* and the *Codex Hermogenianus*, with the writings of the jurists. But this second step was never taken.[23] The Theodosian Code gained legal power in January 438, however, and contains over 2,500 texts.[24]

Then, about a century later, in 530, the emperor Justinian (Justinianus) nominated a new imperial commission. It was lead by the great jurist Tribonian (Tribonianus). Their task was to produce one volume with excerpts from all the jurists, divided into 50 books or headings. This volume, the *Digesta* or *Pandecta* (normally referred to as the *Digest* in English), was to determine what the law was, once and for all, on the specific topics the volume covered. No later commentaries on the *Digest* were to be allowed, and from the moment when the *Digest* was approved, earlier juristic writings would become null and void.[25]

In addition, a new code, the *Codex Justinianus*, was compiled in a similar way as the older *Codex Theodosianus*. It included a good number of the texts in the Theodosian Code, but also many other enactments by Roman emperors, both older (going back to the times of the emperor Hadrian, 117–138 CE) and more recent ones. In addition, there were the Institutes of Justinian, a text book for students, and the *Novellae* of Justinian, or new rulings by that emperor. These works together form the *Corpus Iuris Civilis,* 'The Body of Civil Law.'[26] From 534 onwards, only the *Corpus Iuris Civilis* had legal status. And while the *Corpus Iuris Civilis* survived and was copied during the Middle Ages, very little else has survived of the copious legal writings during earlier centuries of Roman history.[27]

What does this mean when one studies Roman water law? It means that if someone in, say, 200 CE had been attempting to discuss and explain Roman water law as I am in this article, that person would have been able to access many legal texts that are lost to us today. At the same time, all the later enactments by the emperors, which provide most of what we know about the emperors' specific legislation, would have been unknown to that person, as would, for instance, the work of Ulpian († 223 CE), one of the greatest Roman jurists. This situation alerts us to the fact that there is no straightforward answer to what constitutes 'Roman law,' for instance on water management. Roman law obviously changed over time, and we are not equally well informed about its state for every period during the five centuries or so when Rome was ruled by an emperor. Because we do not always know the context well enough, it is also sometimes difficult to evaluate the nature of an imperial enactment.

Public and Private Law

Roman law can be divided into two parts: public law and private law. Public law received its classic treatment over a century ago in Theodor Mommsen's *Römisches Staatsrecht*.[28] There it is summarised how the Romans built their state and their government. Obviously, officials elected by the people or nominated by the emperor to oversee the water supply, particularly in Rome, are part of the 'Staatsrecht' or public law, as is anything that falls under the competence of such officials.

During certain periods we are very well served in regard to public water law; thanks to Frontinus we have unusually abundant information on the *cura aquarum* of the city of Rome up until 100 CE. The management of Rome's water supply is in fact probably the best known sector of Roman imperial administration[29] (in any case outside of Egypt where papyri give us much

detailed knowledge). Then there is private law that concerns water. Briefly put, private law is intended to protect private property and grant every Roman citizen his or her fair rights.[30] The *actio aquae pluviae arcendae* mentioned above naturally belongs to the sphere of private law.

Another way to divide Roman water legislation is according to certain geographic criteria, namely in regard to whether a law primarily concerns an urban or a rural environment. Two preliminary statements can be made here. First, the Roman empire, at least during its heyday, was an empire of cities and towns. Most of the events that were socially and politically important took place in an urban environment. (In late antiquity this changed, and cities decayed.) Second, in today's world, agricultural irrigation globally consumes far more water than do cities, even including the industries which are located in them. But what these proportions – between water for cities and water for irrigation – were in the Roman world, I cannot say. I doubt that anyone has ever even attempted a global estimate of how much of the water, which was transported in aqueducts or otherwise channelled by Roman hydraulic engineers or by local landowners with some technical knowledge, was used for irrigation, and how much was brought to cities and towns.[31]

However, even in case Roman agriculture mainly depended on water from precipitation, we should not think the water use in the countryside was of little interest to the Roman elite. Landed wealth still constituted the economic foundation of the aristocracy and the wealthy.[32] Even if the area of irrigated land was not that extensive,[33] it is more than likely that powerful individuals followed legislation on rural water use with considerable interest. Water was always central for crops and animals, and the access to and right to use rivers, torrents, lakes, ponds, springs and wells was of paramount importance. Thus there should always have been much attention paid to legislation dealing with irrigation and rural water rights and servitudes. Yet if we look at the space that the Theodosian Code and the *Corpus Iuris Civilis* devote to issues involving water, some perhaps surprising features appear.

The Codex Theodosianus

The *Codex Theodosianus*, in its sixteen books of imperial enactments dating to the period from 313 until 438 CE, is overall not very much concerned with sweet water (legislation involving the sea is not an issue here). In Book 15 there is one subsection, no. 2, called *De aquaeductu*, and here we find no more than nine legal enactments. In addition, a few rescripts concerning water are scattered in the other books.[34] One of these concerns the Nile (*CTh* 9.32.1), one tells soldiers not to pollute rivers when they build their camp (*CTh* 7.1.13),[35] while some other passages deal with aqueducts and baths in a clearly urban context.[36] Such is the content also of the nine laws in subsection 15.2: we are mostly dealing with water distribution in cities, and the emperors refer to the countryside only when this is necessary in order to secure the urban supply, it seems to me.[37] One such case is *CTh* 15.2.1, directed by the emperor Constantine I (the Great) to one Maximilanus, *consularis aquarum* ('Water Commissioner') of Rome:[38]

> It is our will that the landholders over whose lands the courses of aqueducts pass shall be exempt from extraordinary burdens, so that by their work the aqueducts may be cleansed when they are choked with dirt. The said landholders shall not be subject to any other burden of a superindiction [special tax levy], lest they be occupied in other matters and not be present to clean the aqueducts. If they neglect this duty, they shall be punished by forfeiture of their landholdings; for the fisc will take possession of the landed estate of any man whose negligence contributes to the damage of the aqueducts. Furthermore, persons through whose landed estates the aqueducts pass should know

> that they may have trees to the right and left at a distance of fifteen feet from the aqueducts, and your office [of the *consularis aquarum*] shall see to it that these trees are cut out if they grow too luxuriantly at any time, so that their roots may not injure the structure of the aqueduct.

On paper the new enactment may appear sensible enough, but to me it seems that we are witnessing a desperate attempt at a privatisation of public services which is doomed to failure. The only public benefit would be the land grab that may have resulted if the law was followed to its draconic letter (which it likely never was). For to clean one of Rome's aqueducts was a major undertaking which in the heyday of the empire was handled by the specialised crew of the city's water administration, as Frontinus describes.[39] No landowner would have men among his/her dependants that could handle this delicate task, wherefore those who had the financial resources would have to employ outside contractors to carry out the cleanup; others would be unable to comply.[40] It is true that among the technical writings of the Roman land surveyors there is a passage which talks about landowners cleaning aqueducts, but this seems to be a late-antique text and the comment surely refers to local aqueducts on a much smaller scale.[41]

Another imperial law, dating to some seventy years after the previous, still shows that the countryside is of interest only in as much as it is an environment where damage to the urban water supply may occur:[42]

> The emperors Arcadius and Honorius to Flavianus the Prefect of the City (of Rome): Let no one think that he through deceit can claim water for himself from the (Aqua) Claudia, having broken and perforated the sides of the aqueduct. If someone acts contrary to this decree, let that person at once be fined to suffer the loss of the buildings and places [which have benefited from the water?]. Moreover, the administrative branch, in whose care the custody of this construction [i.e. the aqueduct] will belong, we force to suffer this punishment, that it will be fined as many pounds of gold, as it is established that our (Aqua) Claudia has been bereft of *unciae* through their collaboration.

Thus, it is public law and the urban environment which was of concern to the Commission which drew up the Theodosian Code, and their choice of material gives the impression that the same priorities were held by the emperors between the early 300s until the 430s, in the cases when they pronounced themselves on matters relating to water. But of course to draw this conclusion regarding the imperial enactments in the century or so before Theodosius II is an argument from silence; we depend on the choice made by the Commission. As for the times of Theodosius II, one should perhaps not discount the possibility that the already existing codes, the *Gregorianus* and the *Hermogenianus*, may have contained rescripts regarding water management that made a new collection of such material redundant (see further below). This question is difficult to address, as we know so little about the content of these two codes.[43]

The Theodosian Code soon began to circulate together with a short collection of new enactments by Theodosius II and his co-ruler in the western empire, Valentinian III, the so-called *Novellae Theodosii* and *Valentiniani*. Here one finds two new laws, one concerning alluvial land, and one regarding urban water supply in North Africa.[44]

The fact that public law is in the foreground is an observation that has been made for the whole *Codex Theodosianus*, that is the *Theodosianus* is more concerned with public law than the later Code of Justinian.[45] Yet one wonders how it came about that the emperors did not express themselves on questions of rural water during the period from the early 300s to the 430s, or rather, that no such enactments were thought relevant enough to be included in the Theodosian Code. We should remember that the emperor always functioned as the Supreme Court in the Roman world. It should always in theory, but certainly often enough in practice,

have been possible to approach him and ask for his verdict in a legal dispute. Many imperial enactments are imperial answers in such disputes, so-called rescripts.

However, the Commission of Theodosius had been given the task to collect imperial laws of general content, and this requirement had an impact on what was included. The emperor himself, and presumably the Roman public too, wanted to avoid special cases in the code, special cases which then would have had to be taken as generally valid, although originally it may have been a question of a personal favour granted by the emperor. It is, however, well known that this initial brief was sometimes difficult to follow for the imperial Commission.[46] What is 'general' and what is not? There are certainly some less than general imperial enactments included in the code, and for instance the imperial rescript of Honorius and Arcadius above has a relatively particularistic flavour to it, being concerned with the Aqua Claudia and the water administration of the city of Rome.[47]

One way of establishing *generalitas* was to look at the nature of imperial enactments: imperial letters, edicts or speeches were considered 'general,' but rescripts, that is answers to individual petitions, although having legal force, were normally not.[48] Yet I wonder if this requirement of general validity can explain why there is practically nothing about rural water use and distribution in the *Codex Theodosianus* as we know it. One must, however, not forget that a large part of Books 1–5 of the Theodosian Code is lost. Some of the content of these books is to be found in the *Codex Justinianus*, although texts which cannot be attributed to a specific chapter in the *CTh* were not included in Mommsen's standard edition.[49] It is in fact thought that all the material from the period 313–437 CE in the *Codex Justinianus* derives from the Theodosian Code,[50] and since some rescripts on rural water management in the *CJ* date to the period covered by the Theodosian Code, they ought originally to have been included in the latter.[51] A thorough study of all the relevant material in both codes may bring new insights. At the moment, I am somewhat puzzled by one-dimensional content of the surviving laws on water in the Theodosian Code, and I am not aware of any specific explanation for this feature.[52] Honoré points out that a major concern of the senators at the time of the approval of the Theodosian Code was the security of land ownership.[53] Surely access to water must have been of concern as well.

Roman Water Law under Justinian I (527–565 CE)

Matters are different in the *Digest*, which was compiled by a group of forty legal experts nominated by the emperor Justinian I about a century after the Theodosian Code. There are fifty books in the *Digest*, but only two and a half deal with public law, the rest is all about private law.[54] In the *Codex Justinianus*, there are twelve books in total, four of which deal with public law, while the majority, eight books, are devoted to private law. In the *Digest*, the topic of water use plays a considerable role in three of the fifty books (Books 8, 39, and 43), it has a certain presence in two others as well (Books 7 and 41), and appears in many individual cases too.[55] In Book 39 there is a section on the *actio aquae pluviae arcendae*, which was already mentioned; the paragraphs cover three-and-a-half pages of small print.

In Book 43, roughly the same amount of pages contain four rather brief sections, mostly about water use for agriculture in the countryside, called *De aqua cottidiana et aestiva*, *De rivis*, *De fonte* and *De cloacis*.[56] Here one finds passages like the following by the jurist Pomponius (mid second century CE), formulated with typical Roman legalistic punctiliousness: 'If I have the right to channel water during certain hours either day or night, I cannot channel it at any other time than the time during which I have the right' (*Dig.* 43.20.2).[57] Book 8 devotes a

total of twelve pages to servitudes (easements) on land. Many of the servitudes which the Romans acknowledged concern water, namely the right to draw water from a well (*servitus aquae haustus*), the right to conduct water over someone else's land (*servitus aquae ductus*) and the right to water animals on alien property (*servitus adpulsus pecoris*).[58] As stated above, the passages in the *Digest* are supposed to include only comments by jurists, but occasionally we also find imperial decisions here, as in the following cases:[59]

> Papirius Iustus, Imperial Rulings, Book 1: The emperors Antoninus and Verus Augustus [Marcus Aurelius and Lucius Verus, 161–169 CE] laid down in a rescript that for the purposes of irrigating fields, water from a public river ought to be allotted in proportion to the size of those fields, unless anyone could establish that he should be allowed more than his proportionate share because of some special right of his. They further laid down that a man is only permitted to channel water if this can be done without wrong to another.

> Paul, on Plautius' (legal writings), Book 15: As to this question, Atilicinus [a jurist] notes that Caesar [the emperor] issued a rescript in the following terms to Statilius Taurus: 'The men who were accustomed to channel water from the Sutrine estate [north of Rome] approached me and stated that they could no longer channel the water of which they had had the use for a number of years from a spring on the Sutrine estate, because the spring had dried up. They also brought it to my attention that, later on, water from the spring had begun to flow again. Their petition to me was that their right should be restored to them on the grounds that they had not lost it through any neglect or fault on their part, but because it had become impossible to obtain water. As their petition did not seem unjust to me, I held that they should be assisted. Accordingly, my decision is that the right which they had on the day when it first became impossible for them to obtain a supply of water should be restored to them.[60]

These are imperial enactments, of which the first is a rescript, a direct answer to the petitioners given by the emperor, while the second (earlier in date) constitutes more of a decision, but not a direct answer to the petitioners (even though the term *rescripsisse* is used). Every Roman citizen in theory had the right to approach the emperor if he/she was troubled by something, and it was expected of the emperor that he give his response to every petition that managed to reach him.[61] But there is nothing in the two passages above to indicate that the emperor pursued an active policy in regard to water management. We also know that the emperors were surrounded by advisors and councillors, and when they gave legal verdicts it stands to reason that they normally consulted with jurists.[62] These two points would tend to place less emphasis on the will of individual emperors when it came to the development of Roman legislation on water use, even though emperors are often seen as acting, and their powers were vast.

In the *Codex Justinianus*, there are considerably more imperial enactments regarding water than in the earlier Theodosian Code, as Jaillette and Reduzzi Merola have shown.[63] Of twenty six enactments in some way concerning water that these two scholars list, seven were already included in the Theodosian Code.[64] The added instances of legislation concern above all water use for agriculture, so that we now find twelve passages on water management in the countryside (servitudes, irrigation, use of alluvial land, etc.) and ten that concern the urban supply.[65] One short passage from the Justinian Code, dated to 294 CE, may illustrate the situation:[66]

> The Emperors Diocletian and Maximian to Valeria: It is not the size of the fields, but the right to draw water based on a servitude (easement), which determines (the amount of water).

One may compare this principle for dividing water to what the emperors Marcus Aurelius and Lucius Verus established in *Dig*. 8.3.17, cited above. There is no conflict, for in both cases the decisive factor is the special right enjoyed by some landowners, called *proprio iure* above, and here *servitus aquae ducendae*.

Several of the imperial rescripts on topics concerning water management that were added to the *Codex Justinianus* date from the third or early fourth century. It is thought likely that those from the third century derive from either the *Codex Gregorianus* or the *Hermogenianus*, the two earlier collections of imperial constitutions which contained material up to c. 295 CE.[67] Perhaps this could explain the absence of such clauses from the *Codex Theodosianus*.

Inconsistencies

Instead of further discussing individual enactments in the Theodosian or the Justinian Code, which the space will not allow, I will address a general feature of the two imperial codes, which make life somewhat more difficult, but also more interesting, for the modern scholar, namely inconsistencies. As has been discussed in some detail by Tony Honoré, one of the foremost scholars of Roman late-antique legislation, the commissions which were working on the codes (he refers especially to the *Codex Theodosianus*), were unable to avoid including conflicting material. Honoré writes: 'the code was compiled on the assumption that even inconsistent laws would be included, provided each was dated. The commissioners were not required to resolve conflicts between them and indeed were not allowed to make changes of substance in the laws they included.'[68] The same scholar goes on to add explanations for this phenomenon: 'The reasons for including inconsistent laws were [...] scholarly, political, and practical. Theodosius II had intellectual interests that were shared by [...] other members of the governing circle. The law of 429 [which established the Theodosian commission] says that though it would be simpler and fairer to eliminate laws that have been repealed, the present and earlier codes [the *Codex Gregorianus* and the *Codex Hermogenianus*] must be understood as designed for the more inquiring, whose interest in learning entitles them to know even about laws that were valid only in their own day and have now gone out of use.'[69]

This is a generally useful insight to keep in mind when reading the *Codex Theodosianus*, and the *Justinianus* as well, and it prompts me, in conclusion, to return to the text of Frontinus' *De aquaeductu urbis Romae*. His work is not a legal treatise, but he both cites and paraphrases a number of laws on water management. In discussing Frontinus' subject matter, the aqueducts of Rome, we are certainly right to look for the emperor's role, because Frontinus constantly stresses the emperor's importance: The emperor paid for the aqueducts (*aq*. 125) and at least for part of the workforce (*aq*. 118.4), he de facto nominated the *curator aquarum* (*aq*. 99.4, 100.1, 104.2) he assigned procurators to supervise the aqueducts (*aq*. 105.2), and so on. And from Augustus onwards, it was an imperial privilege to have the right to install a private conduit in order to draw water from the public supply, and the emperor determined everybody's portion of water (*aq*. 103.2, 105.1, 110.2). There are, however, some conflicting views on private water grants presented in Frontinus, and some open questions, as I have had occasion to note before.[70] Of the issues that trouble the inquisitive modern reader I will here present just one example:[71]

> The right to draw granted water passes neither to an heir, nor to a buyer, nor to any new proprietor of the property. In former times a special right was permitted to bathing establishments used by the populace, whereby water once granted should remain theirs forever. This we learn from old senatorial resolutions, one of which I have given below.

> Nowadays a grant of any water is renewed whenever the occupant changes (Frontin. *aq*. 107).

The question is how to interpret the last sentence. Is it really the case that by the time Frontinus wrote, c. 100 CE, the renewal of a water grant had become automatic? The present tense used by Frontinus seems to indicate this. Or does Frontinus want to make the point that now also owners of private baths, who happen to have a water grant, must renew it when the owner of the business changes? If there really is a conflict of content here (which would not be the only one in Frontinus' text), it seems to me that we may be dealing with a phenomenon similar to the one Honoré detected in the Theodosian Code, that is, the inclusion of contradictory material for the benefit of the curious intellectual. This observation has not been made before in regard to Frontinus' work, although it has been clear for some time that Frontinus was an author with literary ambitions, who was highly conscious and proud of the achievements of the civilisation of which he was part.[72]

If one takes Frontinus literally (the water grant 'is renewed,' in the indicative, not 'may be renewed,' in the potential mode), the situation described by Frontinus is surprising. For if indeed the permission to draw water is renewed whenever the occupant changes, it means that to possess a private water supply in Rome has become a feature of the real estate market from having been an imperial privilege: a person can acquire a private water supply by buying a property that draws water from the public network. Such a situation would be surprising, because at least in Rome one would have expected the emperor to exercise strict control, and certainly back in 100 CE, a mere century after Augustus, according to Frontinus, made the distribution of water rights an imperial privilege.

On the other hand, Robert Rodgers, in his 2005 translation of Frontinus' text (p. 530) places the last sentence in the passage above in parentheses, an interpunctuation which to be sure was unknown to the Romans. Yet perhaps this is the way to solve the problem, by indicating that we are dealing with an irrelevant aside comment, and/or a comment which is meant to indicate that (even) bathbuildings cannot enjoy a water grant in perpetuity.[73] There would perhaps be no point in devoting more time to this issue, were it not for the fact that some legal passages from the *Digest*, dating to about a century after Frontinus, seem to indicate that there was, at least by then, a strong expectation that water concessions once given out would be renewed:[74]

> But a grant may plainly be obtained by the request of him to whom the ownership passes. For if he can show that the water is due to his land, then although it flows under the name of the person from whom ownership has passed to him, he undoubtedly obtains the right of drawing off water. And this is no favour, but if someone should happen not to obtain it, it is an injury.

This passage in the *Digest* (and others that concern similar issues) has caused much discussion, and Frontinus is often invoked in the debate.[75] I cannot go into further detail here and can only hope to have showed that we are dealing with sources that are worth a closer look, because they seem to indicate a change in the way water was managed in Rome during the imperial period. If indeed we are seeing a reduction in the discretionary power of the emperor here, one must conclude that even in Rome his power had become somewhat restricted by the network of loyalties to various members of the upper classes. One the other hand, perhaps in Rome more than anywhere else the elite, which surrounded the emperor, would have made its influence felt. It would have been very much in the interest of everyone, who had the emperor's ear and managed to acquire a private water supply, to have guarantees that this right remained in perpetuity, in order for the resale value of their property to remain high.

Conclusion

Returning to the general theme of imperial power and water legislation, it is important to remember that while the individual emperor had the power to decide about everything, he was also the '*primus inter pares*.' He was the foremost in a group of extremely wealthy senators, and the leader among a group of very knowledgeable lawyers, there were some influential equestrians as well, and he could not afford to neglect the views and pressures that emanated from these circles; he did not act in isolation.[76] Not if he wanted to go down in history as a 'good emperor,' which was what many emperors strived for, that much is clear. In addition, the emperor, all-powerful though he eventually became, did not make decisions in every instance. Local authorities and government officials had the power to make decisions as well, as has been shown above.

On the other hand, the Roman state recognised the right of every citizen to appeal to the emperor. In many cases this right was exercised (there are sources indicating that an emperor, Septimius Severus, answered, in writing, between four and five petitions per day).[77] These imperial rescripts then became legal precedents and contributed to developing Roman law. It is important to keep the role of the emperor in mind, as a kind of heuristic principle, when discussing Roman water legislation, and there are to be sure many riddles left to solve. The seeming neglect of rural water management in the *Codex Theodosianus*, outlined above, seems to me to be one of them. We have here, as in the case of the other late-antique collections of laws, to rely on a commission of lawyers, hoping that they made representative and exhaustive choices in every case. Their choices were obviously dictated by what they considered relevant.[78] While these choices may therefore tell us something about their own time, there is a clear risk that to a corresponding degree earlier practices are being obfuscated, thereby increasing the challenges for modern historians.

Notes

* Abbreviations of juridical sources: *CJ* = *Codex Justinianus*, see Krueger, 1877; *CTh* = *Codex Theodosianus*, see Mommsen and Meyer, 1905, with an English translation by Pharr, 1952; *Dig.* = *Justinian's Digest*, see Mommsen, 1870, with Watson, 1985, for an English translation. For Gaius, *Inst.* see Gordon and Robinson, 1988 (Latin text and translation). The abbreviation Frontin. *aq.* stands for Sextus Julius Frontinus, *De aquaeductu urbis Romae* ('On the water supply of the city of Rome'), for which see below n. 5.

[1] See Harris, 2004 (I have used a reprint from 2009, in which the pagination hopefully agrees with the 2004 Arrow release).

[2] There is the new and important study of the Campanian aqueduct by Ohlig, 2001, to be consulted with the extensive comments by Wilson, 2006, while Catalano, 2003, pp. 83–139 adds important information.

[3] Harris, 2004, p. 9, 'the matrix, as they called it, the motherline.' The term is used in *CTh* 15.2.5 = *CJ* 11.43.3.

[4] Harris, 2004, pp. 26, 41, 138, 247, and so on.

[5] For the most recent critical edition of Frontinus' *De aquaeductu urbis Romae* ('On the water supply of the city of Rome'), with commentary in English, see Rodgers, 2004. For a new English translation, see Rodgers, 2005; a somewhat earlier one in Evans, 1994, pp. 13–52. The translation in the Loeb Classical Library is from the 1920s and is of inferior accuracy.

[6] Frontin. *aq*. 103.2, 105.1, 110.2, 111, etc.

[7] The translation is of lines 37–43 of the inscription *CIL* X 4842 = *ILS* 5743. For the whole text, see also Bianco, 2007, pp. 143–4, 147; the edict was last discussed in detail by Pantoni, 1960–61, who presented another copy of it.

[8] See, for instance, Palma, 1987 (who does not seem to pay sufficient attention to the historical context of the sources he discusses); Geissler, 1998, p. 66 and *passim*; it remains unclear if the treatment concerns only Rome and Constantinople or the Roman world at large; similarly Bianco, 2007, somewhat indiscriminately moves back and forth between Rome and the rest of the empire. Biundo, 2008, p. 170, points to somewhat ambiguous sources concerning whether towns can charge users for private water permits without the emperor's permission.

[9] *Constant autem iura populi Romani ex legibus, plebiscitis, senatus consultis, constitutionibus principum, edictis eorum, qui ius edicendi habent, responsis prudentium*; translation by Gordon and Robinson, 1988, pp. 19–21.

[10] See Bruun, 2000, p. 543, for this and other clauses on water in Hammurabi's Code. The translation is from Driver and Miles, 1955, pp. 30–31; a translation is also found in Pritchard, 1955, 168 (translation by T. J. Meek).

[11] See Bruun, 2000, pp. 541–9. I find it somewhat remarkable that in Westbrook (ed.), 2003, as far as I can find, no more than four instances of legislation relating to water are

included, all of quite trivial nature: p. 394 (the Old Babylonian period), pp. 545–6 (the Middle Assyrian period), p. 650 (the Hittites), p. 676 (Emar). There would obviously have been much more to write about.

[12] On water legislation in the Greek world, see Bruun, 2000, pp. 559–73; for law codes in Athens, MacDowell, 1986, pp. 41–52.

[13] The *lex Quinctia* is cited in Frontin. *aq*. 129; recently translated in Evans, 1994; Rodgers, 2004.

[14] See Frontin. *aq*. 100, 104, 106, 108, 125, 127.

[15] See, for instance, on water in the Praetor's edict (which was a collection of general legal interpretations), Rodger, 1989.

[16] Frontin. *aq*. 94–5.

[17] Crawford (ed.), 1996, pp. 5–6, on city statues approved by the Roman assembly (called a *lex rogata*), or contained in an edict by a magistrate (a *lex data*).

[18] This is § 100 of the *lex* of Urso; translation in Crawford (ed.), 1996, pp. 427–8, the Latin text is on p. 408.

[19] See, for instance, Richardson, 1983 (merely influence from Roman legal thought); Beltrán Lloris, 2006 (mention of Roman officials).

[20] See Honoré, 1994, pp. 1–32, for the development of the emperor's role in the legislative context, and in particular pp. 12–14 for the various kinds of imperial enactments (*constitutiones*), such as edicts, judgment in court (*decreta*), letters (epistulae), rulings out of court (*interlocutio de plano*), and, most commonly, answers to petitions, called rescripts (also *subscriptio* is used) (Gaius, *Inst*. 1.5; *Dig*. 1.4.1). On the rescripts, see also Harries, 1999, pp. 26–31.

[21] The standard work is Sitzia, 1977; he wrote in part in opposition to the ideas in Sargenti, 1940. A more recent monograph is Sitzia, 1999. For shorter contributions in English see Rodger, 1970; 1988.

[22] The earliest enactment by Constantine which was included is from 313 CE; see Barnes 2001, p. 684.

[23] Brief summary in Honoré, 1978, p. 139, with reference to *CTh* 1.1.5 of March 26, 429; more in Honoré, 1998, pp. 123–6. The intention was to produce an error free code that could serve as a general guide.

[24] Barnes, 2001, pp. 684–5, on the *Codex Theodosianus*' coming into power; Matthews, 2000, p. vii, 83, for the number of texts. For recent work on the Code, see, among others, Harries and Wood (eds.) 1993; Honoré, 1994; Matthews, 2000; Barnes, 2001; Sirks, 2009 [non vidi].

[25] Honoré, 1978, p. viii for a time line, p. 140 for the account. The *Constitutio Deo Auctore*, which created the commission under Tribonian that accomplished the task, is dated to December 15, 530; it is published in the introduction to the Digest.

[26] On the *Codex Justinianus*, see Honoré, 1978, pp. 37–8; and pp. 16-19 in general on Justinian's activity; also Robinson, 1997, pp. 20–21, 56–60.

[27] See Robinson, 1997, pp. 57–60.

[28] See Mommsen, 1887–8; the work has also appeared in French, but no English translation exists.

[29] For a reading of Frontinus in this regard see, for instance, Bruun, 1991, *passim*; Brunt, 1983, p. 74; Eck, 1995, pp. 167–74 (orig. 1982).

[30] On Roman private law, see the monumental Kaser, 1971–5; brief glimpses in Robinson, 1997.

[31] Frontin. *aq*. 65–73 gives figures for the distribution of Rome's aqueducts outside and inside the city, with a summary in *aq*. 78, indicating that some 29% of the water was distributed in the countryside (including some to certain municipalities). Wilson, 1999, shows that not only in Rome but also elsewhere was it often the case that aqueducts supplying towns delivered part of their water along their course, water which could be used for irrigation (although the quantities will never have been particularly large); cf. Thomas and Wilson, 1994, in particular pp. 146–50 ('Rural conduit and aqueduct systems'). In studies of Roman water management in the countryside the emphasis is often on drainage, not aqueducts, see Quilici Gigli (ed.), 1997; in particular Leveau, 1997. On irrigation, see also note 19 above.

[32] Cf. how Honoré, 1998, p. 128, characterises the situation in which the Theodosian Code originated: 'a particular anxiety was security of title to land.'

[33] There is also the question of the extent to which large scale irrigation was needed; Leveau, 1997, pp. 307, 309, makes the point that many crops did not need to be supplied with massive quantities of water.

[34] The result of a keyword search of the Theodosian Code is presented in Jaillette and Reduzzi Merola, 2008. The words searched for were *adluvio*, *aquaeductus*, *castellum*, *fistula*, *flumen*, *fons*, *forma*, *irrigatio* and *matrix* (p. 231), which resulted in eight of the nine instances from *CTh* 15.2 and the two other passages just mentioned. Obviously, a computer search of the *CTh* cannot represent but a very preliminary stage in evaluating the content of this body of legal texts.

[35] Matthews, 2000, p. 69, briefly on what may have caused this enactment to be included.

[36] There are, for instance, *CTh* 6.4.29, 15.1.32, 36, and 52, in which aqueducts and baths are mentioned, albeit in a relatively subordinated role. I do not claim to have worked through all of the Theodosian Code for this article.

[37] The emperors who are the authors of the passages in *CTh* 15.2 are Constantine I (330 CE); Valentinianus I, Valens and Gratianus (369); Gratianus, Valentinianus II, and Theodosius

I (382?); Valentinianus II, Theodosius I, and Arcadius (twice in 389); and Acadius and Honorius (four times, 395, 397, 399, 400).

[38] Translated by Lewis and Reinhold, 1966, pp. 479–80. This enactment was also included in the *Codex Justinianus*, as 11.43.1, with one change worth mentioning: 'your office,' *tuo officio*, was changed to *officio iudicis*, 'the office of the government official.' This indicates that the charge of *consularis aquarum* was no longer current.

[39] Frontin. *aq*. 119–24. These passages bring out the difficulties facing a repair and cleaning crew. Among other things, it would be a major operation to divert an aqueduct so that cleaning could take place, and this needed to be done at the same time along the whole length of the aqueduct, which would have required major cooperation and coordination among the landowners.

[40] A pattern familiar from the modern 'downsizing' of public administration. Employees made redundant are rehired as outside contractors.

[41] Campbell, 2000, p. 257: 'Aqueducts follow a course through the middle of properties, and after a period of time they are cleaned by the landholders themselves; for this purpose they pay a small levy.' Latin text on p. 256 (*Ex libris Magonis et Vegoiae auctorum*), with a comment on the date by Campbell, 2000, p. 445.

[42] *CTh* 15.2.9, from 400 CE: *Ne quis Claudiam interruptis formae lateribus adque perfossis sibi fraude elicita existimet vindicandam. Si quis contra fecerit, earum protinus aedium et locorum amissione multetur. Officium praeterea, cuius ad sollicitudinem operis huius custodia pertinebit, hac poena constringimus, ut tot librarum auri inlatione multetur, quot uncias Claudiae nostrae coniventia eius usurpatas fuisse constiterit*. The translation in Pharr, 1952, p. 431, has been modified according to my understanding of the working of the *cura aquarum*.

[43] On the *Gregorianus* and the *Hermogenianus*, see Robinson, 1997, p. 61: 'they have to be reconstructed from post-classical juristic writings and from the Germanic codes in which the enactments they contained were included.' Robinson, p.61, continues her account, but there is much disagreement in regard to the character and content of the two codes; see, e.g., Wenger, 1953, pp. 642–3; Honoré, 1994, pp. 48–50, 53–4; Sperandio, 2005. The question is too large to deal with here in any detail.

[44] See *NovTh* 20 (= *CJ* 7.43.1) on the status of alluvial land, and *NovV* 13.9 on the public water of the city of Constantine in North Africa, which must not be used by private parties.

[45] Robinson, 1997, p. 116, on the distribution of material in these works.

[46] Honoré, 1998, pp. 128–9; Matthews, 2000, pp. 65–70 more in detail.

[47] Cf. Matthews, 2000, p. 69, in regard to an imperial prohibition to wear Oriental or Germanic trousers in the city of Rome (*CTh* 14.10.2): 'it derives its general nature from the categorical nature of the ban and from its proclamation to the people;' cf. p. 70: the requirement of *generalitas* can be present also in 'enactments on specific subjects, large or small, *to be obeyed in all relevant circumstances*.' Even so, uncertainties will not always have been removed.

[48] Matthews, 2000, p. 66.

[49] Matthews, 2000, pp. 85–91; Barnes 2001, pp. 676–8.

[50] Matthews, 2000, p. 90; Barnes, 2001, p. 676 (a view deriving from Mommsen).

[51] *CJ* 11.63.1 (319 CE); 11.66(65).5 (383 CE). There are also *CJ* 7.41.2 (403 CE) and 9.38.1 = 9.32.1 (409 CE), which concern the Nile.

[52] There is nothing on this in Jaillette and Reduzzi Merola, 2008. The brief discussion in Laquerrière-Lacroix, 2009, p. 255, merely states (without attempting an explanation) that there is an emphasis on public law in the Theodosian Code in regard to *viae*, *itinera* and *aquae*, reflecting the legislative practice after Diocletian.

[53] Honoré, 1998, p. 128.

[54] Robinson, 1997, p. 116.

[55] A useful but selective inventory of legislation on water in the *Codex Justinianus* and the *Digest*, with a translation (not always accurate) of every included passage but without the original Latin text, is presented by Ware, 1905. The inventory is however far from complete, and, for instance, the following passages on water supply should be added from the *Digest*: 18.1.78 pr, 19.1.17.8, 19.1.38.2, 30.41.10, 50.4.18.6.

[56] 'About water derived daily and only during the summer,' 'About streams,' 'About wells,' and 'About drains.'

[57] Pomponius (Book 30 on Sabinus): *Si diurnarum aut nocturnarum horarum aquae ductus habeo, non possum alia hora ducere, quam qua ius habeam ducendi*.

[58] A late-antique list of servitudes is found in Justinian, *Institutiones* 2.3.

[59] Translation by Watson, 1985, of *Dig*. 8.3.17: Papirius Iustus libro primo de constitutionibus. *Imperatores Antoninus et Verus Augusti rescripserunt aquam de flumine publico pro modo possessionum ad irrigandos agros dividi oportere, nisi proprio iure quis plus sibi datum ostenderit. Item rescripserunt aquam ita demum permitti duci, si sine iniuria alterius id fiat*.

[60] Translation by Watson, 1985, of *Dig*. 8.3.35: *Paulus libro quinto decimo ad Plautium: Et Atilicinus ait Caesarem Statilio Tauro rescripsisse in haec verba: 'Hi, qui ex fundo Sutrino aquam ducere soliti sint, adierunt me proposueruntque aquam, qua per aliquot annos usi sunt ex fonte, qui est in fundo Sutrino, ducere non potuisse, quod fons exaruisset, et postea ex eo fonte aquam fluere coepisse: petieruntque a me, ut quod ius non neglegentia aut culpa sua amiserant, sed quia ducere non poterant, his restitueretur. Quorum mihi postulatio cum non iniqua visa sit, succurrendum his putavi. Itaque quod ius habuerunt tunc, cum primum ea aqua pervenire ad eos non potuit, is eis restitui placet*. This passage is commented upon by, among others, Millar, 1992, pp. 465–6 (who suggests that the emperor, Caesar, may well be Augustus); Honoré, 1994, p. 6 (who argues that the emperor is likely Nero or someone from the Flavian dynasty, 69–96 CE). In my view, the locality is situated near Rome, which requires a somewhat different interpretation from the one given by Honoré.

[61] This 'model' of how the Roman empire worked is magisterially presented in Millar, 1992.

[62] There is much recent work on the emperors' councillors, but Crook, 1955, is still useful as a general introduction. For emperors regularly consulting with jurists see now Honoré, 1994, pp. 1–32 (general development); pp. 17–19 for a particularly illuminating case under Marcus Aurelius.

[63] Jaillette and Reduzzi Merola, 2008, pp. 238–41. I am basing the next paragraph on their inventory.

[64] There are the six following *CTh* 7.1.13 = *CJ* 12.35(36).12 (partial); *CTh* 9.32.1 = *CJ* 9.38.1; *CTh* 15.2.1 = *CJ* 11.43.1; *CTh* 15.2.4 = *CJ* 11.43.2: *CTh* 15.2.5 = *CJ* 11.43.3 (longer version); *CTh* 15.2.6 = *CJ* 11.43.3 (partial). In addition, one passage was taken from the *Novellae Theodosiani*, a collection of enactments of Theodosius II himself: *NovTh* 20 = *CJ* 7.41.3 (partial). Furthermore, as seen above in note 51, texts in the *CJ* from the period 313–437 CE can also be assumed to have stood in the *CTh*.

[65]The following passages (in chronological order) refer to water use and management in the countryside: *CJ* 3.34.2, 3.34.3, 3.34.4, 3.35.2, 7.41.1, 3.34.6, 3.34.7, 3.34.10, 3.34.12 (see below), 11.63.1, 11.66(65).5, 7.41.3. The following passages concern aqueducts that supplied cities, or otherwise refer to issues that concern urban water supply: *CJ* 11.43.1, 11.43.2, 11.43.3, 11.43.4, 11.43.5, 11.43.6, 11.43.9, 11.43.10, 11.43.11, 1.4.26.

[66] *Non modus praediorum, sed servitus aquae ducendae terminum facit*; see *CJ* 3.34.12. Translated by Ware, 1905, p. 94, as 'It is not acreage, but the use to which the water is put, that measures the right to the water,' which is not quite correct.

[67] Barnes, 2001, p. 676 (based on Mommsen).

[68] Honoré, 1998, p. 141.

[69] Honoré, 1998, pp. 146–7.

[70] Most recently in Bruun, 2007, a review of Peachin, 2004.

[72] *Ius impetratae aquae neque heredem neque emptorem neque ullum novum dominum praediorum sequitur. Balneis quae publice lavarent privilegium antiquitus concedebatur ut semel data aqua perpetuo maneret, sic ex veteribus senatus consultis cognoscimus, ex quibus unum subieci. Nunc omnis aquae cum possessore instauratur beneficium* (Frontin. *aq*. 107). Translation by Rodgers, 2005, p. 530.

[72] On Frontinus' literary ambitions, see DeLaine, 1996, pp. 121–3, 128, 135–6; Saastamoinen, 2003, pp. 35–6; Rodgers, 2004, pp. 27–29 (while in general not much impressed).

[73] The view of Rodgers, 2004, pp. 290–2, is that Frontinus wishes to stress that the change which has occurred is that (not even) the public baths any longer have their water rights renewed automatically.

[74] Translation by Watson, 1985, of *Dig*. 43.20.1.43 (Ulpian): *Plane ei, ad quem dominium transit, impetrabile est; nam si docuerit praediis suis aquam debitam, et si nomine eius fluxisse, a quo dominium ad se transiit, indubitate impetrat ius aquae ducendae, nec est hoc beneficium, sed iniuria, si quis forte non impetraverit*.

[75] Among more recent works see, for instance, Palma, 1987, pp. 448–52; Del Chicca, 2005, p. 30; Bianco, 2007, pp. 128–9.

[76] This point has been much stressed by Honoré, 1994, pp. 1–32.

[77] Honoré, 1994, p. 45.

[78] Stressed by Honoré, 1978, p. 140 (based on the constitution *Deo Auctore* 10): 'Obsolete laws are to be rejected and only those accepted in court practice or by the custom of Constantinople included.'

Reference List

Barnes, T. D. (2001) Foregrounding the Theodosian Code. *Journal of Roman Archaeology* 14: 671–85.

Beltrán Lloris, F. (2006) An irrigation decree from Roman Spain: *the lex rivi Hiberiensis. Journal of Roman Studies* 96: 147–97.

Bianco, A. D. (2007) *Aqua ducta, aqua distributa. La gestione delle risorse idriche in età romana*. Torino: Silvio Zamorani editore.

Biundo, R. (2008) La gestion publique de l'eau: finances municipales et centre du pouvoir à l'epoque impériale. In Hermon, E. (ed.) V*ers une gestion intégrée de l'eau dans l'empire romain*. Rome: 'L'Erma' di Bretschneider, pp. 163–74.

Brunt, P. A. (1983) Princeps and equites. *Journal of Roman Studies* 73: 42–75.

Bruun, C. (1991) *The Water Supply of Ancient Rome. A Study of Roman Imperial Administration*. Helsinki: Societas Scientiarum Fennica.

- - - . (2000) Water Legislation in the Ancient World (c. 2200 BC–AD 500). In Wikander, Ö. (ed.) *Handbook of Ancient Water Technology* (Technology and Change in History 2). Leiden: Brill, pp. 539–604.

- - - . (2007) Why did Frontinus write the *De Aquaeductu? Journal of Roman Archaeology* 20: 460–6.

Campbell, B. (2000) *The Writings of the Roman Land Surveyors. Introduction, Text, Translation and Commentary* (Journal of Roman Studies Monograph 9). London: Society for the Promotion of Roman Studies.

Catalano, R. (2003) *Acque e acquedotti romani. 'Fontis Augustei Aquaeductus'.* Naples: Arte Tipografica Editrice.

Crawford, M. (ed.) (1996) *Roman Statutes* I–II. London: Institute of Classical Studies, University of London.

Crook, J. (1955) *Consilium Principis*. Cambridge: University Press.

DeLaine, J. (1996) *De aquis suis?* The *commentarius* of Frontinus. In Nicolet, C. (ed.) *Les littératures techniques dans l'antiquité romaine: statut, publique et destination, tradition* (Entretiens Fondation Hardt 42). Genève: Fondation Hardt. pp. 117–45.

Del Chicca, F. (2005) Il regime delle concessioni di *aqua publica* ai privati nella testimonianza di Frontino. In Riera, I. (ed.) *In binos actus lumina* (Proceedings from the conference 'L'idraulica degli Antichi fra passato e futuro,' Narni 2001). Agorà edizioni = *Rivista di studi e ricerche sull'idraulica storica e la storia della tecnica* 2: 28–33.

Driver, G. R. and Miles, J. C. (1955) *The Babylonian Laws* II. Oxford: Clarendon Press.

Eck, W. (1995) *Die Verwaltung des Römischen Kaiserreiches in der Hohen Kaiserzeit. Ausgewählte und erweiterte Beiträge* I. Basle: Friedrich Reinhardt Verlag.

Evans, H. B. (1994) *Water Distribution in Ancient Rome. The Evidence of Frontinus*. Ann Arbor: The University of Michigan Press.

Geissler, K. (1998) *Die öffentliche Wasserversorgung im römischen Recht (Freiburger Rechtsgeschichtliche Abhandlungen* N.F. 29). Berlin: Duncker & Humblot.

Gordon, W. M. and Robinson, O. F. (1988) *The Institutes of Gaius*. London: Duckworth.

Harries, J. (1999) Law and Empire in Late Antiquity. Cambridge: University Press.

Harries, J. and Wood, I. (eds.) (1993) *The Theodosian Code*. Ithaca, NY: Cornell University Press.

Harris, R. (2004) *Pompeii*. London: Arrow Books (first published 2003).

Honoré, T. (1978) *Tribonian*. London: Duckworth.

- - - . (1994) *Emperors and Lawyers. With a Palingenesia of Third-Century Imperial Rescripts* 193–305 AD. Oxford: Clarendon Press (Second revised edition).

- - - . (1998) *Law in the Crisis of the Empire 379–455 AD. The Theodosian Dynasty and its Quaestors. With a Palingenesia of Laws of the Dynasty*. Oxford: Clarendon Press.

Jaillette, P. and Reduzzi Merola, F. (2008) L'eau à usage agricole dans la législation romaine à l'époque tardive: du Code Theodosien au Code Justinien. In Hermon, E. (ed.) *Vers une gestion intégrée de l'eau dans l'empire romain*. Rome: 'L'Erma' di Bretschneider, pp. 229–41.

Kaser, M. (1971–75) *Das römische Privatrecht* I–II2 (Handbuch der Altertumswissenschaft X.3.3.1–2). Munich: C. H. Beck.

Krueger, P. (1877) *Codex Iustinianus* (*Corpus Iuris* Civilis vol. II). Berlin: Weidmann (later reprints).

Laquerrière-Lacroix, A. (2009) La vicinitas à l'épreuve du droit: la mutation des *iura vicinitatis dans* l'Antiquité tardive. In Aubert, J-J. and Blanchard, P. (eds.) *Droit, religion et société dans le Code Théodosien*. Genève: Univ. de Neuchatel – Librairie Droz, pp. 247–57.

Leveau, P. (1997) Irrigazione, drenaggio e economia demaniale romana nelle pianure del basso Rodano: l'apporto delle ricerche geoarcheologiche nella valle dei Baux. In Quilici Gigli, S. (ed.) (1997) *Uomo acqua e paesaggio*. Rome: 'L'Erma' di Bretschneider, pp. 301–10.

Lewis, N. and Reinhold, M. (1966) *Roman Civilization Sourcebook II: The Empire*. New York: Harper & Row (originally published 1955).

MacDowell, D. M. (1986) *The Law in Classical Athens.* Ithaca, NY: Cornell University Press (first published 1978).

Matthews, J. (2000) *Laying Down the Law: a Study of the Theodosian Law*. New Haven: Yale University Press.

Millar, F. G. B. (1992) *The Emperor in the Roman World* (31 BC–AD 337). London: Duckworth (reprint of the 1979 edition with a postscript).

Mommsen, T. (1870) *Digesta Iustiniani Augusti*. In Krueger, P. and Mommsen, T. (eds.) *Corpus Iuris Civilis* vol. I. Berlin: Weidmann (later reprints).

- - - . (1887–88) *Römisches Staatsrecht* I–III. Leipzig.

Mommsen, T. and Meyer, P. M. (1905) *Theodosiani libri XVI cum constitutionibus Sirmondianis et leges novellae ad Theodosianum pertinentes*. Berlin: Weidmann (later reprints).

Ohlig, C. (2001) *De aquis Pompeiorum. Das Castellum Aquae in Pompeji: Herkunft, Zuleitung und Verteilung des Wassers*. Nijmegen: Books on Demand GmbH, Norderstedt.

Palma. A. (1987) Le derivazioni di acqua *ex castello. Index* 15: 439–57.

Pantoni, A. (1960–61) L'editto augusteo sull'acquedotto di Venafro e una sua replica alle fonti del Volturno. *Rendiconti della Pontificia Accademia d'Archeologia* 33: 155–71.

Peachin, M. (2004) *Frontinus and the Curae of the Curator Aquarum*. Stuttgart: Steiner.

Pharr, C. (translator) (1952) *The Theodosian Code and Novels and the Sirmondian Constitutions*. Princeton, NJ: Princeton University Press (reprint New York: Greenwood Press 1969).

Pritchard, J. B. (1955) *Ancient Near Eastern Texts Relating to the Old Testament* (second edition). Princeton, NJ: Princeton University Press.

Quilici Gigli, S. (ed.) (1997) *Uomo acqua e paesaggio*. Rome: 'L'Erma' di Bretschneider.

Richardson, J. (1983) The *tabula Contrebiensis*: Roman law in Spain in the early first century B.C. *Journal of Roman Studies* 73: 33–41.

Robinson, O. F. (1997). *The Sources of Roman Law: Problems and Methods for Ancient Historians*. London and New York: Routledge.

Rodger, A. (1970) Roman rain-water. *Revue d'Histoire du Droit* 38: 413–31.

- - - . (1988) The palingenesia of Paul's commentary on the a*ctio aquae pluviae arcendae*. *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (Romanistische Abteilung)* 105: 726–28.

- - - . (1989) The Position of *aquae ductus* in the Praetor's Edict. In Birks, P. (ed.) New *Perspectives in the Roman Law of Property. Essays for Barry Nicholas*. Oxford: Clarendon Press. pp. 177–84.

Rodgers, R. H. (2004) *Frontinus, De Aquaeductu Urbis Romae*. Cambridge: University Press.

- - - . (2005) Translation of Sextus Iulius Frontinus, *De aquaeductu urbis Romae. Journal of Roman Archaeology* 18: 514–34.

Saastamoinen, A. (2003) The Literary Character of Frontinus' *De aquaeductu*. In C. Bruun, C. and Saastamoinen, A. (eds.) *Technology, Ideology, Water: From Frontinus to the Renaissance and Beyond* (Acta IRF 31). Rome: Institutum Romanum Finlandiae, pp. 15–39.

Sargenti, M. (1940) *L'actio aquae pluviae arcendae. Contributo alla dottrina della responsabilità per danno nel diritto romano*. Milano: Dott. A. Giuffrè editore.

Sirks, A. J .B. (2009) *The Theodosian Code. A Study*. Books on Demand GmbH.

Sitzia, F. (1977) *Ricerche in tema di 'actio aquae pluviae arcendae' dalle XII Tavole all'epoca classica*. Milano: Dott. A. Giuffrè editore.

- - - . (1999) *Aqua pluvia e natura agri. Dalle XII Tavole al pensiero di Labeone*. Cagliari: Istituto italiano per la storia della legislazione.

Sperandio, M.U. (2005) *Codex Gregorianus origini e vicende*. Napoli: Jovene Editore.

Thomas, R. and Wilson, A. (1994) Water supply for Roman farms in Latium and Southern Etruria. *Papers of the British School at Rome* 62: 139–96.

Ware, E. F. (1905) *Roman Water Law Translated from the Pandects of Justinian*. St. Paul, Minn: West Publishing Co. (reproduced 1985, Littleton, Col: Fred B. Rothman & Co.).

Watson, A. (1985) *The Digest of Justinian* I–IV. Philadelphia: Univ. of Pennsylvania Press.

Wenger, L. (1953) *Die Quellen des römischen Rechts.* Wien: A. Holzhausens Nfg.

Westbrook, R. (ed.) (2003), *A History of Ancient Near Eastern Law* I–II (Handbook of Oriental Studies – Handbuch der Orientalistik 72.1–2). Leiden and Boston: Brill.

Wilson, A. I. (1999) Deliveries *extra urbem*: aqueducts and the countryside. *Journal of Roman Archaeology* 12: 314–31.

- - - . (2006) Water for the Pompeians (= review of Ohlig, 2001). *Journal of Roman Archaeology* 19: 501–8.

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