Logic, Argumentation & Reasoning 23

Shahid Rahman
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New Developments in Legal Reasoning and Logic

From Ancient Law to Modern Legal Systems

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Logic, Argumentation & Reasoning

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Preface

The use of logical tools for establishing legal certainty has a long and important history, both in the development of legal theory and in shaping inferential and epistemological analyses of legal reasoning. Current historical studies of interactions between logic and legal reasoning often highlight the development of Roman legal scholars' logical schemes and principles, and Leibniz's thorough analyses of legal concepts. Roman jurists made use of logical instruments as process formulae built upon logical connectives, and, in particular, upon different forms of implication. Leibniz, on the other hand, analysed legal concepts as presumptions, conditional rights, and deontic modalities; and his analyses continue to play a major role in theoretical understanding and legal practice to this day, in both the continental frame of Civil Law and the American and British frame of Common Law.

Parallel to these developments, however, and often neglected in modern studies, were the Islamic and Judaic traditions of jurisprudence. Developed throughout the vast East-West span of territory cradling Islamic and Judaic thought, these traditions provided analyses and frameworks for legal reasoning and argumentation that often transcended or significantly preceded those originating in contemporaneous European legal thought. Moreover, they prefigured contemporary perspectives of both Civil and Common Law. With respect to Civil Law, they prefigured an emphasis on hermeneutical, inferential, and dialectical tasks for identifying the norms governing legal reasoning, instrumental to which is pondering the legal relevance of particular cases as instantiating these general norms. And with respect to Common Law, they prefigured an emphasis on deciding the legal status of particular cases, instrumental to which is identifying the legal norm that establishes the bridge to a precedent case.

This context shapes the present volume's main objective; namely, to bring together systematic and historical studies, from different fields, which treat the relational developments between logic, law, and legal reasoning. More precisely, the project is animated by the idea that the study of legal reasoning demands a high level of interdisciplinarity, calling not only for an integration of computer science's recent, breathtaking, technical developments into philosophical studies, but for research wherein historical, logical and philosophical approaches include

the insights of various non-European jurisprudential traditions too often neglected in contemporary work on the interface of deontic logic, argumentation theory, and law.

This project originated in the workshop *Logic, Law, and Legal Reasoning*, which took place as part of the *6th World Congress and School on Universal Logic (Unilog 2018)*, organized in Vichy, France. The workshop gathered logicians and legal theorists from such different fields as philosophy, computer science, law, mathematics, linguistics, and Arabic and Islamic studies, launching a rich, multi-disciplinary discussion on various topics related to the present volume's subject. This volume includes not only some of those workshop participants, but other researchers who are among the finest experts in their fields.

Scholars with similar interests here meet and share the particular insights inherited from their own academic, disciplinary traditions, thus shaping the three-part structure of our volume. Part I, *Historic Roots*, includes five articles on aspects of the Roman, Islamic, and Jewish traditions of legal reasoning. Part II, *Contemporary Law*, includes six articles which study the establishment of legal certainty in the contemporary contexts of International Law and the Civil and Common Law traditions. Part III, *Deontic Logic, Legal Reasoning, Normativity* includes six articles which apply formal notions from deontic logic to legal reasoning in order to provide terminological analyses, or to solve problems that occur within the logic of norms.

Part I, *Historic Roots*, opens with Geoffrey Samuel's *What is it to have Knowledge of Roman Legal Methods and Reasoning?*. Providing an account of certain aspects of Roman legal reasoning, the author highlights its casuistic nature and the emergence of legal positions from factual examples and practical problems, continuing on to show how the concepts and categories of Roman legal methods are still with us today. The following article is closely connected; Markus Winker's *The Use of Logic for Creating Fact Patterns in Roman Legal Writings* studies how logical, mathematical, and abstract thinking play a predominant role in establishing the facts underlying the combination of simple and complex legal cases, by considering a particular passage (Jul.D.35,2,87) in the *Digest* attributed to Julian. Shifting to the Islamic tradition, Mohammad Ardeshir and Fatemeh Nabavi's *A Logical Framework for The Islamic Law* provides an action-based deontic logical system, including a new aspect—stemming from the Islamic legal system—for the notion of obligation. Describing a method of reasoning found in the Ithnā ʿAsharī (Twelver) Shīī school of Islamic law, the authors continue on to prove the soundness and completeness of the new deontic system they call **IDDL**. Next, Walter Edward Young's *The Formal Evolution of Islamic Juridical Dialectic* provides a glimpse of Islamic juristic dialectic at three developmental stages, with a series of vignettes portraying dialectical argument in action. Along the way, the author identifies key features, asserts a critically formative role for the core objections of "intra-doctrinal inconsistency" and "counter-indication," and underscores dialectical disputation's powerful dynamic in shaping Islamic legal and dialectical theory. The fifth and final article of Part I is Joseph E. David's *Independent Reasoning in the Law–the Jewish Tradition*, which discusses the emergence of legal reasoning within Jewish Law as

a form of reasoning independent of other modes (such as logical and hermeneutical reasoning), although, in previous periods, legal reasoning had amounted to the hermeneutical analysis of scriptural texts.

Part II, *Contemporary Law*, opens with Hális Alves do Nascimento França's *Rethinking Interpretative Arguments*, in which the author applies general principles of Textual Discourse Analysis to the interpretations of legal provisions. Describing the overlap between text linguistics and the categorization of legal arguments, the author concludes by explaining how linguistic arguments function as a gateway to all argument types, focusing in particular on commitments in Multilateral Environmental Agreements, and the use of argumentation structures as descriptive tools for analysing statutory meaning. The second article, *A Logic for the Interpretation of Private International Law*, by Alessandra Malerba, Antonino Rotolo and Guido Governatori, extends a logical framework which models reasoning across different legal systems. The authors explain how this framework may be used to analyse the interpretative interactions that occur in private international law when various legal systems are involved, introducing meta-rules for reasoning with interpretive canons. Next, Matthias Armgardt's *A Formal Model for Analogies in Civil Law Reasoning* brings focus to the use of analogies, providing an overview of the concept of analogy in Civil Law systems, discussing different theories, and introducing a new model. This model—based on Alchourrón's significant theory for arguments *a fortiori* and *a pari*—not only includes the requirements for analogical reasoning, but also explains how the balancing of interests can be implemented. The author also provides a new category of analogical arguments, *a simile*, and concludes by applying the model to two concrete examples of analogical reasoning in European Civil Law. Following this, Hans Christian Nordtveit Kvernenes' *Approaching an Analysis of Reasoning by Analogy* utilises Per Martin-Löf's constructive type-theoretical framework to provide a formalisation of analogical reasoning with heteronomous imperatives. This article—linked to the studies on analogy and parallel reasoning—explains how the formalisation of deontic imperatives, together with a notion of conditional obligations, can be used to describe analogical reasoning. It closes by using the formalisation to describe *Adams v. New Jersey Steamboat co*., a well-known example in the literature on analogy. The fifth article, *Elements for a Dialogical Approach on Parallel Reasoning: A Case Study of Spanish Civil Law,* by Maria Dolors Martínez-Cazalla, Tania Menéndez-Martín, Shahid Rahman, and Hans Christian Nordtveit Kvernenes, illustrates—in a case study taken from Spanish Civil Law—the use of parallel reasoning in a dialogical framework, where the intertwining of suitable cooperative and competitive moves structures the legal interpretation of the notions at stake. The sixth and final article of Part II is Douglas Lind's *Abductive Inference in Legal Reasoning: Resolving the Procedural Effect of Res Ipsa Loquitur*, which references C. S. Pierce's notion of abductive inference in the law, with particular regard to the formation of legal concepts. The author deploys this notion of abduction to explain the procedural effect of the common law tort maxim *res ipsa loquitur*, 'the thing speaks for itself.' Despite its widespread use (after the English Court of the Exchequer introduced it in *Byrne v. Boadle* and *Scott v. London and St. Katherine Docks Co.*), this maxim remains highly controversial,

as its procedural effect is seemingly to authorize a burden-shifting presumption of negligence. The author explains how abduction is a suitable form for legal reasoning, clarifies how the English Court of the Exchequer's reasoning process in the mentioned cases can be understood by reference to abductive inferences, and establishes how the procedural effect of *res ipsa loquitur* can be solved by recognizing abduction as the underlying process of inference.

Part III, *Deontic Logic, Legal Reasoning, Normativity* opens with Federico L. G. Faroldi's *Common Law Precedent and The Logic of Reasons*, which provides a justification-based model for the concept of reason in the precedential constraints of Common Law. This model is a response to John Horty's reasons-as-defaults model, describing precedential constraints by both reasons and explicit rules. The author shows how reasons are not assumed to be propositions, and how explicit rules can come in different forms: some are simple, while some are iterated. Following this, Stef Frijters, Joke Meheus, and Frederik Van De Putte's *Reasoning with Rules and Rights: Term-Modal Deontic Logic* introduces a new logic for representing general deontic statements. The authors introduce a first-order logic named **TMDL** (Term-Modal Deontic Logic), wherein deontic operators are indexed with terms of the language. Quantification is then possible not only over objects in the domain, but also over the deontic operators themselves, giving the system properties often associated with second-order systems. The authors discuss how **TMDL** constitutes a suitable logical framework for precisely representing legal rules and legal arguments underlying legal justification, and recognizing such arguments as logically valid. They conclude by demonstrating how **TMDL** can be employed in representing different deontic statements. The third article, *Dyadic Deontic Logic in HOL: Faithful Embedding and Meta-Theoretical Experiments*, by Christoph Benzmüller, Ali Farjami, and Xavier Parent, addresses the issue of automated reasoning for the logical framework DDL (Dyadic Deontic Logic). The authors provide a sound, consistent, semantical embedding of DDL, enabling the mechanisation and automation of DDL on computers; this is part of a larger project, LogiKEy, which develops a general reasoning infrastructure for deontic formalisms. Following this, Jaromir Savelka and Kevin Ashley's *On the Role of Past Treatment of Terms from Written Laws in Legal Reasoning* examines the effect that imprecise language has on the interpretation of written laws, concluding that the analysis of the term's past treatment is indispensable for the establishment of legal certainty. The authors elaborate on certain pitfalls and inefficiencies, illustrating the discussion with an example displaying the complexity of legal interpretation. Next, Juliele Maria Sievers' *Jørgensen's Dilemma in the interface between Legal Positivism and the Natural Law tradition* investigates how Jørgensen's dilemma, the problem of using imperatives in logical inferences, can be solved in the positivistic and the naturalistic traditions of law. The author provides a historical account of natural law and legal positivism, an explanation of how the notion of practical syllogism leads us directly to what is now known as Jørgensen's dilemma, and an argument that Kelsen's solution to the dilemma holds in the field of law, but is not—contrary to Kelsen's view—justifiable in the moral field. Part III closes with Max Urchs' *Coping with inconsistencies in legal reasoning*, which develops new foundations

for dealing with contradictions in legal discourse. The author shows how to utilise Stanisław Jaśkowski's discussive logic D2 in order to provide a methodological basis for legal reasoning. Instead of attempting to avoid any contradiction in the logical formalisation, one might represent these contradictions in the formal system and bring the analysis close to the actual practice of legal disputes, with disagreements and differences.

With the authors of the present volume providing such multi-perspectival interfaces, the editors feel confident they will not only help to fill a gap in our current understanding of the structural dynamics and historic evolution of legal reasoning, but prompt new explorations in some of the more prominent forms of reasoning shaping our society's normative systems.

Lille, France — Shahid Rahman

Hamburg, Germany — Matthias Armgardt

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Part I
Historic Roots

Chapter 1
What Is It to Have Knowledge of Roman Legal Methods and Reasoning?

Geoffrey Samuel

Abstract Investigation of what it is to have knowledge of Roman law is fraught with difficulties of an epistemological and historiographical nature. Accordingly, any attempt to provide an epistemological account of reasoning and method in Roman law will not be easy, if only because one cannot focus exclusively on the original Roman texts themselves. There is much more to Roman law than actual Roman law itself. Despite these difficulties, this contribution will attempt to provide an account of Roman legal method and reasoning, but it will do so taking some account of developments since the end of the ancient Roman world.

Keywords Analogy · Epistemology · Fiction · Induction · Interpretatio · Ius · Jurists · Regulae · Res · Responsa · Universitas

1.1 Introduction: Epistemological Challenges

There are numerous epistemological and historiographical challenges facing scholars interested in researching legal method and legal reasoning in Roman law. The first, and classic, is that one is viewing the past from the position of the present which means that the language and the knowledge models that are employed are often of a kind that would be unknown to Roman jurists themselves. Or, to put it another way, how can one speak of yesterday using the words of today?[1] Modern jurists might, for example, employ the well-known dichotomy between casuistic

[1] N Offenstadt, *L'historiographie* (Presses Universitaires de France, 2nd ed., 2018), at p 56.

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and axiomatic reasoning to explain Roman methods,[2] yet it is highly unlikely that this dichotomy would have been familiar as such to a jurist from the ancient world. This is not to suggest that such a distinction should be abandoned as an explanatory model; it is simply to make the point that one is always interpreting the past through contemporary eyes.

A second challenge is to be found in the fact that there is not one monolithic period to be examined. Roman law divides up into a series of 'lives' and each of these lives have their own textual and methodological subtleties which have contributed gradually to the epistemological picture, or pictures, that we have today.[3] There are two generic lives, the first being the period of the Roman Empire itself which covers around a thousand years and ends with a large compilation of the legal materials published in 533 AD under the authority of the emperor Justinian.[4] The second period, which also covers to date around a thousand years, and is often called the second life of Roman law, begins with the rediscovery of the Justinian texts in eleventh century Italy and runs up to the present day, embracing, it might be said, this present contribution.[5] Both of these 'generic lives' sub-divide into four 'sub-lives' so to speak. The Roman period is usually discussed in terms of the Ancient, Republican, Classical and Post-Classical periods,[6] while the second life is seen in terms of the medieval, humanist, natural law and German Pandectist eras, a fifth period perhaps now to be classified as Post-Pandectist.[7] What characterises these second life periods are changes in methodological and epistemological outlook with the result that Roman law today cannot be viewed other than through these various methodological developments.[8] Indeed it is often said that if a Roman jurist could be reincarnated today he (and they were all men) would not recognise the 'Roman law' to be found in the Roman law books of the Post-Renaissance period.

A third challenge is epistemology itself. What actually is it to have knowledge of law? How is this knowledge to be represented? Does law actually exist or is it simply something that human brains deem to exist? Is law analogous to a science like mathematics or is it a social science? And, if the latter, what is the relevance of social science methods and epistemology to the understanding of law and its

[2] AR Jonsen & S Toulmin, *The Abuse of Casuistry: A History of Moral Reasoning* (University of California Press, 1988).

[3] For a general overview see P Stein, *Roman Law in European History* (Cambridge University Press, 1999).

[4] W Kaiser, Justinian and the *Corpus Iuris Civilis*, in D Johnston (ed), *The Cambridge Companion to Roman Law* (Cambridge University Press, 2015) 119.

[5] See for example L Mayali, The Legacy of Roman Law, in Johnston, *op.cit*, 374; R Zimmermann, Roman Law in the Modern World, in Johnston, *op.cit*, 452. And see generally M Bellomo, *The Common Legal Past of Europe 1000–1800* (The Catholic University of America Press, 1995, trans LG Cochrane).

[6] See generally O Tellegen-Couperus, *A Short History of Roman Law* (Routledge, 1993).

[7] See generally J Gordley, *The Jurists: A Critical History* (Oxford University Press, 2013); JW Jones, *Historical Introduction to the Theory of Law* (Oxford University Press, 1940).

[8] *Ibid.*

methodology? Questions such as these – and they are not exhaustive – evidently impact upon legal reasoning and while there is no lack of theory material with respect to law much of this material does not fully address, let alone answer, aspects of these questions. Where, then, does one start any investigation into Roman legal methods and reasoning? The late Robert Blanché, in his stimulating introduction to epistemology, proposed a number of approaches which, although they are concerned mainly with the natural sciences and with mathematics, are nevertheless probably of relevance to legal knowledge.[9] First, he suggested that one difference between the philosophy and epistemology of science is that the latter is situated as much in actual practice as in any theoretical reflection; pure practitioners can become epistemologists of science while pure philosophers probably cannot. Secondly he identified a number of methodological approaches, the one between a diachronic and a synchronic being of particular relevance. He also identified a distinction between an internal viewpoint and an external one. These dichotomies might well have been meaningless to the Roman jurists themselves, but for a contemporary theorist looking back on the Roman texts they do provide insights. The Roman jurists were not 'theorists' as such; this is to say that they did not classify those with knowledge of law into practitioners and theorists (a modern practice with chairs of legal theory in universities).[10] Basically they were all practitioners, but, paradoxically perhaps, this could well mean that directly examining their work might well be more insightful than viewing their texts using models fashioned by modern legal theorists. But, of course, can one really do this?[11]

In addition to the relevance of scientific epistemology and methodology, there is equally the question of social science theory and methods. What is the relevance of these with regard to an engagement with, and an understanding, of legal reasoning and Roman law? The late Jean-Michel Berthelot, in his work on social science epistemology, identified not just a number of paradigm – or as he preferred, programme – orientations but also six schemes of intelligibility.[12] These schemes – the causal, structural, functional, hermeneutic, dialectic and actional – are readily identifiable in legal reasoning and argumentation and thus are, arguably, fundamental models through which one can assess such reasoning over the ages. In other words, it would appear to be impossible to provide an account of legal reasoning in Roman law without adopting an interdisciplinary approach. But, of course, many of these disciplines outside of law did not 'exist' as such in Roman times; indeed many, like sociology, were constructed in the nineteenth century.[13]

[9] R Blanché, *L'épistémologie* (Presses Universitaires de France, 3rd ed., 1983).

[10] One exception was perhaps Cicero (106–43 BC) a lawyer and statesman who did write what might be called theory pieces on law; but it seems that he was largely ignored by the Roman jurists themselves.

[11] Cf P Stein, The Roman Jurists' Conception of Law, in A Padovani & P Stein (eds), *The Jurists' Philosophy of Law from Rome to the Seventeenth Century (A Treatise of Legal Philosophy and General Jurisprudence: Volume 7)* (Springer, 2007) 1.

[12] J-M Berthelot, *L'intelligence du social* (Presses Universitaires de France, 1990).

[13] J-M Berthelot, *La construction de la sociologie* (Presses Universitaires de France, 6th ed., 2005).

Yet it seems impossible to provide any proper account today of Roman law without recourse to models and disciplines of which the Roman – and in fact post-Roman – jurists were completely unaware.

Last, but by no means least, is legal reasoning itself. What is meant by the expression? Here the distinction between the past and the present becomes fundamental because modern works on legal reasoning, as accurate as they may be about the situation today, provide a dangerous model for understanding the Roman jurists. Thus one contemporary and highly competent textbook on general theory of law says that "legal reasoning consists of an intellectual process susceptible to lead to a solution of legal problems, thanks to a certain number of rational steps."[14] This is by no means an inaccurate observation; yet it suggests that legal reasoning is a matter of arriving, through rational steps, at a legal solution. In other words the focus tends to be the reasoning used in judicial decision-making. The problem with this model is that it needs to be applied to Roman reasoning, as evidenced in Justinian's *Digest*, with care because the writings of the jurists are far more wide-ranging than simply texts about the arriving at solutions. The writings of the Roman jurists as evidenced in the original sources indicate a mixture of description, commentary, interpretation, argument, disputes, factual situations, rule assertion and so on; and these various aspects, today, would not always be intermixed in the same way. Today one tends to classify legal reasoning and writing into commentaries on judicial decisions and legislative texts, on the reasoning processes to be found in judgements of courts or individual judgements, on the setting out of the law in particular defined areas, and on questions of a methodological and (or) theoretical nature. Of course these four areas can intermix in that, for example, a commentary by a professor on a case might involve a description of the legal situation (as understood by the professor), an analysis of, say, the legal case being examined, and references to legal theory. But the tendency today, influenced by strict positivist theories about legal sources, is to divide up the legal literature into various kinds of legal reasoning and analysis texts. Textbooks focus on particular legal categories; commentaries focus on specific cases and statutes; and other texts focus on legal concepts, theories and other more general or abstract ideas. This is a valuable set of distinctions, but not one that is always helpful in the understanding of Roman legal reasoning.

Where, then, should one start this investigation? The apparently obvious answer would be with the Roman jurists themselves. Yet, if one were examining legal reasoning as a whole from a diachronic perspective, it is arguable that it might be more useful to begin with the rediscovery of the Roman legal texts in medieval Italy.[15] It was the medieval Roman law commentators who both facilitated the reception of Roman law into modern Europe and developed many of the methods

[14] J-L Bergel, *Théorie générale du droit* (Dalloz, 5th ed., 2012), at 300.

[15] Mayali, *op.cit.*; W Ullmann, *Law and Politics in the Middle Ages* (Sources of History, 1975); H Berman, *Law and Revolution: The Formation of the Western Legal Tradition* (Harvard University Press, 1983).

that we associate with legal reasoning today.[16] However because the emphasis in this contribution is on Roman reasoning itself it might be better on this occasion to adopt an approach that is more traditional. One will start with the Roman texts (or a selection of them) and examine them in order to try to analyse the methodology of these jurists of the ancient world. But in order to undertake this examination reference will be made to the way these texts have been analysed and interpreted by the medieval and later jurists. In other words there will be some coming-and-going between the Roman text and later texts. Hopefully such an approach will help reveal the reasoning methods that are inherent in the original Roman texts even if their full development is perfected only during a subsequent era.

1.2 Roman Legal Reasoning: General Overview

The most sophisticated era of Roman legal culture is traditionally regarded as the classical period which covers more or less the first two and a half centuries AD.[17] However, from a diachronic perspective, the preceding epoch known as the Republican period was the time when the foundational conceptual structures underpinning Roman legal thought and reasoning were consolidated. Just how these structures and reasoning methods developed is of course important to the understanding of legal knowledge development in Rome, but if one is to analyse Roman legal reasoning it is probably convenient to focus one's attention on the period that produced the most evolved writing and reasoning, namely the classical. This said, the connection between this reasoning and literature began with the *respona* (professional opinions on practical legal problems) originally given orally, but which, later, were reduced to texts thus endowing them with a permanent nature.[18] These *responsa* were at first limited to a particular case but gradually they expanded beyond the case to embrace more general situations and ideas.[19] A narrow casuistry was gradually being expanded through the employment of reasoning techniques developed outside law.[20] One can perceive this even in the Roman's own version of their legal history. The classical jurist Pomponius (second century AD) notes how an earlier jurist, Quintus Mucius Scaevola (140–82 BC), had organised the law in terms of genus and species,[21] thus laying the foundations for a dialectical methodology (*diairesis*) which was to become one of the key characteristics of Roman (and medieval) legal reasoning. As Aldo Schiavone notes, such a method

[16] See further G Samuel, *Rethinking Legal Reasoning* (Edward Elgar, 2018), at 12–32.

[17] F Schulz, *Classical Roman Law* (Oxford University Press, 1951).

[18] A Schiavone, *Ius: L'invenzione del diritto in Occidente* (Einaudi, 2nd, ed., 2017), at 78–81, 107, 161.

[19] *Ibid*, 120–123, 168–169.

[20] D Ibbetson, Sources of Law from the Republic to the Dominate, in Johnston, *op.cit*, 25, at 28.

[21] D.1.2.2.41.

operates both at the general and at the specific level; it organises law as a whole into generic categories each subdivided into specific units while at the same time serving as a means of dividing up factual situations in order to arrive at a legal solution (as will be seen).[22]

Alongside this dialectical development was a move towards abstraction and formalism. The "introduction of the division into generic categories", writes Schiavone, "was intrinsically tied to the development of a pre-existing ontological base" in that "in each discipline abstraction was always a prerequisite, logically and historically, to the dialectical (*diairesis*) method."[23] In fact, continues this author, with regard to law there was nothing inevitable about this ontological development. For, in the period before the Republican jurists, when the law was in the hands of priests (*pontifices*), it was by no means clear that one was going to be able to construct concepts that had the capacity to advance beyond the strictly casuistic.[24] Epistemologically speaking, and using a diachronic framework employed by the philosopher of science Robert Blanché, there was a difficulty in moving on from the descriptive stage of science to an inductive one. It was the dialectical method that permitted this movement because of its logical, rather than historical, orientation (*la sua priorità è stata logiica, non storica*).[25] The great contribution, therefore, of the Republican jurists was to present the civil law (*ius civile*) as a network of concepts divided up according to a series of generic categories containing a body of specific casuistic materials which were drawn from the mass of juristic *responsa*.[26] Thus, to use Schiavone's example, the factual situation of buying and selling moved from an *a posteriori* analysis where each transaction was simply descriptive to an *a priori* and inductive abstraction where a legal action attached to a conceptualised 'buyer' and 'seller'.[27] This conceptualised structure then became an institution attracting its own rules defining the reciprocal obligations of the parties.[28] The same process was repeated with a whole range of other operations each being given their own name. This in turn permitted "the construction of a law capable of attaining a dimension entirely formal – in the sense that, from its point of view, nothing other was capable of being envisaged but the abstract dimension of the relations that it was taking into account – to which was tied the deployment of a specific 'practical' reasoning, based upon a 'calculating' and quantitative evaluation."[29]

This evolution from a purely descriptive law of *responsa* to an inductive stage where persons and things had become formalised notions within a network of assertions, rules and obligations created a reasoning foundation that was indeed

[22] Schiavone, *op.cit*, at 182.
[23] *Ibid*, at 190.
[24] *Ibid*, at 190–191.
[25] *Ibid*, at 191.
[26] *Ibid*, at 191–192.
[27] *Ibid*, at 193.
[28] See D.18.1 and D.19.1.
[29] Schiavone, *op.cit*, at 193.

metaphysical but also one that was ontological in that it seemingly operated within factual reality itself. Thus, says Schiavone:

> The obligation, the contract, ownership, possession, tutorship, usufruct, servitude, pledge, stipulation, loan, deposit, inheritance, legacy, sale, hire, corporation, but also equity, fraud, good faith, mistake and the like – this small group of forms that has become familiar to us through long usage – were to become the actors in an invisible scenario, quasi spectral, but capable of influencing in a decisive way material reality, life, and which would finish by appearing completely devoid of sense (legal) outside their presence.[30]

In other words these forms of law, having been induced out of descriptive factual situations, re-descend so to speak into the facts. Yesterday's forms become today's realities. This 'ontologisation' of concepts had the result of merging form with function and so, to return to the example of sale, it became a factual reality, but a reality that operated equally in the abstract world of law. It appeared as an empirical transaction that acted as the source of legal obligations; sale became the *causa* that underpinned the contractual remedies. The forms got lost in the substance. Such an evolution applies across the whole of the civil law – not just with respect to operations like sale or hire – and so possession, servitudes, wills, dowry and so on all exist as both realities and legal concepts. The reasoning of the jurists was therefore able to move with ease from facts to law and from law to facts. Thus, as Schiavone says, "the originality of the epistemological model that Roman legal thought elaborated, [was] its capacity to combine abstraction and realism."[31]

Viewed from the outside, then, these groups of forms – sale, hire, possession, ownership and so on – became the substance of the discipline of law. They became 'blocks' that were, said Alan Watson, largely self-referential and were "rigorously separate"[32] one from another and this was one reason why the Romans "never developed a general theory of contract but only individual types of contract."[33] Each type was an individual block. The same was true for delicts and for inheritance, possession, ownership, servitudes and so on. Watson noted that the self-referential nature of these blocks is to be found in the fact that only rarely "are arguments drawn by analogy from one block to another"[34] and so, for example, there is little interconnection between the different kinds of contract. There may be references to other legal actions and other areas of law – for example in the 'block' dealing with the contract of loan of an item for use by another there are references to theft and to delict[35] – but Watson seems correct, with one or two exceptions,[36] in saying that there is largely an absence of any cross-referencing in terms of rule analogy. Thus in the contract of gratuitous loan of a thing (*commodatum*) there is a longish

[30] *Ibid*, at 196.

[31] *Ibid*, at 201.

[32] A Watson, *The Making of the Civil Law* (Harvard University Press, 1981), at 16.

[33] *Ibid*, at 16–17.

[34] *Ibid*, at 18.

[35] See e.g. D.13.6.7.

[36] See e.g. D.19.2.2.

discussion about which party must bear the risk if the thing lent is destroyed and what emerges is that the risk is normally on the owner of the thing. However there is an exception to this principle if the loss can be attributed to some fault on the part of the borrower.[37] This is not directly stated as a rule but emerges out of the various factual examples cited by the jurist Ulpian. Now if one leaves the gratuitous loan of a thing contract and examines the more general, but quite separate, contract of hire (*locatio conductio*) one finds an almost identical discussion; yet there is no reference to any other type of contract.[38] There is no attempt to generalise. Indeed there is no attempt to formalise a general rule (*regula*) about liability with respect to the destruction or loss of things lent or hired.

Despite this 'block' effect, it would be misleading to say that there were no attempts to generalise all this legal material within a taxonomical structure. Mention has already been made of the work of the Republican jurists in organising, however loosely, the law into generic categories. Moreover the Republican lawyer, politician and writer Cicero had advocated that knowledge of law depended upon its being organised into a rational systematic whole (*ars*) employing the technique (*scientia*) of genus and species.[39] Although Cicero was largely ignored by the jurists, there was a great step forward, to use the words of the late Peter Stein, by the jurist Gaius (second century AD) whose introductory textbook – the *Institutes* (*institutiones*) – set out the whole of law (*ius*) according to a three-part scheme of persons (*ius personarum*), things (*ius rerum*) and actions (*ius actionum*).[40] Despite being rather unimpressed by this plan, Herbert Jolowicz's discussion of it remains a useful one with respect to the details of its origin and he reflects on the possibility that Gaius was not attempting a sophisticated taxonomy of rules in terms of these generic categories.[41] They were just points of view. Peter Stein also examines the origins of the scheme in considerable detail and again concludes that it is more of a descriptive account of legal phenomena than any attempt to provide some sophisticated taxonomical structure.[42] It was a work designed for students. In this respect it was, it seems, extremely successful with the consequence that nearly four centuries after its publication, the emperor Justinian oversaw the publication of what was in effect a second edition.[43] Thus Justinian's *Institutes*, published in 533 AD, retains the three part scheme, even although the law of actions had lost much of its meaning, thanks to procedural changes, by this time.[44]

[37] See D.13.6.5.

[38] See D.19.2.9.3.

[39] On which see Schiavone, *op.cit*, at 123–126, 167–170.

[40] G.I.8; D.1.5.1; P Stein, *Legal Institutions: The Development of Dispute Settlement* (Butterworths, 1984), at 125–129.

[41] HF Jolowicz, *Roman Foundations of Modern Law* (Oxford University Press, 1957), at 61–81.

[42] P Stein, The Development of the Institutional System, in P Stein & A Lewis (eds.), *Studies in Justinian's Institutes in memory of JAC Thomas* (Sweet & Maxwell, 1983) 151.

[43] On which see P Birks & G McLeod, *Justinian's Institutes* (Duckworth, 1987).

[44] See generally Jolowicz, *op.cit*.

1.3 Conceptual Thinking

One of the most revealing aspects of the development of taxonomical thinking about the law was the way in which the literature from Republican times up to Justinian indicate change and development in legal thought (our understanding aided of course by the discovery of a an almost complete copy of Gaius in 1816). As Peter Stein observed, earlier jurists, when they discussed 'things' thought in terms of physical property (*res corporales*), but "Gaius' classification of things involves the acceptance of at least three new conceptual notions". These were:

> first, the recognition of incorporeal things as things alongside physical things; secondly, the classification of inheritances and of obligations as incorporeal things; and thirdly, the recognition of contract and delict as sources of obligations. In Gaius' scheme the category of things thus has to bear most of private law.[45]

Jolowicz thought that the placing all law other than persons and actions under 'things', hung "on a very slender logical thread."[46] Certainly, as will be seen, the intermixing of what today we would call the law of property with the law of obligations under the heading of 'things' causes confusion given that, even in Roman law, property and obligations were separate large-scale 'blocks'.[47]

However the separation between property and obligations becomes much clearer in book four of Gaius' *Institutes* where he distinguishes between different kinds of actions. His description and his reasoning with regard to these actions is worth noting. He wrote:

> 1. It remains to speak of actions. And if we ask what *genera* of actions there are, it seems in truth to be two, *in rem* and *in personam*. For those who have spoken of four in counting *sponsionum* in the class of *genera* they have treated a species of action as if it is generic. 2. An action *in personam* is one where we sue someone obligated to us either in contract (*ex contractu*) or in delict (*ex delicto*), that is where we claim that he ought 'to convey (*dare*), to do (*facere*) or to perform (*praestare*) something.[48]

And he continued:

> 3. An action *in rem* is one where we claim either a corporeal thing to be ours or some *ius* [in a thing], as for instance the *ius* of using or usufruct, going over, driving over or conducting water over land or of raising the height of a building or of having an unobstructed view. A negative opposing action [*in rem*] is available to the adversary. 4. And so having described actions, it is clear that it is not possible for us to claim our thing from another in the following way: 'if it appears it ought to be conveyed'. For what is ours (*quod nostrum est*) cannot be conveyed to us since of course to be conveyed is to be understood as what is given to us is made ours but a thing which is already ours cannot be made more ours. It is true that one's hatred of thieves, in order to multiply the actions for which they are liable, it has become accepted that, in addition to the penalty of double or quadruple, thieves are even liable for the recovery of a thing set out in this way: 'if it appears that they ought to convey',

[45] Stein, *Legal Institutions*, *op.cit*, at 127.

[46] Jolowicz, *op.cit*, at 61.

[47] See D.44.7.3pr.

[48] G.IV.1–2.

> although this action for what is ours is available against them as well. 5. Actions *in rem* are, on the one hand, called vindications (*vindicationes*); actions *in personam*, on the other hand, whereby we claim that someone ought to convey or do, are called *condictiones*.[49]

This passage is particularly revealing in respect of legal thinking and reasoning in the earlier part of the Classical period. As we shall see, in their reasoning the jurists for the most part start out, when considering a factual situation, from the availability or non-availability of an action. Even when they place the emphasis on one of the parties – can this person bring an action? – the verb often employed is related to 'acting' (*agere*). It is the *actio* that was, to use Jolowicz's expression, the "instrument of attack" where "the correct instrument must be chosen for the attack contemplated."[50] Or, as Peter stein put it, the "law of actions was not distinguished from the rest of the law."[51]

Yet there is a conceptual structure suggested in this passage from book four. Behind these *actiones* is a fundamental difference of relationship between person and thing – the action being aimed at a thing (*in rem*) – and person and person, the latter action being aimed at another person (*in personam*). This difference of relationship was fundamental as a text from the jurist Paulus (second and third century AD) informs us: *Obligationum substantia non in eo consistit, ut aliquod corpus nostrum aut servitutem nostram faciet, sed ut aliam nobis obstringat ad dandum aliquid vel faciendum vel praestandum*.[52] The substance of an obligation is not that it makes some thing or some servitude ours, but that it binds another person to us to give something, to do something or to perform something. Here one can see the 'block' effect in that a contract (obligation) cannot of itself convey ownership of a thing and so a sale agreement does not transfer ownership of the subject of the sale.[53] There had to be a separate conveyance (*traditio*) of the thing: *dominium absque traditione non transit* (or similar phrases) said the medieval jurists. Furthermore, if some item of property owned by the claimant was in the possession of another who refused to return it to the claimant, this latter party would in effect bring an action against the thing itself. And this was why the *res*, or some piece of it representing the thing, originally had to be in court, the name of the defendant possessor not being mentioned in the action.[54]

As for things (*res*) themselves, Gaius' *Institutes*, as Peter Stein noted, seems to have made, or least recorded, a major evolution in what constituted property. Much of the early law, as one might expect, focused on physical property. But when Gaius turns from the law of persons to the law of things he reasons in the following way:

> 1. In the last book we set out the law of persons (*iure personarum*). Let us now look at things (*de rebus*). These are either in our patrimony or outside our patrimony. 2. The most

[49] G.IV.3–5.

[50] Jolowicz, *op.cit*, at 76.

[51] Stein, *Legal Institutions*, *op.cit*, at 128.

[52] D.44.7.3pr. See also D.45.1.28.

[53] D.45.1.28.

[54] G.IV.16–17.

> important division of things puts them into two parts: namely some belong to divine law (*divini iuris*), others to human . . . . 9. For what belongs to divine law is no one's property (*nullus in bonis est*), whereas what belongs to human law (*humani iuris*) is for the most part someone's property; but it is possible that it can belong to no one. Thus things forming part of an inheritance (*res hereditariae*), before someone appears as heir, is no one's property. 10. Those things which belong to human law are either public or private. 11. Public things are considered to belong to no one; for they are thought of as belonging to the community itself as a corporate whole (*universitatis*). The things which belong to individuals are private[55]

And he then goes on to say:

> 12. Further still, some things are corporeal (*res corporales*), others incorporeal (*incorporales*). 13. Corporeal things are those that are able to be touched, as for instance land, a slave, a garment, gold, silver and indeed innumerable other things. 14. Incorporeal are those things that are not able to be touched, of a kind that exist in law, as for example an inheritance, a usufruct, obligations however contracted . . . .[56]

Conceptually speaking, there is, one might say, much going on here. First, there is the notion of patrimony (*patrimonium*). This expression is used to represent the total assets and liabilities of a person and it has particular relevance with regard to inheritance law.[57] On the death of a person, this patrimony became a *hereditas* which was a thing in itself and could be claimed via an *actio in rem*.[58] Secondly, there is the distinction between property that could be privately owned and property that could not. This distinction was itself interrelated with another fundamental taxonomical division in Roman law, namely that between the *ius publicum* and the *ius privatum*.[59] Thirdly, there is the notion of a *universitas*.[60] This term gave expression to a corporate whole which was seen as a legal person that was separate from the members of the corporation. As a late Classical jurist put it, what is owed to the *universitas* is not owed to its members, and what the members owe the corporation does not owe.[61] This form of conceptual thinking is one of the most striking contributions of Roman law – as will be seen – to modern legal thought.

Finally, there is the distinction between tangible (*res corporales*) and intangible (*res incorporales*) property. Gaius says that the latter exist only in law (*sunt ea [in] iure consistunt*) and what is so important about this evolution is that it not only extends considerably the notion of property (*res*) to cover virtually all commercial assets. It also shows how law and legal thought had evolved into what today we would call a system. That is to say a conceptual structure which both defines itself in relation to other elements in the structure and has the capability of creating, as a system, its own new elements, such as of course the corporate person (*universitas*)

[55] G.II.1, 2, 9–11.

[56] G.II.12–14.

[57] See also D.50.16.208.

[58] D.5.3.25.18.

[59] D.1.1.1.2.

[60] See generally Jolowicz, *op.cit*, at 127–139; P Duff, *Personality in Roman Private Law* (Cambridge University Press, 1938).

[61] D.3.4.7.1.

and the *res incorporalis*.[62] Where perhaps there is confusion is the inclusion of obligations into the category of intangible things. This is confusing because it transgresses the frontier between the law of property and the law of obligations which, as we have seen, were normally regarded as two quite separate 'blocks'.[63] Yet the inclusion also makes sense because obligations – in particular debts – are assets or liabilities which thus form part of a person's patrimony or wealth (or perhaps lack of wealth).[64] This has resonance today in that people may well regard money in their bank accounts as constituting 'their' property, that is to say as money 'owned' by them. In fact people do not own such money; all they have is a claim in contract (law of obligations) to a sum of money owed to them by the bank. Debts are not capable in theory of being 'owned' by creditors, yet they are nevertheless assets forming part of an individual's patrimony.[65] This reasoning has its foundation in Gaius. As for the confusion, in Gaius' time this probably would not have worried jurists because the separation between property and obligations was very clearly set out in the law of actions, that is to say between *actiones in rem* and *in personam*. However, as Jolowicz and others note, in Justinian's *Institutes*, the law of actions was very much reduced and does not have a book of its own.[66] The separation between property and obligations thus became more difficult to perceive except as a matter of substantive law where, of course, there was a blurred frontier given that obligations were a form of property. In the *Digest* the law of actions was merged with obligations and thus the impression was given that actions and obligations belong in the same category.[67] The medieval jurists started to emphasise the difference more clearly at the level of 'rights' (*iura*) in seeing the obligation as the mother of actions (*obligatio est mater actionis*). As Baldus (1327–1400) put it: *ius obligationis, quae est iuris, et quae est mater; et ius actionis, quae est filia* (the obligation right is the legal right as a mother, while the right to an action is the legal right as daughter).[68]

By the time of Justinian, then, the formulary procedure in which the *actio* had an important role had disappeared. In a celebrated text to be found in Justinian's *Institutes* – a text actually attributed to the early Classical jurist Celsus (67–130 AD) – it is stated that an action is nothing other than a *ius* to recover through judicial proceedings what is owed to one (*Nihil aliud est actio quam ius quod sibi*

[62] D Durand, *La systémique* (Presses Universitaires de France, 9th.ed., 2004), at 5–30.

[63] Cf S Ginossar, *Droit réel, propriété et créance* (Librairie Générale de Droit et de Jurisprudence, 1960).

[64] D.50.16.49; cf. D.50.16.83.

[65] *Ibid*.

[66] Jolowicz, *op.cit*, at 61.

[67] D.44.7.

[68] Baldus, comment on C.2.1.3 no 5. This jurist also emphasised the difference between ownership (*ius dominii*) and the *rei vindicatio* (the *actio in rem* to enforce ownership): *Rei vindicatio non est causa dominii, sed ex dominio procedens*: comment on D.6.3.10 [9] no 13.

debeatur iudicio persequendi).[69] How should one translate *ius* in this context? Most translations into English use the word 'right' (as indeed this present contribution has done on occasions), but this is controversial because it implies that the Romans thought in terms of rights and thus constructed their *Institutes* system on the basis that what was being classified were rights. Both Henry Maine (1822–1888) and Michel Villey (1914–1988) contested this implication, Maine asserting that the Romans had not attained to the conception of a legal right as the term is understood today (that is to say nineteenth century).[70] "There are", he continued, "undoubtedly, certain senses of Jus in which the meaning of 'right' is approached, and even closely approached; but, on the whole, the Romans must be considered to have constructed their memorable system without the help of the conception of legal Right."[71] Villey's view was similar. However he based this opinion on the thesis that the modern conception of a right was the result of the merging of two separate concepts in Roman law, namely *dominium* (ownership) and *ius* (legal relation), and that this merging did not begin to occur until the period of the medieval Roman jurists.[72] In Roman times *dominium*, as the word implies, was a form of *potestas* (power), which it was, but *ius* did not have this power implication; it only gained it later when, in the Middle Ages, *dominium* was itself seen as a form of *ius*. Thus Baldus wrote: *quod iura realia sunt ius dominii directi, ius dominii utilis, ius quasi dominii, ius haereditatis, iura servitutem realium et personalium*.[73] Real rights include direct and indirect ownership, quasi ownership, the right to an inheritance and real and personal servitudes. Villey argued that *dominium* was never considered a *ius* in Roman times. But once the two had merged, argued Villey, the notion of *ius* gradually absorbed the *potestas* associated with *dominium*, thus giving the notion of a right its power dimension.

Villey's thesis did not escape criticism. "The harshest criticism that could be made of Villey's treatment of Roman law", wrote Brian Tierney, "is that he selects a few suitable texts, drapes a whole theory of law around them, and then refuses to take seriously any texts that do not fit his preferred theory."[74] However this critic added that Villey was making a valid point when he said that "Roman jurists did not conceive of the legal order as essentially a structure of individual rights in the manner of some modern ones."[75] Nevertheless, Peter Stein was of the view that between "the time of Gaius and the time of Justinian, considerable progress had been made in developing the notion of an individual right and consequently there was a movement towards looking at the whole of the law as a set of rights conferred

[69] D.44.7.51; J.4.6pr.

[70] H Maine, *Early Law and Custom* (John Murray, 1890 edition), at 365.

[71] *Ibid*, at 365–366.

[72] See generally M Villey, *La formation de la pensée juridique moderne* (Presses Universitaires de France, Quadrige, 2006).

[73] Baldus, comment on C.2.3.28 no 19.

[74] B Tierney, *The Idea of natural Rights* (Scholars Press for Emory University, 1997), at 18.

[75] *Ibid*.

in certain circumstances on persons capable of holding them."[76] Probably Tierney's view more accurately sums up the position with regard to Roman law itself, for even Peter Stein recognised that the key jurist who re-interpreted the whole of Roman law in terms of subjective rights, and using the institutional system, was Hugues Doneau (1527–1591).[77] The modern expression 'right' carries an ideological flavour that makes it a dangerous term to apply even to Byzantine Rome.

1.4 Ex Facto Ius Oritur

When one moves from reasoning about law in general to reasoning about the specifics of law, one is faced with a range of complexities. By specifics of law, is meant, generally, operating at the level of factual problems, of describing actual legal situations within specific areas of law and of explaining, interpreting and applying different expressions, often within the context of factual examples. The origin of the texts themselves to be found in Justinian's *Digest* indicate the variety of literary and reasoning processes. There are the *responsa*, the disputations, the commentaries on the edicts of the praetor (*ius honorarium*), the descriptions of legal situations, the reporting of other jurists' holdings and comments (sometimes positively and sometimes more negatively) and of course the asserting of rules (*regula est* . . .). Various expressions have been used to sum up this legal reasoning at this specific level. Casuistry is perhaps the most common and general term, although one might also talk about 'bottom-up' (as opposed to 'top-down') reasoning. Indeed a clear example of such bottom-up thinking is to be found in the following text:

> He who has contracted to transport a column and if, during the removal, transportation or re-erection it gets broken, the risk (*periculum*) is with him if through some fault (*culpa*) of himself or someone employed to do the work, the accident has occurred; however if all the facts show that the highest diligence of a careful person was observed there is no negligence. We appreciate that the same situation applies to the transport of jars or a beam; in fact the same can apply to anything carried.[78]

The jurist in effect arrives at what today we would immediately see as a general principle, but only by starting out from a factual discussion of columns, jars and beams. The medieval jurists fashioned an expression to describe this kind of approach: the law arises out of facts (*ex facto ius oritur*).

The expression was employed by a number of the later medieval jurists – the Post-Glossators or Commentators – but it is often associated with the pithy comment

[76] Stein, *Legal Institutions*, *op.cit*, at 128.

[77] P Stein, Donellus and the Origins of the Modern Civil Law, *Mélanges F Wubbe* (Fribourg, 1993) 439.

[78] D.19.2.25.7.

of Baldus attaching to a celebrated Roman *responsum* from the Republican period.[79] This Roman text says:

> On Capitoline hill mules were pulling two loaded wagons; the drivers of the first wagon which had tilted up were supporting it so as to make it easier for the mules to pull it; however while doing this the first cart started to roll backwards and when the drivers, who had been between the two wagons, had got out of the way, the rear cart was hit by the one in front and moved back and crushed someone or other's slave boy. The owner of the slave boy asked me against whom he should claim (*agere*). I replied that the law was to be found in the facts of the case (*respondi in causa ius esse positum*). For if the drivers who were supporting the wagon got themselves out of the way on their own accord and it was as a result of this fact that the mules were not able to hold the wagon and were themselves dragged back by the load, then no action could be brought against the owner of the mules. However with respect to the men who were holding up the tilted wagon a claim under the *lex Aquilia* could be brought; for it is no less the doing of damage he who voluntarily lets go of something he is holding up so that it hits something; for example if someone who steers an ass does not restrain it, he would do wrongful damage in the same way as if he had discharged a spear or anything else from his hand. But if the mules behaved in the way they did because they were frightened by something, and the drivers left the wagon fearing they would be crushed, while no action could be brought against the men, an action could be brought against the owner of the mules. However if neither mules nor men were the cause, but the mules could not hold up the weight, or while trying slipped and fell and the wagon went backwards and the men had been unable to bear the weight of it when the wagon tilted over, neither the owner of the mules nor the men would be open to an action. What is indeed certain, whatever the situation in this affair, is that no claim could be made against the owner of the mules pulling the wagon behind, for they did not go back on their own accord but because they were hit and pushed backwards.[80]

Again, one can see here that the Republican jurist (Alfenus, first century BC) is starting out from the facts: *in causa ius esse positum*. One might note also how the vehicle of analysis is the notion of an *actio* reflected in the verb *agere*: against whom could the claimant bring an action? Just as interesting is the method by which the facts themselves are analysed. The approach is, as one might say today, almost algorithmic in its analysis; the jurist identifies two possible defendants, the owner of the mules and the drivers, and proposes alternative factual situations in which one would be liable but not the other (either . . . or). In addition, again arising out of the facts, is reasoning by analogy: letting go of the wagon is analogous to discharging a spear. Of course behind these facts, there is clearly a rule or principle – indeed a legislative rule (*Lex Aquilia*) – that acts as the normative basis (to use a modern expression) of liability.

The algorithmic nature of the factual analysis becomes evident in the hands of the late medieval jurists (Post-Glossators). In another celebrated Roman text, the late Classical jurist Ulpian discusses a problem involving neighbours and a cheese-maker.

> 5. Aristo says in an opinion give to Cerellius Vitalis that he does not think that smoke can in law be discharged from a cheese workshop on to the buildings above it, unless the buildings

[79] Baldus, Comment on D.9.2.52.2.

[80] D.9.2.52.2.

> are subject to a servitude of such a kind and this is admitted. The same author says that it is not legal for water or anything else to be discharged from the building above to the one below: as a man is lawfully able to do things in his own premises only when he discharges nothing onto those of another; now smoke like water is something that can be discharged. An action is given in this case against the upper owner as well as the lower owner not to act in this way. He says finally that Alfenus writes that an action can be brought in which it is asserted that a person cannot lawfully cut stone on his own land in such a way that fragments fall onto my land. Aristo thus says that a person who has hired a cheese workshop from the town of Minturnæ can be prevented from discharging smoke by the owner of the upper floor, but he would have an action against Minturnæ on the contract of hire; he adds that one can bring an action against the person who discharges the smoke in saying that he has no lawful authority (*ius ei non esse fumum immittere*) to discharge smoke. It must follow, in contrast, that one can bring an action to assert that he has lawful authority to discharge smoke (*ius esse fumum immittere*); this also appears to have Aristo's approval. And indeed an interdict *uti possidetis* can be obtained if one is prevented from doing what he wants on his own land. 6. A doubt is raised by Pomponius in his Readings (*Lectiones 41*) as to whether one can bring an action to assert lawful or non-lawful discharge of smoke that is not serious, for example smoke from a hearth. And the major view is that one cannot bring an action, just as one cannot bring an action to assert that it is lawful to light a fire or sit down or to wash on one's own land.[81]

In the hands of the medieval jurist Bartolus (1313–1357), the problem is reduced to its algorithmic structure:

> When the owner of a lower tenement lights a fire in the course of normal family life this is, then, lawful and he will not be held liable if the smoke ascends unless he does it with a wrongful intent. And in the same way if the owner of the upper tenement allows water to flow, for his water time piece, he will not be liable if the water descends unless he was doing it with wrongful intent. But if the owner of the lower tenement was running a shop or an inn, where he was continually having a fire which generated a large amount of smoke, this is not lawful (*non licet*) according to him [Aristo]. In the same way if the owner of the upper tenement allows water to flow beyond the normal amount this is unlawful he [Aristo] says.[82]

The smoke or water is discharged *either* intentionally *or* unintentionally. If the former, then there will be liability, probably for the delict of insult (*injuria*); if unintentionally, then it must be determined whether it is *either* moderate *or* immoderate, only the latter giving rise to liability. This kind of algorithmic structure appears to be latent in the text of Ulpian, just as it is in the text of Alfenus about the wagon case. However one major difference between the era of the Roman jurists and that of Bartolus is the influence of Aristotle's syllogistic logic; the logic appears absent from the *Digest* while it was fundamental to the reasoning of the medieval jurists.[83] This is not to say that the Roman legal reasoning was not 'logical'. There are texts in which the jurist reasons along lines that are logical in the way that if a particular solution or interpretation is adopted it would lead to an

[81] D.8.5.8.5.

[82] Bartolus, comment on D.8.5.8.5.

[83] Gordley, *The Jurists*, *op.cit*, at 14–15; for the medieval jurists see A Errera, *Lineamenti di epistemologia giuridica medievale* (Giappichelli, 2006).

undesirable or absurd result. Moreover the jurists certainly employed a genus and species analysis in their reasoning. Yet there is no evidence in the sources of what might be termed 'axiomatic' or top-down reasoning whereby a jurist would start out from first principles in order to arrive at a solution to a particular factual problem. Indeed, another difference between the Roman texts and the text of Bartolus, is that the former talk in terms of legal actions – one would say today, the reasoning was remedy-orientated – while the latter talks in terms of liability and lawfulness. This emphasis on actions is to be found throughout the *Digest* and is a major characteristic of Roman legal reasoning.

With regard to the distinction between top-down and bottom-up reasoning, James Gordley notes that "a Greek philosopher, or a modern physicist or economist, defines concepts abstractly and then works out their implications one step after another." Whereas the "Roman jurists explained their concepts not by defining them, but by testing them against particular cases."[84] Professor Gordley goes on to state that "the Roman jurists moved from a concept to its application in a particular case all at once, without explaining how they got from one to the other."[85] There is certainly some truth in this assertion. To take just one example, in the title on hire (*locatio conductio*) the opening passages describe its similarity to sale,[86] but the discussion then moves on to particular factual cases without any proper definition of the contract and little explanation as to its nature as a legal notion. Such information is to be gleaned from the cases and examples discussed in the rest of the title. Yet this is perhaps not so true of other titles. Take the title on possession. The opening paragraph very briefly describes the etymological foundation of the word *possessio* and its historical relationship with *dominium*; and, having done this, the jurist makes very clear that one of the fundamental requirements of possession is an intention to possess.[87] Thus madmen and children without the authorisation of their tutor cannot possess, for it would be like putting a thing in the hands of a sleeping person.[88] The paragraph then indeed continues, as Gordley indicates, with the application of the concept of possession to particular cases. However in the third paragraph the jurist Paul (third century AD) lays down what are surely the fundamental definitional characteristics of possession, namely that it applies only corporeal things and that both physical act and intention are required (*corpore et animo*).[89] Professor Gordley's view must, then, be treated with a certain amount of caution; there are examples of reasoning that explain how one gets from a concept to its practical application or, at least, from the latter to the former.

[84] Gordley, *op.cit*, at 8.

[85] *Ibid*.

[86] D.19.2.2.

[87] D.41.2.1.

[88] D.41.2.1.3.

[89] D.41.2.3pr; D.41.2.3.1.

1.5 Induction and Analogy

Another way of viewing the definitional characteristics cited by Paul is as an example of inductive reasoning. One of the most well-known forms of this reasoning is to be found in the title on *pacta* where the jurist Ulpian (contemporary of Paul) wrote:

> 1. *Pactum* is derived from *pactio* (from this term the word peace also comes). 2. And *pactio* means the agreement and mutual consent (*consensus*) of two or more persons over the same thing. 3. Agreement (*conventio*) is a general word applying to all things about which persons who deal with each other agree by contracting (*contrahendi*) or compromising a dispute (*transigendi*); for just as two people are said to come together when they are brought together and come to a single place from different locations, so also when people of different minds agree as one, that is come together in one mind. So general is the term agreement (*conventio*) Pedius makes the nice point that there can be no contract and no obligation, either made by the transfer of a thing (*re*) or by words, if not involving agreement; for even a stipulation which is made by words, without having agreement, is void. 4. But most agreements are formed under some name, for example sale, hire, pledge or stipulation.[90]

The Romans never developed a general theory of contract as such which could be applied top-down so to speak. They had a law of contracts, as is evident from the last sentence in Ulpian's text. However Ulpian, following an earlier jurist Pedius (first and early second century AD), induced out of all the various types of contract the common denominator *conventio* (agreement) and went on to say that where this notion was absent there could not be a contract. It would perhaps be presumptuous to say that Ulpian was inducing a rule to the effect that all contracts are founded upon agreement since a bare agreement – a *nudum pactum* – gave rise (as Ulpian went on to say) to no obligation.[91] He was, nevertheless, inducing a common denominator which, in the hands of the Renaissance jurists, was to become the foundation of a general theory of contract.[92]

Another example of an apparent inductive technique is in a text dealing with damage wrongfully caused. The jurist Paul discusses a problem concerning a pruner who throws down branches that result in the killing of a passer-by. Paul asserts that the pruner will be liable only if he had thrown down the branches in a place open to the public and had failed to shout a warning. However Paul goes on to cite another jurist, Mucius Scaevola (died 82 BC), who said that even if the accident had occurred on private land an action for wrongful damage might lie since there is fault (*culpa*) where a person fails to foresee what a diligent person would have been able to foresee (*culpam autem esse cum quod a diligente provideri potuerit non esset provisum*).[93] Some Romanists doubt whether Mucius himself actually said

[90] D.2.14.1.1–4.

[91] D.2.14.7.4.

[92] On which see R-M Rampelberg, *Repères romains pour le droit européen des contrats* (LGDJ, 2005), at 64–69; R Zimmermann, *The Law of Obligations* (Oxford University Press, 1996), at 559–569.

[93] D.9.2.31.

this – it might have been added by the sixth century compilers of the *Digest* – or that, anyway, it is meant as some kind of definition or rule of *culpa*.[94] But it is an interesting general statement in the Roman sources that seems to point the way towards a principle of foreseeability.

Closely associated with inductive reasoning in Roman law is the use of analogy. Indeed sometimes it is difficult to distinguish between the two approaches. For example, in a text dealing with a stolen mare which comes into the possession of a *bona fide* purchaser, Ulpian states that a foal will equally belong to the purchaser because it is included in the term *fructus*; and he then adds that this is the same for the offspring of other animals belonging to the class of *pecudes*. This technique could be seen as a form of induction of a *fructus* rule, although Ulpian does not talk in terms of a rule (*regula*); he says that it is 'the same for' (*idem et in pecudibus*) the offspring of animals kept in herds. Equally, it might be seen as a form of analogy, the jurist suggesting that the legal position with regard to mares might at the level of fact be extended to animals other than mares. This said, there are, as has been seen in the Wagons case, plenty of examples of clear analogical reasoning. A particularly good illustration is this opinion given by Ulpian:

> If someone stops me fishing in the sea or casting my net, can I act against him for insult (*injuria*)? There are those who judge that I can act in *injuria*, thus for example Pomponius. And many think it similar (*et plerique esse huic similem eum*) to one who is prevented from washing in public [baths] or sitting in a public theatre or acting, sitting or conversing in some other place, or if someone does not permit me to use my own property: for here *injuria* can be brought . . . .[95]

Liability here is justified by reference to cases that are considered analogous. One might note again how this use of analogy starts out from the specific – the baths and the theatre – before moving upwards, very slightly, towards some more generic factual situations. The reasoning is anchored in the facts.

1.6 Regulae Iuris

What one cannot claim is that the jurist was inducing a rule of law (*regula iuris*) out of the facts of the pruner case anymore than Ulpian was inducing a rule about *conventio* and contract. As Professor Gordley asserts, the Roman jurists "were neither deducing the results in the cases from concepts, nor deriving general conclusions about the concepts from the results in the cases."[96] He makes this point with particular regard to Cicero who was dismissive of the learning of the jurists because no one had been able to arrange the material the manner of an Aristotelian

[94] See e.g. CH Monro, *Digest IX.2 Lex Aquilia* (Cambridge University Press, 1898), at 54–55.

[95] D.47.10.13.7.

[96] Gordley, *The Jurists*, *op.cit*, at 16.

'scientific' plan (*ars*).[97] "Roman law", says Gordley, "was not based on a set of rules or principles that the jurists themselves articulated."[98] Again, there is much in what he says. Yet this is not to say that the notion of a rule or principle is absent from the Roman sources. Quite the opposite in fact, as the late Peter Stein's study of *regulae iuris* indicates most clearly – and indeed so do the sources themselves where the jurists quite often employ the word *regula*.[99] As Stein said, the Roman jurists "recognised that their decisions should harmonise with each other, but did not conceive of the legal system as founded on a comprehensive framework of broad general principles."[100] This latter point seems to be confirmed in the *Corpus Iuris* itself. The final title of the *Digest* is devoted entirely to general rules or maxims, but in the first *regula* the jurist Paul warns that a rule is a brief description of what something is for the law does not arise out of a rule, but is made by the law. *Regula est, quae rem quae est breviter enarrat. Non ex regula ius sumatur, sed ex iure quod est regula fiat*.[101] By a rule, then, a brief description of things is transmitted. However, as Stein said, this does not "mean that they had no rules, or that they failed to abstract the effect of their decisions."[102]

The idea that the substance of law consists of rules and principles began to evolve with the shift in Post-Classical Roman times from the writings of the jurists, as opinions (*ius honorarium*), to the issuing of legislative texts whose orientation, as a Roman text itself says, is towards law as command (*praeceptum*).[103] According to Peter Stein:

> In the classical period, the term *regula* connoted a juristic rule, which summed up what had been handed down (*tradita*) by juristic practice. In the post-classical period it is used of what has been laid down in imperial constitutions.[104]

Gradually, then, *ius* became *lex* and *ratio* became *regula*.[105] This shift was important in terms of both theory and method. It was important for theory because the *ius honorarium* was essentially founded upon justice, fairness and reason (*ratio*);[106] *lex*, however, flowed from the authority of the emperor and thus what the emperor desired had force of law.[107] One can see here the foundation of the idea that *Rex*

[97] *Ibid*, at 16–18.

[98] *Ibid*, at 18.

[99] P Stein, *Regulae Iuris: From Juristic Rules to Legal Maxims* (Edinburgh University Press, 1966).

[100] *Ibid*, at 102.

[101] D.50.17.1

[102] Stein, *Regulae Iuris*, *op.cit*, at 102.

[103] D.1.3.1; D.1.3.7.

[104] Stein, *Regulae Iuris*, *op.cit*, at 110.

[105] *Ibid*, at 112–114.

[106] D.1.1.1.1.; D.1.3.2; D.1.3.14–16.

[107] D.1.4.1pr.

est lex.[108] As for method, the textual nature of legislative rules meant that the focus of attention moved from facts (*in causa ius esse positum*) towards the words themselves: what did they mean and what did they cover? The reasoning involved in answering these questions was one of *interpretatio*.[109] This is not to say that the jurists abandoned the idea that law was founded upon reasoning (*ratio*); and so a *lex* that was against the reason of the law (*contra rationem iuris*), said the jurists, ought not be taken to its conclusion (*non est producendum ad consequentias*) or indeed followed (*non possumus sequi regulam iuris*).[110] Nor is it to say that interpretation did not involve the detailed consideration of factual cases. But the shift towards *regulae iuris* indicated the way in which law was to develop.[111]

This development is quite difficult to assess with regard to Roman law itself because the main period of both rule-model and hermeneutical thinking occurred during the later life of the civil law. This results in something of an historiographical issue because of the temptation to view Roman law from an epistemological position that has been influenced by the later civil lawyers. Professor Gordley alludes to this problem when he compares Roman law with the later civil law. As he says, "it is commonly said that a distinctive feature of the civil law is that it depends on principle and on system." But "Roman law was not based on a set of rules or principles that the jurists themselves articulated."[112] The articulation begins to manifest itself in the era of the medieval Italian jurists. Thus Baldus in a celebrated comment wrote that he who wishes to know the effects must first know the cause and he who wishes to know the nature of all things must know the principles (*principia*) behind them (*Qui vult scire quid rei, debet scire principia rei*).[113] By the sixteenth century the *regulae iuris* – or *axiomata* as Matteo Gribaldi Mofa (1505–1564) called them[114] – had become the source of legal knowledge.

Now it is to be doubted that Gribaldi Mofa was employing the term *axiomata* in a mathematical sense. His aim was to inform law students that there were clearly defined brief principles capable of being memorised as well as acting as the major premises for the syllogism (*Plane ex regulis componimus syllogismos*).[115] However a century later the term had acquired its mathematical meaning; these axioms, said Hugo Grotius (1583–1645), were the source of right reason (*jus naturale est dictatum recte rationis*) which were so unalterable that even God could not change

[108] Schiavone, *op.cit*, at 414. This expressiont can be found in Baldus, comment on D.1.3.2 no 5 where he said *Rex est lex animata*.

[109] See e.g. D.1.3.18.

[110] D.1.3.14–15.

[111] Schiavone, *op.cit*, at 359.

[112] Gordley, *op.cit*, at 18.

[113] Baldus, comment on D.1.1.1.

[114] Matteo Gribaldi Mofa, *De methodo ac ratione studendi libri tres* (1541), for example at Book I, chap VII.

[115] *Ibid*.

them (*ut ne a Deo quidem mutari queat*).[116] Subsequent jurists went on to develop further this *mos mathematicus* analogy. For example Christian von Wolff (1679–1754) asserted that nothing is true "unless it can be demonstrated as a necessary consequence of inference" (*Non admittus tanquam verum, nisi quod ex antea demonstratis per necessariam consequentiam infertur*).[117] And Gottfried Wilhelm Leibniz (1646–1716) wrote that the reasoning of the Roman jurists was almost akin to mathematical demonstrations (*Atque ita ad Methodum venio . . . ut in certissimas ac pene mathematicas demonstrationes eorum responsa redigendi laboris potius sit in digerendo, quam supplendo ingenii*).[118] His view was that the *responsa* could be reconstructed in such a way as to expose their structural rationality and coherence. The Romans had fashioned a precise model from which solutions could be deduced as a matter of abstract logic. Such a view would surely have baffled the Roman jurists themselves. Nevertheless Johann Heineccius (1681–1741) went further and was contemptuous of the casuistic approach.

> All the proper sciences reason by way of an intelligence of principles and their cohesion with posited conclusions. And just as those who teach the divine and sublime mathematics do not demand their audience to learn by heart thousands of problems, but instead inculcate and demonstrate definitions, axioms and theorems by which of themselves any problem can be promptly solved. And so it is not for the jurist, I think, to stuff their audience's brains with decisions and cases . . . .[119]

No doubt this jurist believed that he was restating Roman law, but in presenting it in this way he might have made it easier for students to comprehend yet it was not the Roman law or Roman reasoning to be found in the original sources.

1.7 Interpretatio

This shift from the *ius honorarium* towards an ontology of law that was more rule-orientated had an impact at the level of method in that rules were as much about language as facts. The application of a rule to particular factual situations could well involve an emphasis on the meaning of a word or phrase within the rule. How, then, did Roman legal reasoning approach interpretation? In respect of this question it must be remembered that one is dealing not just with legislative texts; wills also presented problems of interpretation and meaning and so could certain contracts, in particular the stipulation based on formal words.[120] Moreover it is difficult to escape from the contemporary perception of the issues concerning legal interpretation when

[116] H Grotius, *De Jure Belli ac Pacis* (1625), at Book I, Chapter I, § 10, 1 and 5.

[117] C Wolff, *Jus Gentium Methodo Scientifica Pertractatum* (1764 edition), at Praefatio.

[118] GW Leibniz, *Doctrina Conditionum* (1669) (new edition: Institut Michel Villey, 1998, translation into French by P Boucher), at Proemium.

[119] J Heineccius, *Elementa Juris Secundum Ordinem Institutionum* (1725), at Praefatio.

[120] See e.g. D.45.1.111.

viewing the Roman sources, a perception whose foundations are rooted in the Renaissance writers on Roman law.[121] Consequently, the tensions identified by the humanist jurists are, first and foremost, the one between the letter and the spirit of a text – or, to put it slightly differently, between a strict (or restrictive) and liberal (or extensive) interpretation – and, secondly, between authority and rationality. Perhaps another, again slightly different way of expressing this latter tension, is between a grammatical and a logical interpretation.[122] A third tension is to be found between equity and strict law, one Roman text for instance emphasising *aequitas* over law (*ius*).[123] Are all of these tensions to be found in the Roman sources?

In fact one way of answering this question is to start out from the medieval and renaissance jurists who, as Ian Maclean notes, used Roman texts to support their own interpretative opinions. Accordingly Roman texts can be found containing:

> maxims which support contrary arguments: thus, the legislator's intention may be prized above the literal meaning of the text, or the literal meaning above intention (D.1.3.17, D.50.16.6.1; D.32.25, D.40.9.12); the facts of the case can be prized above the written record, or the written record above the facts (D.33.2.19); laws may be extended in application to *casus omissi*, or all extension disallowed.[124]

This observation might suggest total confusion amongst the Roman jurists, but contradictory principles and approaches are equally to be found in the modern legal systems. In English law, for example, statutory interpretation has traditionally been a matter of choosing between three different approaches – namely the literal, golden and mischief rules – all of which, when taken together, hardly amount to some kind of uniform interpretative theory.[125] What approach is adopted often depends both on the text to be applied and on the facts in issue.

The same attitude no doubt applies to the Roman jurists who were faced with the perennial problem of reconciling words (*verba*) with things (*facta*, *res*) whose relationship had to be mediated through the focal point of the intention or wishes (*mens*, *voluntas*) of the writer of the text.[126] Added to these focal points, was the rationality (*ratio*) of the law itself. As one Roman jurist put it, the reason why one should treat mistakes of law differently from mistakes of fact is that law can and should be definite (*ius finitum*) while the interpretation of facts (*facti interpretatio*) confuses even the most careful of people (*prudentissimos*).[127] Thus, said the jurist Julianus (110–170 AD), where anything has been constituted that is against the rationality of the law (*contra rationem iuris*) such a rule cannot be followed (*non*

[121] On which see I Maclean, *Interpretation and Meaning in the Renaissance* (Cambridge University Press, 1992).

[122] Jolowicz, *op.cit*, at 11–12.

[123] See e.g. D.39.3.2.5.

[124] Maclean, *op.cit*, at 6.

[125] For a summary of the three rules see e.g. Denham J in *DPP v Murphy* [1999] 1 *Irish Reports* 98, at 109–111.

[126] D.1.3.19.

[127] D.22.6.2.

possumus sequi regulam iuris).[128] As for facts, they are no doubt often complex and ambiguous – requiring, as we have seen, a careful analysis through the use of distinctions and divisions – but of course written law can equally be obscure, especially if the writer uses ambiguous language. The jurist Paul (second and third century AD) wrote that in an ambiguous discourse we do not say two things, but only what we mean. And that is why the person who says something different from what he wishes does not say what his voice says because he does not wish it (*non vult*) nor what he wishes because he does not say it (*non loquitur*).[129] What, then, if there is an ambiguity in the formulation of a legal action or in a defence to one? The answer seems to be that an interpretation that validates rather than destroys.[130] In a contract of stipulation, where there is an ambiguity as to the parties' words (*ubi est verborum ambiguitas*), it is what the contract intended that is valid (*valet quod acti est*).[131] Moreover an ambiguous word is to be given a meaning which avoids a damaging result (*quae vitio caret*) and preserves the intention of the legislator (*voluntas legis*).[132] Yet if a text is clear in its language, then it would seem that it is the words that govern: *cum in verbis nulla ambiguity est non admitti voluntatis quaestio* (when there is no ambiguity in the words the question of the wishes [of the writer] are not to be admitted).[133] To know a statute is to be acquainted not with their words (*verba*), but with their force and power.[134]

What seems to emerge from these texts is not some definitive rule or theory, but a series of practical guides each of which would gain their relevance in the context of particular factual situations. Some factual situations might need to be resolved through a liberal (*benignius*) interpretation and application; other situations might require the wish or intention (*voluntas*) of the legislator (or the testator) to be the controlling factor. Yet when one looks at the texts dealing with particular statutes or other texts these guidelines are not points from which the jurists begin their analysis. The approach is normally a descriptive one pointing out, first, what the statute is designed to do and then, secondly, going straight on to make particular assertions with respect to the statute and to consider a range of factual questions often by way of citing the opinions of previous jurists or the holding of an emperor in a rescript. Indeed the continual emphasis on practical examples and cases can often mask the fact that what is in essence being discussed is the interpretation and application of a statute.

This is particularly true of wrongfully caused damage where the source of liability is an old statute, the *Lex Aquilia* (circa 287 BC). Thus the title in the *Digest* dealing with this piece of legislation begins with a short description of its

[128] D.1.3.15.
[129] D.34.5.3.
[130] D.34.5.12 (13).
[131] D.34.5.21 (22).
[132] D.1.3.19.
[133] D.32.1.25.1.
[134] D.1.3.17.

scope and origin before moving on to its first provision set out in chapter 1 of the statute.[135] This text stated, according to Gaius, that "one who unlawfully (*injuria*) kills another's slave or female slave, or a four-footed animal belonging to the class of *pecudes*, let him be condemned to pay to the owner an amount that was the highest value in the previous year."[136] Gaius then goes on to discuss the class of *pecudes* and names the animals that fall within the category, for example sheep, goats, bulls, horses, mules and asses.[137] He then asked whether pigs are included and cites the jurist Labeo (circa 54 BC-10 or11 AD) in saying that they are, but *canis inter pecudes non est* (dogs are not) nor are wild beasts such as lions and panthers. As for elephants and camels, *quasi mixti sunt* (half in half out) but because they are beasts of burden they have to be included within the chapter.[138] This paragraph is followed by an extract from Ulpian who noted that the killing must be unlawful, for *non enim sufficit occisum, sed oportet injuria id esse factum* (killing is not enough, for there has to be *injuria*).[139] Both Gaius and Ulpian then go on to give some factual examples of when the killing is not unlawful and the latter jurist also explains the word *injuria* and its meaning within the *Lex Aquilia*.[140] Much of the rest of the title is devoted to particular cases and factual examples up until paragraph twenty seven of the title when Ulpian sets out the provisions of the third chapter of the statute (the second having fallen into disuse) which extends liability to any damage unlawfully done to another's property.[141] Having stated this chapter, the following paragraphs are devoted almost entirely to actual cases and examples, including the facts of the pruner and the mule driver cases discussed earlier.[142]

The point of spending a little time looking at the opening paragraphs of the title on the *Lex Aquilia* is simply to illustrate that there is in play an exercise of interpretation but that the jurists do not seem at all concerned with actual definitions or theories of meaning. They prefer to interpret, so to speak, through the traditional casuistic methods upon which the *ius honorarium* was founded. Rather than define terms such as *pecudes* and *injuria*, the jurists provide factual examples in order to illustrate the scope and limits of such terms. This seems, on the whole, equally true of the term *culpa* (blameworthiness). As the late Professor Lawson (1897–1983) acutely observed, the Roman cases appear to show that "to do a certain act at a certain time and place was *culpa*, but at another time or place it was not."[143] By this he meant that the jurists preferred to explain fault in terms of specific examples. To burn off stubble in a field, the fire getting out of control and causing damage to a

[135] D.9.2.1.

[136] D.9.2.2pr.

[137] D.9.2.2.2.

[138] *Ibid*.

[139] D.9.2.3.

[140] D.9.2.4; D.9.2.5.

[141] D.9.2.27.5.

[142] D.9.2.31; D.9.2.52.2.

[143] FH Lawson, *Negligence in the Civil Law* (Oxford University Press, 1950), at 38

neighbour, is negligent if done on a windy day; if not, and all precautions were taken, it was not blameworthy.[144] A slave is accidently killed by a javelin while walking across some ground where people are practising the sport: was it ground devoted to such a sport (in which case the slave ought not to have walked there) or not?[145] The same approach is adopted with regard to the word *rumpere* (break up); the jurists explain its (extended) meaning by way of factual cases and examples.[146] In short, the whole of the title devoted to wrongfully caused damage (*damnum injuria datum*) is an exercise in statutory interpretation, although when one compares the title with other titles in the *Digest* dealing with damage and harm – titles not based on legislation as such – it is very difficult to detect much difference in the reasoning techniques.

1.8 Fiction and Fiction Theory

Another important characteristic of Roman legal technique and reasoning was the use of fictions. The medieval jurists defined a fiction as *contra veritatum*; it was a matter of taking the false as true: *fictio est falsitas pro veritate accepta*.[147] One difficulty with the word fiction is that it is a term that can have a wide or a narrow scope, the latter attracting in addition a rather pejorative orientation because the use of fictions is often associated with 'primitive' legal thinking. This said, fictions, as Yan Thomas pointed out, were absolutely fundamental to the Roman legal technique, yet it was not until the Italian medieval jurists that a theory of fictions in law was properly developed.[148] In more contemporary times there was a further development with the thesis of Hans Vaihinger (1852–1933) whose fiction theory asserted that all concepts, both in the natural and social sciences, were fictions.[149] They were 'as if' constructions by which he meant that concepts did not represent some objective truth but should be regarded 'as if' they were true provided such concepts proved pragmatically useful.[150] Such a thesis was echoed by Thomas Kuhn in his celebrated work on changes of paradigm; and, although he did not employ the expression fiction theory, he essentially expounded an epistemological model that was similar.[151] Now these subsequent theories, from a strict historiographical position, ought not to be of relevance when examining the use of fictions in Roman

[144] D.9.2.30.3.

[145] D.9.2.9.4.

[146] D.9.2.27.13ff.

[147] Baldus, Comment on C.9.2.7 no 7.

[148] Y Thomas, *Les opérations du droit* (Seuil/Gallimard, 2011), at 133–186.

[149] H Vaihinger, *La Philosophie du comme si* (Éditions Kimé, 2nd ed., 2013; translation C Bouriau).

[150] See also C Bouriau, *Le 'comme si': Kant, Vaihinger et le fictionalisme* (Les Éditions du Cerf, 2013).

[151] T Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 2nd ed., 1970).

law itself, for one should not impose non-Roman thinking on Roman thinking so to speak. However these theories do appear to provide insights into aspects of Roman legal technique and thinking and even a modern theory such as the one proposed by Vaihinger can perhaps explain why the Romans were happy to employ fictions as a fundamental tool in law.

Yan Thomas himself wrote that jurists have perhaps not paid enough attention to the device of 'as if' as employed by the Romans.[152] The expression is to be found quite frequently in the roman texts (*perinde*, *quasi*, *si* and the like) and it is arguable that it is this 'as if' orientation that is the key to understanding the use of fictions – or at least the use of many fictions – in Roman law. The examples are so numerous that it is difficult to focus on just some typical texts, although Thomas has provided a good selection.[153] But one might highlight the different levels at which these fictions were important. At the level of fact, a well known example is of course adoption where a person is treated as if they are the biological offspring of another person or persons. Indeed, says one text, a person can be adopted not only as a son but also as a grandson; the law treats the grandson 'as if' he is the offspring of a son (*perinde quasi ex filio*).[154] Sometimes such fictions can be obscured by the what appears to be the facts themselves. For example an area of property law that was supposedly only about fact is possession: *eam enim rem facti, non iuris esse* (it is a matter of fact not law) asserted Paul.[155] But later on in the same title another jurist, Ulpian, noted that anyone ejected by force from possession should still be treated 'as if' (*perinde*) they possess as they have the power to recover it through legal action.[156] One can see here a subtle move from the fact of possession to the 'right to possess' (*ius possessionis*)[157] through the use of an 'as if' fiction.

Possession is of course both a factual and a legal notion and so can provoke a question about the boundary between law and fact. This was particularly true of Roman law since not all property possessed by a person amounted to legal possession, that is to say possession protected by possessory remedies. Thus a person who hired property did not have legal possession, only custody (in the post-Roman world attracting the word *detentio*),[158] legal possession remaining with the owner of the thing hired.[159] This is not to suggest that the distinction between *possessio* and custody is founded upon a fiction, but it does bring into play a certain 'as if' orientation since the owner is being treated as if he still

[152] Thomas, *op.cit*, at 136.

[153] Thomas, *op.cit*, at 169–186.

[154] D.1.7.43.

[155] D.41.2.1.3.

[156] D.41.2.17pr.

[157] D.41.2.44pr.

[158] See e.g. Bartolus, various comments on D.41.2.39. Bartolus referring to the expression *ius possessionis* said that *possessio est iuris, sed animus est facti*: comment on D.41.2.49 no 1. As for *detentio*, he thought that this was fact (*detentio est facti*): comment on D.41.2.1 no 13.

[159] D.41.2.19pr.

retained factual control over the property. As Professor Christian Baldus has put it, the notion of possession does raise an interesting question about the relationship between (Roman) law and reality.[160] But what of concepts more generally? Can they all be seen as fictitious devices? Some legal notions, such as damage (*damnum*) and interest (*interesse*) seem embedded in reality and gain their force from social fact rather than legal normativity. Thus the notion of an interest is of importance, for example, in the delict of theft (*furtum*) and in the delict of wrongful damage (*damnum inuria*). The expression *interesse* (and other similar expressions) is employed as a means of assessing the measure of damages, for example where a person steals accounting tablets and the like (*tabulas* and *cautiones*) which have no intrinsic worth in themselves.[161] It is, admittedly, difficult to describe *interesse* here as a fiction because the jurist makes it dependent upon the facts;[162] the *actio furti* goes only to the extent of the party's interest (*dicendum est furti actionem in id quod interest locum habere*).[163] And, indeed, there are some quite detailed and subtle factual analyses.[164] Yet one wonders what was really in play with such notions. Were they simply descriptive notions describing an empirical social situation or were they 'as if' notions infiltrating themselves into empirical reality so as to allow the law to be applied?

Whatever the situation with regard to notions such as *interesse* and *damnum*, there were other concepts that seemed to be much more fictional in their orientation and function. The *res incorporalis*, which has already been discussed, indicated that the image of a physical thing could be extended to embrace a non-physical entity and is, from today's perspective, undoubtedly fictional in the Vaihinger sense. The *res incorporalis* was an abstract entity being regarded 'as if' it was a physical thing. However just as the physical *res* could be extended to the non-physical, so the physical person (*persona*) could likewise be extended to embrace the non-physical person; the corporation (*universitas*) became a person in itself abstracted from its members. The fictional nature of this abstract entity was recognised by the medieval jurists; Paulus de Castro for example described the *universitas* as a *persona ficta*;[165] and Baldus equally employed the expression, although he thought that in essence it was a *corpus intellectuale* and thus incapable in itself of being condemned, for example, as infamous (*infamia*). It was an entity *in abstracto et est inanimata*.[166] Such a view finds some support in the Roman sources: how, asks Ulpian, can a municipal body (*municipium*) be guilty of fraud?[167] One might note that the

[160] C Baldus, Possession in Roman Law, in P Du Plessis, C, Ando, & K Tuori (eds), *The Oxford Handbook of Roman Law and Society* (Oxford University Press, 2016) 537, at 537–538.

[161] D.47.2.27pr.

[162] See D.47.2.27.1.

[163] D.47.2.27.2.

[164] See e.g. D.47.2.32.1.

[165] P de Castro, Comment on D.5.1.76 no 6.

[166] Baldus, Comment on D.3.2.6.

[167] D.4.3.15.1.

medieval jurists also regarded this *persona ficta* as a *res incorporalis*, suggesting that it was more of a 'thing' than a 'person'.[168] However whether the Romans saw corporate bodies as founded on a fiction is far more difficult to determine. Patrick Duff (1901–1991) highlighted some texts that might support a fiction theory,[169] the most important of which is one that states: *hereditas personae vice fungitur, sicuti municipium et decuria et societas* (inheritance functions like a person, just like a municipal body, a town council and a partnership).[170] Gaius also seemed to assert that *civitates* (towns, communities) are in the same position (*loco*) as private people.[171]

These kind of texts do suggest that a body such as a *universitas* or a *municipium* could have been regarded 'as if' they were people (*personae*), but, as Jolowicz said, "the Romans themselves had never worked out the fiction theory".[172] This is hardly surprising since the Romans seemed little interested in theorising as such and so while they certainly recognised the importance both of actual and of 'as if' fictions there is nothing in the sources that suggests intangible things and persons were completely devoid of any reality. Towns were probably seen as existing and it is unlikely that other collegial or groups were perceived as actual fictions. Certainly, with regard to the *res incorporalis*, one wonders if there was, as today, an important psychological element with regard to such an entity. It is easy enough to accept that some legal notions such as adoption are fictions, if only in an 'as if' sense. Yet, to recall a point made earlier, would a contemporary person regard 'their' money in their bank account as a fiction? Are they not 'real' rather than 'fictional' assets? Maybe the Romans thought about intangible things in a similar way.

The third level at which fictions, or at least 'as if' fictions, operated was legal taxonomy. Two categories within the law of obligations are relevant here, namely quasi contract and quasi delict. In his *Institutes* Gaius had originally sub-divided obligations into the two categories of contracts and delicts,[173] but recognised immediately that this plan was unsatisfactory because there were certain claims that could not be accommodated.[174] In an extract in the *Digest* from another of his works he had added a third and miscellaneous classification labelled various causes (*Obligationes aut ex contractu nascuntur aut ex maleficio aut proprio quodam iure ex variis causarum figuris*).[175] However the extract subsequently goes on to describe not just obligations arising *ex contractu* and *ex maleficio* but also *quasi ex contractu* and *quasi ex maleficio*.[176] Thus by the time of Justinian the plan had expanded

[168] P de Castro, Comment on D.3.4.7 no 5.

[169] See Duff, *op.cit*, at 224–232.

[170] D.46.1.22.

[171] D.50.16.16.

[172] Jolowicz, *op.cit*, at 134.

[173] G.III.88.

[174] G.III.91.

[175] D.44.7.1pr.

[176] D.44.7.5.1 and 6.