## Burkhard Schafer / Panagia Voyatzis

## «The End of the Law is Peace. The Means to this End is War»:

## Jhering, Legal Education and Digital Visualisation

The paper describes a novel approach to the visualisation of legal argumentation, aimed at training legal professionals in Mexico. The approach that draws its inspiration from battle maps used in military history is discussed in a jurisprudential and legal-historical setting.

Category: Articles

Region: England

[^0]
## Contents

1 Introduction
2 Preparing the Battle Ground
3 Let The Battle Commence
3.1 All is Fair in Law and War

4 Battle Joined
5 Literatur

## 1 Introduction

[Rz 1] This is a violent paper. There will be murder most horrid. The bagpipes will play, the highland charge is performed, and blood will be spilled, all for the benefit of education, though no student was harmed in the research for this paper. Reader discretion is advised. Despite this uncharacteristic violence, it shares a key concern with Friedrich Lahmayer's work. Its topic is a new approach to visualisation in legal education. Anyone who ever had the benefit of seeing Friedrich Lachmayer give, nay, perform a presentation, knows that a particular interest of his is to depict the dynamic aspect of visualisation, the process of legal thinking that he tries to depict and not just its end product, logical form of a legal decision. Graphical representations of argument structures in the tradition of Wigmore charts or Toulmin diagrams typically give a static picture of an argument, with the relation between propositions frozen in time. While this can aid the understanding of the underlying logical form, it abstracts away an important aspect of «real life» legal argumentation, the insight that law typically takes place in a dispute between parties and therefore is always essentially contested. We too will try to find new ways of representing this dynamic aspect, but where for Lachmayer, a key inspiration is the Mandala, for us it is the battle map, and where he emphasises oneness, we will emphasise division. But this, in turn, is just another way to maintain the balance for which the Mandala stands, Shiva needs her Kali, whose role as slayer of demons we will take on for this paper.
[Rz 2] We take our lead from Rudolf von Jhering, sometime holder of the chair of Roman Law at Vienna and his observation of the role of peace and war in thinking about the law and legal education. In the public lecture that was to form the backbone for his most famous publication, «Der Kampf ums Recht» («The Struggle for Law») he said: ${ }^{1}$
[Rz 3] «Von diesen beiden Auffassungen nun ist es gerade die eine, daß das Recht vorzugsweise die Ruhe, die Ordnung, der Friede sei, welcher unsere romanistische Wissenschaft vorzugsweise Geltung erworben hat. Wenn ein junger Mensch aus den Vorlesungen über römisches Recht ins praktische Leben tritt, so wird er etwa von folgenden Vorstellungen erfüllt sein: das Recht entwickelt sich, (wie es Savigny dargestellt hat) wie die Sprache aus dem Volksgefühle heraus; die vollen Ideen des Rechtes, die brechen sich von selbst Bahn, d. i. das Gewohnheitsrecht; es ist das also die Macht der rechtlichen Überzeugung, die sich hier bewährt hat. Daß diese Überzeugungen aber einen Kampf zu kämpfen haben, der bei der Entwicklung der Sprache und ebenso der Kunst gar nicht stattfindet, das tritt bei seinen Vorstellungen in den Hintergrund»

[^1][Rz 4] In the book that resulted from this lecture, his imagery is even starker: ${ }^{2}$
[Rz 5] «So long as the law is compelled to hold itself in readiness to resist the attacks of wrong and this it will be compelled to do until the end of time - it cannot dispense with war. The life of the law is a struggle, - a struggle of nations, of the state power, of classes, of individuals. All the law in the world has been obtained by strife. Every principle of law which obtains had first to be wrung by force from those who denied it; and every legal right - the legal rights of a whole nation as well as those of individuals - supposes a continual readiness to assert it and defend it. The law is not mere theory, but living force.»
[Rz 6] This image of law as peaceful yet ultimately static order, born out of the «common law» (Gewohnheitsrecht) is particularly precarious when applied to post-revolutionary legal orders, where justice is in transition, concepts essentially contested, and the new consensus as yet to be forged. Our own research is placed in the context of the transition of Mexico from a civil law system to one that follows increasingly the approach of its main trading partner, the common law system of the United States. We will describe a new approach to formalise legal argumentation that tries to stay true to the «combat element» and depicts the «battle of the concepts» for supremacy. We demonstrate how visualisation methods used in military history can be re-purposed to depict the battle between two parties in adversarial litigation, taking as example the case of Carney vs. US, which had become the standard for AI supported argument analysis ever since it featured as the main example in the works on legal AI by Kevin Ashley. In the first section, we briefly describe the current developments in Mexico and its shift from inquisitorial to adversarial procedures. We then put this development in a jurisprudential and historical context that further analyses the structural similarities between legal argumentation and armed conflict. We then briefly outline a radical departure from traditional argumentation visualization techniques: the battle of the precedents. Drawing our inspiration from familiar battle and campaign maps, we argue that the semantic richness of this type of visualization, and its ability to present dynamic interaction between forces of different strength makes it particularly suitable for our purposes.

## 2 Preparing the Battle Ground

[Rz 7] In this first part, we briefly introduce the setting for our study, discussing the transitions that the legal system of Mexico is currently experiencing form a comparative-legal and jurisprudential perspective.
[Rz 8] Over the last decade, the role and working practice of the Mexican federal judiciary has changed dramatically. The judiciary is in the process of becoming a more confident and active precedent-giver and also precedent-user, moving away from its historical self-understanding as part of a civilian jurisdiction and orienting itself more towards the USA as the predominant economic power in the region. Integration in NAFTA and constitutional reform under the last government all played a role in a process that changes not just the use of precedents, but pushes the judicial system in its entirety towards an adversarial, common law approach that emphasizes adversarial, oral procedure, cross examination of witnesses and public pleadings. As a result, more federal precedents are issued, published and made available to all legal professionals, and also

[^2]used more frequently than in the past in judgements by lower courts. ${ }^{3}$ However, this fundamental change in «legal style» has not been problem-free for the legal community. In 2006 the Supreme Court of Justice published the results of a comprehensive, three-year-long study of the perceived problems that judges, officials and legal practitioners in Mexico face with the administration of justice. The research conclusions and the working papers show that legal practitioners experience disorientation when dealing with precedents and their role in daily practice ${ }^{4}$. Complaints concern both the quantity and the consistency of precedents: Faced with what appears to be a deluge of often mutually inconsistent decisions, legal professionals feel left alone in deciding which of these are the «right» ones to use in a given case. What was intended to increase legal certainty is perceived as having the opposite effect, creating confusion and a perceived loss in legal certainty and predictability. ${ }^{5}$ Respondents to the government inquiry list as desiderata the enactment of clear rules on how to give weight to conflicting precedents; that courts should issue fewer precedents; that contradictions should be avoided by institutional incentives and that institutional efforts should be put into practice to unify precedents. ${ }^{6}$ In short, what was asked for can be understood as no less than a «codification of precedent-based reasoning» - defying in a sense the very reason for moving away from the codes towards an increased use of precedents in the first place. What create certainty in the view of these practitioners are codified abstract rules. Psychologically, we can understand this reaction as a form of cognitive inertia or cognitive dissonance: faced with massive changes across all aspects of the legal profession (and indeed wider society and politics) in a short period of time, practitioners in Mexico cling to their learned reasoning and behaviour pattern especially strongly where it comes to the core of their self-understanding and what it means to think legally. In 2007 a public enquiry raised by the Senate of the Mexican Republic regarding the functioning and future reform agenda for the judiciary raised similar concerns and questions about precedents. ${ }^{7}$
[Rz 9] On closer inspection though, we find that the amount of information available to legal practitioners does not seem to be excessive compared to that available in other legal systems - in fact, quite the opposite. Second, for the common lawyer it is self-evident that precedents are models of decisions with variable degrees of authority, persuasiveness and «on point-edness», and as such cannot be used in an all-or-nothing way; they usually help practitioners in building functional maps of the law and in making inferences. The problem then is that Mexican legal practitioners treat precedents as if they were the same as legal rules laid down in codes, reinterpreting them through the cognitive-conceptual framework they acquired when in law school.
[Rz 10] What this understanding misses is that a system of precedents provides a more or less wide range of past decisions with varying degrees of authority. Their weight can be evaluated according to a set of complex considerations, both formal and substantive - precedents of lower courts are normally trumped by precedents of higher courts, older decisions normally by newer decisions, tangential decisions by on-point decisions, etc. Experience and «intuition», rather than strict rules, then tells a lawyer how to handle a conflict between a recent, but low level court decision and an older, but higher ranking court. Aspects that determine the weight also include

[^3]whether the case was decided by a slim majority or was an unanimous decision, and whether the specific part that is cited is core of the ratio or a mere obiter. ${ }^{8}$ Precedents are also sensitive to their relations to other precedents, in particular precedents often form clusters to make strong «fronts» that then needs stronger «attacks» from contradictory precedents than they would individually. In the (civilian) German legal system, this is known as «ständige Rechtsprechung» or «consolidated jurisprudence» - the recognition that sometimes a consensus emerges across a variety of cases over an extended period of time. This gives the position a considerably higher weight than a single precedent and can even trump precedents from a notionally higher-ranking court.
[Rz 11] Thus, precedents can be understood as past decisions providing context-sensitive models that point with variable force towards a certain direction, guiding future decisions. As such, precedents do not have all-or-nothing validity, but are better understood as having degrees of authority, soundness or force, and, as MacCormick and Summers point out, «this is a truth already understood in some quarters within common law systems, but the partial convergence of civil law systems [... ]requires us to face up to it frontally». ${ }^{9}$
[Rz 12] Here we argue that the perceived information overload that legal practitioners report in Mexico is the result of their image of the law and the corresponding cognitive toolbox they have at their disposal. The image of the law circulating within this legal system is that of classical legal positivism that depicts the law as a system of rules from which practitioners should identify those which apply to the particular case. ${ }^{10}$ The rules are valid or invalid and therefore are applicable or inapplicable, binding or not binding: in this model, there is no place for degree of force. As Duxbury argued: «precedents, unlike statutes, do not bind judges in an all-or-nothing fashion, that the binding force of a precedent is best explained not in terms of its validity (this being a non-scalar concept) but in terms of its authority (of which there can be degrees)». ${ }^{11}$ These schemata used by common lawyers $t$ make sense of precedents are not taught in Mexico. For example even the most authoritative introductory book for legal studies in Mexico only gives seven to the issue of precedents, the so-called jurisprudencia; and here too we find an immediate appeal to statutes when problems are encountered - for example, «when there is normative contradiction it is not possible that the incompatible precedents are both valid» or «determining if two contradictory precepts have or have not binding force is not a problem for logic but something that only positive law can solve». ${ }^{12}$ Maynez's language is that of (all-or-nothing) bindingness, validity and applicability, and in this account there is no room for evaluations of normative soundness that function as a matter of degree.
[Rz 13] Legal practitioners in Mexico seem to have deeply internalized - during their formative years - an image of the law incompatible with the way in which legal precedents work in a legal system. But common (or civilian) lawyers are not born, they are made. Studying legal education and the way in which it imparts certain cognitive traits on its «raw material» should therefore be, in our view, integral to both the jurisprudential question pertaining to the nature of legal knowledge and the comparative legal question regarding the most basic differences and commonalities between legal systems. As Jhering had emphasised, if we can prevent students leaving university

[^4]from having internalised an inappropriate image of law, we can hope to support the transition of a legal system such as Mexico's from a statute-based civilian system to a precedent-based system. How then can we turn students from «peaceful» academics into fighters who can marshal their precedents to the greatest effect and win battles on the mean streets of legal practice?

## 3 Let The Battle Commence

[Rz 14$]$ In this second part, we develop the intellectual context for our approach, tracing back the often intimate relation between war and law through the centuries. We travel to Scotland, obviously, and spend some time with the last large judicial battle on the British Isles

### 3.1 All is Fair in Law and War

[Rz 15] Jhering's notion that law and battle share structural similarities is by no means unique. In particular in common law countries do we find an understanding of the trial process that sees the interaction between the parties as a duel, the lawyers as the seconds and the judge as a neutral arbitrator. Karl Llewellyn, one of the most influential thinkers in the legal realist movement, famously described the «duelling canons of interpretation» with metaphors from fencing - for each «thrust» with one canon, there is a «parry» to block it ${ }^{13}$ - and elsewhere, using the ambiguity in the very word «canon», he stated that «With this it should be clear, then, why our canons thunder.» ${ }^{14}$ We will discuss Llewellyn's conclusions from his studies of US appeal courts later, and focus in particular on his attempt to reconcile the idea that while precedents can never force a unique decision, legal decision making is nonetheless not arbitrary. There is another reason why he is an interesting author for our purposes - born into a family of German immigrants, he attempted to join the German army at the outbreak of WWI, was refused due to his unwillingness to renounce his American citizenship, fought nonetheless with the Seventy-eighth Prussian Infantry and was wounded in service. ${ }^{15}$ Returning to the US, he promptly asked to join the US army once the States had joined the war against Germany - his previous conduct though resulted in a rejection from the US authorities as well. The ability to argue with equal fervour for both sides of a dispute, one might say, is an essential quality in a lawyer, though Llewellyn may have taken the notion rather too far. Even more relevant for our purpose though is the influence Jhering had on Llewellyn's thinking, ${ }^{16}$ an influence that became tangible in the transplantation of German legal thought into US law. Llewellyn took a lead in authoring the Uniform Commercial Code (U.C.C.). ${ }^{17}$ This Code did not just, or not even mainly, transplant German substantive law to the US. Rather, it introduced a new style of writing codes, and with that a new cognitive approach to reasoning with formal rules. In the past, codified law in common law countries was distinguished by its high degree of detail and prescriptiveness to make it «judge proof», that is to prevent the judiciary to revert to their preferred mode of precedent based reasoning as their co-

[^5]gnitive default. Teleological interpretation was discouraged. Llewellyn by contrast used general clauses liberally, forcing a rethink in judicial method and a promotion of purposive interpretation that was as radical - and for practitioners as unsettling ${ }^{18}$ - as that the Mexican judiciary is experiencing today.
[Rz 16] A second legal realist who contributed considerably to the understanding of law as a war-like activity was Llewellyn's fellow realist Jerome Frank, judge at the United States Court of Appeals for the Second Circuit. He contributed to the vocabulary of comparative law the distinction between «truth» and «fight» theories of legal procedure, linking the former to the continental European model of inquisitorial trial, the latter to the common law model of adversarial litigation. On this, he writes: «In short, the lawyer aims at victory, at winning in the fight, not at aiding the court to discover the facts.» Frank linked his analysis to the history of the institution of the trial, citing approvingly Vinagradoff's dictum that «an ancient trial was little more than a «formally regulated struggle between the parties in which the judge acted more as an umpire or warden of order and fair play than as an investigator of truth. $>^{19}$
[Rz 17] It is this last comment that we want to use as a springboard for a somewhat deeper analysis of the historical similarities between war and law. Wager of battle or judicial duel («Gerichtskampf») was a common method of Germanic law to settle certain types of disputes, and as ubiquitous on the continent as it was in Britain. The «wager of war» could involve a duel between individuals, but also entire groups of fighters lined up for battle. In Britain, the formal jury trial of the royal court replaced only slowly and incrementally the judicial wager of battle and the monopoly of the crown to exercise violence remained contested by powerful local interests for centuries. The clan system meant in particular for Scotland that the emerging state-centric legal order kept elements of the older trial by combat - indeed, as Hector MacQueen showed, the right to challenge an opponent to a duel may still be a formal part of the Scots law of evidence today, a common law right whose abolition may be outside the powers of Parliament. ${ }^{20}$
[Rz 18] The oldest documented case of a judicial combat in Britain was the trial of Wulfstan vs. Walter from 1077 between an «indigenous» Saxon noble and a member of the new ruling class. ${ }^{21}$ Trial by combat is listed as the main form of procedure between aristocrats in the Tractatus of Glanvill from 1187, a highly influential codification of the evolving «Anglo-Norman» law whose key innovations such as the system of writs cast a long shadow over the common law until today. ${ }^{22}$ This code too was an example of legal transplantation and the merger of different legal traditions, styles and ideals, mainly Anglo-Saxon and Norman legal concepts, though the role of Roman law in Glanville remains contested. ${ }^{23}$
[Rz 19] Soon after however, trial by jury began to replace trial by combat. Central to this development was the emergence of the legal profession as an independent and powerful professional body in the 13th century. Lawyers began to steer their clients actively away from the physical risk of a trial by combat, developing in the process highly sophisticated, if not sophistic, arguments and legal fictions that called for a trial by jury even in those cases when procedurally, a trial by

[^6]combat would have been appropriate. The modern understanding of the lawyer as a party to the process who has primarily the interest of his client at heart goes back to this time, and since dead clients are bad debtors, securing their survival at least until the proceedings were completed became their preeminent task. This development shaped the emerging procedural law, and some of its repercussions can still be felt today, for instance the role of the lawyer to advise the client in the plea bargaining process.
[Rz 20] Even clearer though is the origin of the modern lawyer as quite literally a «champion» for his side in the civil procedure of that time. There, woman, children and clergy were allowed to hire professional fighters to combat on their behalf. Documented is for instance that the household of Bishop Swinefield paid a certain Thomas of Brydges not only an annual retainer fee for acting as champion, salary and expenses (the Bishop seems to have been involved in quite a number of litigations) it also stipulated additional payments for each fight that Thomas won on behalf of his master ${ }^{24}$ - a «contingent fee» of the form hotly contested again in contemporary common law jurisdictions. ${ }^{25}$
[Rz 21] At the turn of the $13^{\text {th }}$ century however, trial by jury had largely replaced trial by combat - if not the duel between individuals, then at least the larger wager of battle. One of the last large judicial wagers of war took place 1396 in Scotland, in the «battle of the clans» in Perth. Considerable uncertainty surrounds this event, its historicity however is confirmed from a bill to the exchequer accounts that had an entry which states «For timber, iron, and making of a battlefield for 60 persons fighting on the inch at Perth, $£ 14: 25$ or 14 pounds 2 shillings.» Access to justice, even then, came at a price, though the true costs would only become apparent after the trial was over. Here we will tell but one version of the story. ${ }^{26}$ The dispute itself was a side issue in the 350 year feud over territory and cattle between the Chattan confederation on one side - an unusual, semi-permanent alliance of Scottish clans including the Clans Macpherson and Davidson - and Clan Cameron on the other.
[Rz 22] Having suffered bitter defeat at the Battle of Invernahavon, retaliation by the Camerons resulted in bloodshed so frequent and so violent that finally, King Robert III chose to intervene. He threatened to arrest the leaders of the warring factions, however, his generals found it impossible to execute their orders without risking their own armies - the central power still being weak and contested. Evoking the legal procedure of trial by wager, a «legal» solution was proposed. Each side would pick thirty warriors, armed only with swords. They would fight before the Court and the King sitting in judgement. Indemnity for all past offenses was promised to the loser, the victors however would get the property rights for the contested lands. A part of the river Tay was enclosed with a deep ditch to form an arena with seats for the spectators, King Robert sitting as judge on the field. ${ }^{27}$

[^7][Rz 23] A small problem presented itself immediately - Clan Chattan was one man short, and none of the Cameronians was willing to give up his place in the battle order and the chance for glory. At this point, a substitute volunteered who had no blood connection to the parties, a local blacksmith called Henry Smith, more famously known as Hal o' the Wynd His payment was to be half a French crown of gold, and a position for life if he survived. If a lawyer is someone willing to fight for money for an arbitrary stranger in a trial, then we can also think of Henry Smith as a proto-lawyer. With both sides now at parity, battle could commence.
[Rz 24] While we can't vouch for the historical accuracy, Sir Walter Scott, described the battle thus: ${ }^{28}$
«The trumpets of the King sounded a charge, the bagpipes blew up their screaming and maddening notes, and the combatants, starting forward in regular order, and increasing their pace, till they came to a smart run, met together in the centre of the ground, as a furious land torrent encounters an advancing tide.

Blood flowed fast, and the groans of those who fell began to mingle with the cries of those who fought. The wild notes of the pipes were still heard above the tumult and stimulated to further exertion the fury of the combatants.

At once, however, as if by mutual agreement, the instruments sounded a retreat. The two parties disengaged themselves from each other to take breath for a few minutes. About twenty of both sides lay on the field, dead or dying; arms and legs lopped off, heads cleft to the chin, slashes deep through the shoulder to the breast, showed at once the fury of the combat, the ghastly character of the weapons used, and the fatal strength of the arms which wielded them.»
[Rz 25] The end came quickly. An anonymous historian summarised the outcome 500 years after the event like this: ${ }^{29}$ «The encounter was maintained on both sides with inconceivable fury; but, at length, by the superior valour, strength, and skill of Henry Wynd, victory declared herself for the clan Chattan. Of them no more than ten, besides Wynd, were left alive, and all dangerously wounded. The combatants of the Clan Kay were all cut off, excepting one, who remained unhurt, threw himself into the Tay (River), and escaped to the opposite bank.» Only 12 of the initial 60 «party litigants» survived, amongst them Wynd, whose prowess at arms contributed considerably to the Chattan victory. Then as today, it pays to spend money on a good lawyer.
[Rz 26] While Clan Chattan received the coveted legal title to the land by Royal decree, the hope that the trial had ended the conflict was in vain. A short period of piece ensured as the best fighters on both sides had been slain, but soon the feuding would start anew. This battle, which had been orchestrated to end to tensions between the two rival clans, had thus only the effect of «suspending» actions for a number of years but it did nothing to eliminate the on-going feud in the future. There too may lie a lesson for the present - litigation rarely solves a conflict, it merely manages them.
[Rz 27] With the battle of the clans the tradition of wager of battle as a method of judicial dispute resolution disappears from the history books. Duels between individual litigants in court however

[^8]remained an option for centuries to come. Queen Elizabeth $1^{\text {st }}$ reign saw the judicial duel between Connor MacCormack O'Connor and Teig McGilpatrick O'Connor. Adam Loftus, Archbishop of Dublin, was one of the presiding Lords Justices in the case, along with Sir Henry Wallop in a trial that took place in Dublin Castle on 7 September 1583. ${ }^{30}$ The litigants had accused each other of treason, and the privy council had granted their wish for trial by combat. An account of the proceedings as observed by one of the Privy Councillors is given in the State papers Ireland 63/104/69:
[Rz 28] «The first combat was performed at the time and place accordingly with observation of all due ceremonies as so short a time would suffer, wherein both parties showed great courage by a desperate fight: In which Conor was slain and Teig hurt but not mortally, the more was the pity» Conor had been a «wild» Gaelic chieftain, Teig «semi-wild», that is in the parlance of the day willing to work with the English. Had Teig died as well, the property would have fallen to the - English - crown. Even in a trial by duel, then as today, ultimately the lawyers are bound the make the greatest profit.
[Rz 29] It is unclear when the last trial by duel in Britain took place. But we know that trial by combat remained on the statute books, mainly due to records of failed attempts to have it abolished. ${ }^{31}$ In 1774, and as a response to the Boston Tea Party, Parliament considered a bill which would have abolished private prosecutions of murder, the legal form most likely to result in trial by battle. It was successfully opposed by Member of Parliament John Dunning, who called the «appeal» (private prosecution) of murder» that great pillar of the Constitution». ${ }^{32}$ Here we see one of the reasons why trial by duel remained part of the legal process in the UK, but not on the continent: any attempt to monopolise legal powers by the state was met with suspicion, and the right to privately challenge criminals, not relying on a crown prosecutor, was part of this understanding that also saw the police officer as nothing else but a citizen in uniform, and the citizen as a plainclothes policeman, both with equal rights (but differing duties). ${ }^{33}$
[Rz 30] The issue came to the boil in the famous case of Ashford vs. Thornton. ${ }^{34}$ This case upheld the right of a defendant who had been acquitted in a case brought by the crown, and now faced a private appeal by a relative of the victim, to challenge the accuser to trial by battle. In 1817, Abraham Thornton was charged with the murder of Mary Ashford whom he had met at a dance. The next morning, she was found drowned in a pit, most likely victim of a sexual assault. In the absence of any direct evidence against Thornton though, the jury acquitted him. Mary's brother launched a private appeal. Thornton then claimed the right to trial by battle, The judges, deciding on this request, granted it despite their misgivings:
Lord Ellenborough:
«The discussion which has taken place here, and the consideration which has been given to the facts alleged, most conclusively show that this is not a case that can admit of no denial or proof to the contrary; under these circumstances, however obnoxious I am myself to the trial by battle, it is the mode of trial which we, in our judicial character, are bound to award. We

[^9]are delivering the law as it is, and not as we wish it to be, and therefore we must pronounce our judgment, that the battle must take place.> ${ }^{35}$
[Rz 31] The judges however also came up with a solution that ultimately avoided the battle in this case, leaning on Ashford to grant Thornton a release without obligation to return to court. His lawyers had no illusions who would win that fight, the brutal and experienced fighter Thornton, or their bookish client. In a letter to his clerk, he wrote: «I am very apprehensive our poor little Knight will never be able to contend the Battle with his brutish opponent.» ${ }^{36}$ Common sense prevailed, and Ashcroft withdrew the accusation. The case however lives on, if in disguise - it provided the inspiration of the duel scene in Sir Walter Scott's Ivenhoe. ${ }^{37}$
[Rz 32] Parliament abolished wager of battle shortly after. While this should have been the end of the story of trial by combat, this underestimates the ingenuity of the British citizen. In December 2002, a 60-year-old mechanic challenged the Driver and Vehicle Licensing Agency over a $£ 25$ fine. He claimed a right to a trial by combat under the old law, arguing that its repeal was not constitutional. The DLVA was asked to nominate a «champion», the fight would be to the death, using «samurai swords, Ghurka knives or heavy hammers». This claim was however denied by a court of magistrates in Bury St Edmunds, and he was further fined ${ }^{38}$
[Rz 33] While we find trial by combat also in medieval Germany and France, there it disappeared much earlier than in Britain, and with much less of a conceptual legacy. ${ }^{39}$ We indicated some of the reasons above: Establishing a judicial monopoly of the state was in the UK a slow, evolutionary process that was at every step opposed not just by powerful local interest, but also by a stronger integration of the populace in the justice system, from the role of the juror to the citizen as «special constable». We also noted the much more prominent role of the legal profession, in particular trial lawyers, in shaping the procedural law in the UK. This also found its expression in the structure of legal education. In the UK, training young lawyers remained until very recently a prerogative of the legal profession; training was vocational, on the job and by «battle hardened» practitioners. By contrast, legal education on the continent became a role for universities and academics, the goal of the education a position as a judge, whose overriding duty to the state put him in the position of «peacemaker» rather than «warrior». In the UK, law degrees are accredited by the legal profession, the Law Societies of England and Scotland respectively, in Germany, examination is by the state and the judiciary continues to play a decisive role in shaping the curriculum. German professors often hold position as judges, their UK counterparts very rarely, but the absence of the habilitation and a tradition of academic legal writing facilitates the vertical movement of experienced litigators into the academy.
[Rz 34] These differences too are behind the picture that Jhering lamented in our introductory quote. Now, it may seem a bit unfair to juxtapose the mild mannered academic Jhering with the violence of the «battle of the clans». Surely, for all his appeal to the concept of «struggle», he did not mean to equip students with swords and these days, Health and Safety regulations would surely prevent this. Yet, when he compares legal disputes with wars between states, and with

[^10]duels between knights, he reminds us also of the pedagogical value of these comparisons: «Even in the case of the action at law, there was a time when the parties to the action themselves we called on to enter the lists, and when the true meaning of the struggle was thus made to appear.» To revel the «true meaning» behind the nature of the trial, but without injuring our students in the process, we want to explore if we can revive through digital visualisation the combative sprit of legal argumentation and to realign the modern practice of trial court reasoning with the judicial battle from which it originated. This will be the topic of the next paragraph.

## $4 \quad$ Battle Joined

[Rz 35] On the basis of the discussion above, we will now propose an way to represent case based reasoning that emphasises the adversarial use of precedents of different weight. History, and more specifically military history, has for a long time used visualizations that match all the above criteria in the form of the ubiquitous battle maps. These visualizations typically develop a semantic that is sufficiently constraint to allow a degree of standardized interpretation.
[Rz 36] A typical example looks like this:
Figure 1: Explanation of «attack in oblique order» ${ }^{40}$

[Rz 37] The different size of boxes and arrows is used to describe different strengths of a unit and different strengths of an attack respectively. This does not merely help to depict a historical battle

[^11]- it is also used in the training of officers, playing a causal, explanatory role why one general defeated the other. The skill that the officer takes from this is the ability to see, immediately and without the need for complex calculations, how a combination of forces and environment creates winnable and indefensible positions and strategies. It is this causal, explanatory element aided by visualization that we are most interested in here. In a legal setting, we can now think of precedents as individual units. The difference in size corresponds to the «objective» strength of a precedent (for example, the Supreme Court versus the Court of First Instance), whereas the size of the arrow expresses the strength of the use of the precedent in a given context - an onpoint precedent will be stronger than a tangential one, for instance. In the example, we can see also how a learner would immediately identify the cluster on the right-hand side - a form of «cohesiveness» that creates a centre of gravity and that goes beyond a simple «support relation», so that all units support each other. Clusters of precedents are used in the same way in legal argumentation. They work not because there is an explicit linear support relation in the sense, for example, of Toulmin's warrant or support between them, but because their joint effect gives additional strength to the argument that is proposed.
[Rz 38] This type of «clustering» plays a crucial role in Llewellyn's own analysis of the persuasive force of precedents, and plays a crucial role in explaining why court decisions, though short of logically necessary, are far from arbitrary. The same holds true with battles - while it is possible that they could have ended differently from the way they did, we can also see how more and more unlikely a divergent outcome becomes once key decisions are taken.
[Rz 39] In battles fought between coalitions, visual markers can be used to distinguish internal subdivisions within a side - and the learner will begin to «see» and understand them as a possible source of weakness, despite their possible utility. In the same way, persuasive but non-binding precedents from other jurisdictions can be marked up as «auxiliary troops» within a coalition. Procedural moves at the initial stage of a hearing finally correspond to typical skirmishing attacks that do little but prepare the ground for the real issue, even if they sometimes can strike lucky.
[Rz 40] A quick example, based on the case of California vs. Carney, can help illustrate this approach: the rule to be interpreted requires a warrant for the search of a person's dwellings. Carney is the example used by Kevin Ashley in his highly influential HYPO, CATO and LARGO suit of legal AI systems which all involve argumentation visualisation. ${ }^{41}$ We discussed the strength (and possible weaknesses) of this approach elsewhere, like most other argument visualisation tools, it depicts logical connections, but not «argumentative weight» of the type we are interested in. ${ }^{42}$
[Rz 41] What were the facts of Carney? Carney was suspected of selling marijuana from his Dodge Mini Motor home, in which he lived. While Carney was away, one officer entered without a warrant and searched the vehicle, finding drugs. Carney motioned to suppress the evidence, since warrantless searches of a person's home are prohibited under the US constitution. The motion was denied by the trial court. The California Court of Appeal affirmed, finding that the automobile exception that allows searches of vehicles without a warrant also applied to a motor home. The California Supreme Court reversed, holding that there is a greater expectation of privacy in a motor home when also used for living quarters, so the automobile exception did not apply. The legal question then was whether motor homes are dwellings for the purposes of the law.

[^12][Rz 42] In the trial, the prosecution proposes a test: if the place that is searched has wheels and is self-propelling, then no warrant is required, as it is a car. The justification for this is based on principles, which in turn are derived from a history of precedents. One principle is that rules should be clear-cut and nothing seems easier than counting wheels. The defence offers an alternative test: if the place that is searched is used as a home and has the features commonly associated with one (such as a bed), then a warrant is required, as it is a home. Again, principles derived from precedents support this view, here the principle that privacy needs protecting. At the oral presentation, the judge then queries both tests using hypotheticals. For example, he asks of the prosecution: assume a case (the hypothetical) where the motor home has wheels and a motor, but is on a permanent parking lot, has gas pipes and electricity wires permanently attached to it, and cannot move without causing damage. Would you still want to apply your test and treat it as a car? At this point, the prosecution can either stick to its guns and argue that this case also should be decided under its proposed test (and hence be deemed a car) or it can refine the test by excluding, for example, situations where the car is permanently attached to an unmovable structure and in a way becomes part of it.
[Rz 43] This type of reasoning can be found frequently in SCOTUS hearings. In addition, it also plays a major role in US teaching practice, linked to the «Socratic model of education». ${ }^{43}$ Ashley argues that it is a suitable tool to explain and motivate rule choice and contextual and policy analyses. ${ }^{44}$ Citing from the Best Practices for Legal Education, he supports the view that open hypotheticals are particularly suitable «to demonstrate complexity and indeterminacy of legal analysis», the very issues the Mexican legal profession is struggling with. Figure 2 shows how we can translate this aspect of legal arguments into Battle maps.

Figure 2: Carney vs. US


[^13][Rz 44] Carney is «hiding behind» the Fourth Amendment, which secures a principal value privacy (for obvious semiotic reasons, using a battle that involves a siege, with Carney the party under siege, would have also been a possibility, the Fourth Amendment creating legal walls that correspond to the physical wall of his car). The social value underpinning the Fourth Amendment is privacy - values are indicated by the boxes with a cross bar. The prosecution is using a lead case, Carroll vs. US, which established the vehicle exception, to pierce the Fourth Amendment protection. However, its case is supported by a whole range of other precedents, all of them mentioned, but none of them later discussed in the decision - they merely help to form the «centre of gravity» we talked about above. These cases include US vs. Ross and Cardwell vs. Lewis.
[Rz 45] At this point counsel for the defence launches a counter-attack in the form of a hypothetical: what would the case be if a motor home had a tent attached to it? Would the tent be protected, but the car not?

[Rz 46] The aim of the attack by the hypothetical, visualized as round blobs on the left (hypotheticals are not precedents, so we use a symbol other than boxes), is to «overextend» the precedent and lure it into territory where it can be attacked by the blue forces. By conceding, for example, that under the proposed interpretation of Carroll vs. US, the tent too would be unprotected, the precedent is isolated from its supporting, more conservative cases. This allows it to be attacked by the privacy principle that underpins Carney's case. Here is how a successful development would have looked like: Carroll takes the bait, overextends itself and is finally defeated by the privacy policy rationale.

[Rz 47] Maps are potentially semantic-rich environments - depending on the graphic skills, the environment can also be used to represent relevant features. Very common are indicators of height, a natural choice given the importance of holding the high ground in battles. So important is this feature of military campaigns that it found its way into ethical discourse, and the spatial representation of maps would make it possible to graphically represent the idea of «holding the moral (or legal) high ground», putting an additional (and instantaneously visible) burden on an attacker.
[Rz 48] These representations of battles are common and predate computer animations by a considerable amount of time. What computers add in value though is their ability to incorporate them into animations. Particularly good examples can be found at the Art of Battle website. The added dynamic element will be, we hope, a particularly good teaching tool to aid the transition from the fixed, document-based procedure of the past to Mexico's embrace of oral, adversarial and dynamic hearings that coincided with the introduction of precedent-based reasoning. As a next step, though, we hope to represent a number of interesting cases both as animated and static battle maps, using a variety of representation forms. Following this, we hope to test these on a student population, both as passive consumers and active creators of these maps. Should there indeed be a measurable benefit, the issue of balancing the demands of computer readability with the desirable freedom of the map users to develop representations that suit their personal cognitive style would have to be addressed. Jerome Frank, despairingly, characterized legal procedures as trial by combat. If this analysis is correct, and we think it is, then the techniques and methods that have been used to train new commanders should also be suitable to train new judges. Our approach hopes to make the first small contribution in this direction.

## 5 Literatur

Anon, The history of the feuds and conflicts among the clans in the northern parts of Scotland and in the Western Isles; from the year M.XXXI. unto M.DC.XIX. To which is added, A collection of curious songs in the Gallic language, published from an original manuscript, 1780

Ashley, K., «Teaching a process model of legal argument with hypotheticals». Artificial Intelligence and Law, 17, pp. 321-370, 2009

Ashley, K., Desai, R. and Levine, J.M., «Teaching case-based argumentation concepts using dialectic arguments vs. didactic explanations», in S.A. Cerri, G. Gouardères and F. Paraguaçu (eds.), Proceedings of the 6th International Conference on Intelligent Tutoring Systems, ITS 2002, Springer: Berlin 2002, pp. 585-595
Atiyah, P.S. and Summers, R.S., Form and Substance in Anglo-American Law: A Comparative Study in Legal Reasoning, Legal Theory and Legal Institutions, Oxford University Press: New York 1987

Barnes, T. G., Shaping the common law: from Glanvill to Hale, Stanford University Press: Stanford 2008, pp. 1188-1688
Cáceres, E., Psicología y Constructivismo Jurídico, in M. Muñoz de Alba (ed.), Violencia Social, UNAM: Mexico City 2002, pp. 335-342
Cox, R., «Representation construction, externalised cognition and individual differences». Learning and Instruction, 9, 2009, pp. 343-363
Danzig, R., A Comment on the Jurisprudence of the Uniform Commercial Code, 27 Stan. L. Rev., 1975, p. 621

Duxbury, N., The Nature and Authority of Precedents, Cambridge University Press: Cambridge
Dyer, G., Ivanhoe, Chivalry, and the Murder of Mary Ashford, Criticism 39.3, 1997, pp 383-408
Fitz Gerald, W., The duel between two of the O'Connors of Offaly in Dublin Castle on the 12th.
Sept., 1583. The Journal of the Royal Society of Antiquaries of Ireland, Ser. 5, Vol. XX, 1910, pp. 1-5

Garcia Maynez, E., 2000. Introduccion al Estudio del Derecho, Porrua: Mexico City 2008
Grise, J. E., Gelter, M. and Whitman, R., Rudolf von Jhering's influence on Karl Llewellyn, Tulsa L. Rev. 48, 2012, pp. 93-143
Hall, J., Trial of Abraham Thornton, William Hodge \& Co: Edinburgh and London 1926
Jhering, R.v., The Struggle for Law, trans Lalor, J. J., Lawbook Exchange: Union, NJ 1919
Kritzer, H. M., Lawyer fees and lawyer behavior in litigation: What does the empirical literature really say. Tex. L. Rev. 80, 2001, p. 1943
Larkin, J.H. and Simon, H.A. 1987. «Why a diagram is (sometimes) worth ten thousand words». Cognitive Science, 11, pp. 65-100
Legrand, P., «How to compare now». Legal Studies, 16, 1996, pp. 232-42
Legrand, P. and Machado, A., Are civilians educable? Legal Studies, 18, 1998, pp. 216-30
Llewellyn K. N., The bramble bush, Oceana: New York 1930
Llewellyn K. N., Remarks on the Theory of Appellate Decision and the Rules or Canons about how Statutes are to be Construed, 3 VAND. L. REV., 1950, p. 395
MacCormick, D.N. and Summers, R., Interpreting Precedents: A Comparative Study, Ashgate: Dartmouth 1997

MacQueen, H., Desuetude, the cessante mazim and trial by combat in Scots law Journal of Legal History, 1986, pp. 90-97
Mackintosh Shaw, A., The clan battle of Perth in 1396: An episode of Highland history: With an enquiry into its causes, and an attempt to identify the clans engaged in it, W.P. Griffith: London

Megarry, R. E., E Garner, B. A. (eds.). A new miscellany at law: Yet another diversion for lawyers and others, Hart Publishing: London 2005
Moorhead, R., Conditional fee agreements, legal aid and access to justice, U. Brit. Colum. L. Rev. 33, 1999, p. 471
Neilson, G., Trial by Combat, William Hodge \& Co. Glasgow 1890
Re, E. D., The Roman Contribution to the Common Law, Loy. L. Rev. 39, 1993, p. 295
Schafer, B., Crowdsourcing and cloudsourcing CCTV surveillance, Datenschutz und DatensicherheitDuD 7, 2013, p. 434-439
Scott W. R., St. Valentine's Day; or, The Fair Maid of Perth (Chronicles of the Canongate, Second Series), Cadell and Co.: Edinburgh 1828

Shoenfeld, M., «Waging battle: Ashford vs. Thornton, Ivanhoe and legal violence», in Simmons, Clare, Medievalism and the Quest for the «Real» Middle Ages, London, Routledge, 1997, pp. 61-86

Stuckey, R., Best Practices for Legal Education, CLEA: New York 2007
Sinclair, M., Only a Sith Thinks Like That : Llewellyn's' Dueling Canons,'Eight to Twelve, New York Law School Law Review, 52, 2006, p. 919 ff.
Suprema Corte de Justicia de la Nación, Dirección General de la Coordinación de Compilación y Sistematización de Tesis, Libro Blanco de la Reforma Judicial: Una agenda para la justicia en México (Mexico City: Suprema Corte de Justicia de la Nación), 2006

Suprema Corte de Justicia de la Nación, Estudio sobre la reforma judicial integral. Diagnóstico ciudadano y conclusiones de los foros. Problemario: Problema 19 (Mexico City: Suprema Corte de Justicia de la Nación) 2008

Thayer, J.B., «The Older Modes of Trial, 5 Harv. Law Rev. 45, 1891, p. 65
Teubner, G., How the law thinks: toward a constructivist epistemology of law, Law \& Society Review, 23, 1989, pp. 727-758

Twining W., Karl Llewellyn and the Realist Movement, Weidenfeld and Nicolson: London 1973
Vogel, T., Fehderecht und Fehdepraxis im Spätmittelalter am Beispiel der Reichshauptstadt Nürnberg, Lang: Frankfurt/M. 1998
Voyatzis P., Schafer B., The Battle of the Precedents: Reforming Legal Education in Mexico Using Computer-Assisted Visualisation in Zenon Bankowski, Paul Maharg, Maks Del Mar (eds.), The Arts and the Legal Academy Beyond Text in Legal Education Farnham, Ashgate, 2013, pp. 149-168 Whitman, J., Commercial Law and the American Volk: A Note on Llewellyn's German Sources for the Uniform Commercial Code. Yale Law Journal 97.1, 1987, pp. 156-175

Burkhard Schafer, Professor for Computational Legal Theory, SCRIPT Centre, School of Law, University of Edinburgh, Edinburgh EH8 9YL UK. Panagia Voyatzis, Research Student, School of Law, University of Edinburgh, Edinburgh EH8 9YL UK.


[^0]:    Citation: Burkhard Schafer / Panagia Voyatzis, «The End of the Law is Peace. The Means to this End is War»: , in: Jusletter IT next: 11. September 2014 - Lachmayer

[^1]:    1 Der Kampf um das Recht. Vortrag des Hofrates Professor Jhering, Gehalten in der Wiener Juristischen Gesellschaft am 11. März 1872 notes from a stenograph available at http://www.koeblergerhard.de/Fontes/ JheringDerKampfumsRecht.htm. The English Translation of the published version, «The struggle for law» omits the reference to legal education.

[^2]:    2 Jhering1919.

[^3]:    3 Suprema Corte de Justicia de la Nación. 2006 p. 166.
    4 Ibid, pp. 166-168.
    5 Suprema Corte de Justicia de la Nación, 2006 p. 168.
    6 Corte de Justicia de la Nación, Libro Blanco de la Reforma Judicial,pp. 166-169.
    7 Senado de la República, 2007.

[^4]:    8 Аtiyahand Summers1987 pp. 115-116.
    9 MacCormick and Summers1997, p. 544.
    10 Cáceres 2002.
    11 Duxbury2008 p. 23.
    2 Garcia Maynez2000: pp. 68-75.

[^5]:    13 Llewellyn, 1950; see also Sinclair 2006.
    14 Llewellyn 1930 p. 6.
    15 Twinig1973 p. 91ff.
    16 Grise, Gelter, and Whitman 2012.
    17 See e.g. Whitman 1987.

[^6]:    18 For a typical criticism see DANzig(1975).
    19 Frank 1950.
    20 MacQueen 1986.
    21 Thayer, 1891.
    22 Barnes, 2008.
    23 See e.g. Re, 1993.

[^7]:    24 Neilson 1890 pp. 46-51.
    25 See e.g. Moorhead, 1999; Kritzer 2001.
    26 For a fuller account, see http://unknownscottishhistory.com/pdf/TheBattle of the North Inch.pdf; dated, but still an important source is SHAW1874.
    27 The ideal of public trial is of course another traditional feature of common law litigation, and indeed another of the changes Mexico is introducing. As William Blackstone, the great English law commentator, would write in 1789: This open examination of witnesses viva voce, IN THE PRESENCE OF ALL MANKIND, is much more conducive to the clearing up of truth, than the private and secret examination taken down in writing before an officer, or his clerk, in the ecclesiastical courts, and all others that have borrowed their practice from the civil law. William Blackstone, Commentaries, 3: pp. 349-67, 370-81, 383-85.

[^8]:    28 Walter Scott, St. Valentine's Day; or, The Fair Maid of Perth (Chronicles of the Canongate, Second Series) Edinburgh: Printed for Cadell and Co., Edinburgh; 1828. Chapter 34.
    29 Anon, 1780.

[^9]:    30 Fitz Gerald1910.
    31 Megarryand Garner2005, p. 62.
    32 Shoenfeld 1997 p. 61.
    33 Schafer 2013.
    34 Ashford vs. Thornton(1818) 106 ER 149.

[^10]:    35 Hall1926 p. 179.
    36 Ibid at p. 175.
    37 Dyer1997.
    38 http://www.telegraph.co.uk/news/uknews/1416262/Court-refuses-trial-by-combat.html.
    39 See e.g. Vogel 1998.

[^11]:    40 From http://www.theartofbattle.com/, with kind permission. This website has excellent animated battle maps, the reader can get a very good idea of how our ultimate ambition is, though so far their skills surpass ours.

[^12]:    41 See e.g. Ashley2009, Ashleyat al 2002.
    42 Voyatzisand Schafer 2013.

[^13]:    43 Stuckey2007 p. 214.
    44 Ashley 2009.

