I. INTRODUCTION

Not long ago, socio-legal scholars were engrossed in the question of whether there exists a discrete terrain of knowledge that can be called "legal knowledge". Indeed, as the question raised for discussion at this year's forum implies, the analysis has moved well past this initial query of existence to focus on ways of identifying and theorizing the make up of that which is now broadly understood to be legal knowledge. Evidence that legal knowledge has been accepted, at least in some academic circles, as a definable, knowable entity can be found in the proliferation of knowledge management technologies and the increased use of legal knowledge systems by judges, lawyers, law schools and law firms.¹

This paper invites deeper consideration and critical discussion around the development of information systems designed to represent legal knowledge for the propose of providing legal professionals with a resource tool for information sharing, decision-making, cost efficiency and job training. I argue that within the development of information management systems, legal knowledge is conceptualized within a strict functionalist framework and fails to account for the historical, moral, ideological and practical origins of law, the importance of context in understanding decision-making processes, and the role of extra-legal actors/factors in the dynamics of legal decision-making and the constitution of legal knowledge. My primary critique, then, has to do with claims of representativeness as much as with the representations themselves.

I begin by exploring one working model for contemporary legal knowledge engineering, and in particular legal information engineered to represent "responsibility knowledge". From there, I trace several historical representations of responsibility knowledge in order to problematize IT frameworks based on functionality, cause and effect. To elucidate the importance of historical reflection, I draw on evidence from early 20th century Canadian murder cases to show the narrative quality of knowledge formation and information, and in particular the morally contingent nature of legal decisions. These cases suggest that knowledge systems based wholly on traditional logic, precedents, outcomes, reported expert evidence, and jurisprudence do not approximate a socially meaningful representation of legal knowledge. Therefore, we ought to be concerned about claims of representation and the potential impact of knowledge management technology on the way in which law will be written, interpreted and practised in the future. Most importantly, however, I propose we return and stay tuned to the fundamental question—what is legal knowledge?

II. "ENGINEERING" LEGAL KNOWLEDGE

Over the last decade there has developed a growing literature in the field of information technology and artificial intelligence that engages the challenges of "knowledge acquisition" and "knowledge management". Knowledge

---

2 Much research is still to be done on the implementation and use of legal knowledge management systems in the context of law firms. Some work has been done in other professional and business contexts, such as banks. For a good example of research which considers how representations of organizational knowledge are constructed and used in work settings, see: John Hughes, Mark Rouncefield and Peter Tolmie, "Representing Knowledge: Instances of Management Information" (2002) 53 British Journal of Sociology 2 at 221–238.

3 Louise Earl, Knowledge Management in Practice in Canada, 2001 (Catalogue No. 88F006XIE No. 07), Statistics Canada: Science, Innovation and Electronic Information Division
management has been defined and used in many different ways, but simply put it is "a combination of technology for organizing knowledge and techniques for using it better". According to Statistics Canada, most businesses, ranging in size from 1–19 workers to large firms of over 250 workers, employ on average of 10–15 knowledge management practices.

In response to initiatives in the U.S., U.K., Europe and Canada to establish "knowledge banks" as resource tools for lawyers, law firm personnel, and junior judges, IT specialists have been working hard to code and decode what they consider to be the essential elements of legal knowledge. This technology of knowledge identification, selection, omission and codification has been referred to as "Legal Knowledge Engineering". According to Benjamins et al:

Any computer system that provides some kind of support to judges and lawyers should be based on a common, agreed upon model of law. The "law" we do here not only means as it is described in the books, but we mean the set of knowledge and legal professionals use while performing their jobs. This includes normative, jurisprudential and experiential knowledge. Especially experiential knowledge is hard to get and represent, as it involves gathering knowledge in the field.

The process of "gathering" diverse forms and sources of information from "the field" into a specified legal knowledge system is shaped by the decided end purpose, or function, of the knowledge system, which in this case is identified as information sharing, efficiency and job training. Knowledge engineering requires the selection of features that are assumed to be relevant and non-relevant to the specified task. As well, "Limited availability of resources, such as

(2003). This survey measured the extent to which knowledge management practices have been used by Canadian businesses (at 9). The concept and practice of knowledge management became popular in the early 1990s as a way for corporations to organize and use "intellectual capital", which is said to consist of "the sum of everything everybody in a company knows that gives it a competitive edge" (Thomas Stewart quoted in Lois Gander, ibid. at 2).

4 Buckler, supra note 1 at B12.
5 Earl, supra note 3 at 11–13.
6 A U.S. firm called "LRN, The Legal Knowledge Company" established in 1994, claims to lead the "legal knowledge revolution" by providing their clients (law firms) with a knowledge-sharing platform—a knowledge bank—that would allow "legal teams to actively infuse legal and ethical knowledge into employees' daily decision-making at an enterprise-wide level". Retrieved 15 April 2004, from http://www.lrn.com/about/html.
8 Supra note 1 at 2.
time, money, [and] labour, may all cause fragments of knowledge to be left out [of] the system.9

This process of selecting, omitting and compressing information into bits of legal knowledge contained in domain specifications—what Visser calls "knowledge compilations"—raises a number of concerns regarding claims of representation. According to Visser,

During the development of a knowledge system on of the main problems is the knowledge acquisition: expert [legal] knowledge is characterised by inaccessibility and incompleteness. The problem is known as the knowledge acquisition bottleneck. ... If knowledge can only be obtained from an expert in compiled form, then knowledge compilations in specifications are inevitable.10

Knowledge compilations are shortcuts that edit information deemed pointless or tedious to the domain developer. Again, according to Visser, "This means that the knowledge compilation cannot be used for problem-solving tasks that need to have access to the fragments of knowledge underlying the compilation."11 In losing access to underlying "fragments of knowledge", technological representations of legal knowledge import the falsehood that legal decision-making is, in its ideal form, logical, predictable and void of morally directed forms of reasoning. Of course, it could be argued that the exercise of engineering legal knowledge is itself a reflection of moral reasoning. Yet, the strategic glossing over of questions about the moral/ethical origins of law and legal knowledge seems to be primarily about efficiency and coping with difficulties in conceptualizing terms that require deontic logic.

The inability of legal knowledge systems to accommodate and represent forms of ethical inquiry can be seen in the challenges posed by the legal use of words such as "permitted" or "ought." For instance, in order to grasp the concept that an accused ought to have known that an act was wrong, at least two moral exchanges are required. The first is in deciding what ought to be wrong; the second is in deciding which acts or omissions we, as law-abiding citizens, ought to know are wrong. Therefore, assessing whether a certain aspect of the legal domain should be "conceptualized" as legal knowledge is bound by the limitations of technology in this case.

To get around this technical obstacle, it has been argued that for many legal knowledge systems that "one does not need to distinguish a legal modality, such as 'ought' to or 'permitted' (thus eliminating the need for deontic logics)."12

---


10 ibid. at 3.

11 ibid.

12 Bench-Capon, quoted in ibid.
Again, this denies deeper moral/ethical relationships between law, justice, culture and decision-making in order to privilege the use of traditional functional logics in representing legal knowledge. As Stamper points out, "[T]raditional logics rely on symbolic representations that have only very weak connections to the real-world concepts they intend to denote."\textsuperscript{13} The representation of legal knowledge within a functionalist frame of reference is pervasive, and perhaps necessary, in the context of knowledge management technology. As a result, the question for IT specialists seems to have quickly moved past "what is legal knowledge" to exploring how they might best acquire and represent legal knowledge. In fact, there is little evidence to suggest the former question was ever considered outside of the task of system functionality.

One of the most comprehensive legal knowledge models was developed by Andre Valente in the mid-1990s. According to Valente's "Functional Ontology of Law" there are six ontologies of legal knowledge, geared towards specific tasks, that operate within the broader social function of law. Here it is assumed that the legal system functions as a whole in order to achieve a set of "social goals". Law is regarded as a "social device operating within society and on society, and whose main function is to regulate social behaviour".\textsuperscript{14} Briefly, the six ononomies of legal knowledge described in Valente's model are as follows:\textsuperscript{15}

\textbf{Normative Knowledge}: Describes knowledge that prescribes behaviour and defines a standard of social comparison. Normative knowledge determines that which is allowed, legal, desirable, permitted and what is disallowed, illegal, undesirable, and prohibited. Here 'normative' is equated with 'legal.'

\textbf{Meta- Legal Knowledge}: Specifies how the normative status with respect to the normative system is built and determines which legal knowledge is valid. In this context, validity is a concept that can be used for specifying both the dynamics of the legal system and its limits, and where a valid norm is the one which belongs to the legal system.

\textbf{World Knowledge}: Functions as the interface between the real world and the legal world. It is intended to be a model of social behaviour that takes into account common sense reasoning. The world model is composed of two related types of knowledge: "definitional knowledge", used to describe the ideal world it

\textsuperscript{13} See R.K. Stamper (1991) at 229, as referenced in \textit{ibid.} at 4.


\textsuperscript{15} The following descriptions of categories of legal knowledge are summarized from \textit{ibid.}
defines, and "causal knowledge", used to describe the static cause-effect relationships. According to this model, the view imposed in the law about behaviour is thus largely a static description of possible or relevant behaviours, but the full reasoning about them is left to "common sense."

Responsibility Knowledge: Follows the commonsense principle that "one is only responsible for what one causes." Responsibility knowledge assigns or limits the responsibility (accountability, guilt, liability) of an agent over a given disallowed state or action.

Reactive Knowledge: Used to reach a conclusion about legality, based on normative knowledge, and the blameworthiness of the agent, based on responsibility knowledge. Specifies which legal reactions should be taken and how.

Creative Knowledge: The knowledge through which the legal system regulates, structures and organizes itself, such as by the legislation of new entities (laws) that did not previously exist in the world, or the design of new departments or organizational bodies.

This is only a synopsis of Valente's much more detailed model. My aim is simply to show the ways in which different knowledge formations have been separated from each other. This careful allocation of legal knowledge into functional task-oriented components produces a conservative and exclusionary representation of law; it is remarkably ahistorical and does not account for the role of non-legal actors (experts, religious organizations, lay public, education, media) in the maintenance, production and mobilization of legal knowledge. Nevertheless, this model—built on assumptions about shared values, the order of things and the stability/utility of socio-legal relationships—offers a provocative and important analytical site.

First, it would be useful to evaluate the ways in which legal knowledge has been conceptualized, represented, or engineered as the case may be, for different purposes and from within and across different disciplinary fields. Second, by unravelling the complex domain of legal knowledge into smaller identifiable threads or ontologies, we may be able to home in on some of the

---

16 In information science an ontology refers to "a shared and agreed explicit representation of some domain." (Benjamins and Contreras, Supra note 1 at 2) It represents the hierarchical structuring of knowledge about things by subcategorizing them according to their essential qualities. Accordingly, a set of agents that share the same ontology will be able to communicate about a domain of discourse (law) without necessarily operating on a globally shared theory.
intricacies of discrete legal knowledge formations and their subsequent representations.

According to Valente and Breuker;

It is impossible to represent the world in its full richness of detail. In order to represent a certain phenomenon or a part of the world (which is called a domain), it is necessary to restrict the attention to a small number of concepts which are meaningful and sufficient to interpret the world and provide a representation adequate to a certain task or goal at hand. As a consequence, a central part of knowledge representation consists of elaborating a conceptionalization: a set of abstract objects, concepts, and other entities which are assumed to exist in certain domain, as well as the relations that may hold between them. Particularly relevant are domain ontologies, i.e., ontologies which describe a part of the world or a human activity such as medicine, law, or engineering.17

It is therefore clear that the representation of law sought in this model—and it seems in information systems generally—is intended to be limited to "a representation adequate to a certain task or goal at hand."

The third reason I find information technology to be an important site for analyzing contemporary thinking on legal knowledge is that beyond providing insight into a growing commodification and exploitation of Western legal knowledge, artificial intelligence designed to approach a functional representation of legal knowledge, nevertheless, forces some inquiry into the very nature of the function, constitution, and domain boundaries of legal knowledge, even if such considerations are consistently restricted to a task-based analysis. If the goal of information management systems is to appropriate and approximate legal knowledge in a compiled, usable form in order to expedite legal work and simplify legal decision-making, then how legal knowledge comes to be represented in the form of knowledge banks or knowledge management systems will be a reflection of these marketing objectives.

In order to examine more closely the limitations of modern-day attempts to engineer legal knowledge, I will focus in on the category of legal knowledge that has been associated with the task of deciding legal responsibility—what Valente termed "responsibility knowledge". The functional conceptualization of responsibility, and the ontology designed to describe responsibility knowledge, maps out the processes through which legal responsibility is presumably assigned or limited in each case scenario. It is based fundamentally on a cause-effect model, intended to enable the prediction of just findings based on the decided facts of a given case. According to Valente and Breuker,

This mechanism has rather practical motives. Given the innumerable problems in establishing, proving and reasoning with causal connections, the assignment of legal responsibilities which bypass these connections to some extent is used to give more

17 supra note 14 at 1–2.
precision in situations where the use of the commonsense or moral concept of responsibility by the law can lead to inconsistencies or undesired results, or when there is a practical interest (based on an implicit or explicit policy) that a frontier should be drawn so that it becomes easier to define what are the limits of responsibility under certain circumstances.\(^1^8\)

While the authors acknowledge that causal knowledge requires a static description of the world and relationships in order to determine who, or what has caused a given state of affairs—and, therefore, who can be held responsible—they prefer this more practical approach to alternative forms of reasoning based on common sense morals.\(^1^9\) According to this model, the role of responsibility knowledge is therefore to interfere with the \textit{prima facie} connection between causing and being responsible and to provide a path of logic away from the basic principles of moral blame.

This suggests, mistakenly, the possibility of conceptualizing the notion of legal responsibility outside of a moral framework; that interpretations of cause-effect relations are based more on scientific objectivity than on common sense; and that scientific reasoning is both superior to and different from common sense reasoning. These assumptions about the kinds of knowledge that ought to be incorporated into contemporary legal decision-making about responsibility raise several concerns for me, given evidence of the kinds of knowledge that \textit{have} historically gone into legal decisions about responsibility, whether they ought to have or not.

\textbf{III. HISTORY, HISTORICISM AND THE PROBLEM OF LEGAL KNOWLEDGE REPRESENTATION}

Certainly any model of legal knowledge that claims to be representative is premised on a number of calculations about the role of law, the nature of legal decision-making, and the implied interest or disinterest of legal decision-makers. Given the wealth of socio-legal research showing the unstable and contingent nature of decision-making practices around the issue of criminal responsibility, and the variable kinds of personal, professional and political interests that inform decision-making processes, claims of representativeness (even the purely functional sort) must be carefully scrutinized.\(^2^0\) In a modest effort to address some of these issues, and hopefully complicate claims of legal

\(^{18}\) Valente and Breuker, see \textit{supra} note 14 at 6.

\(^{19}\) \textit{Ibid}.

representation, I will use the example early twentieth century murder cases to highlight the convergent nature of legal knowledge produced during case proceedings to define the boundaries of criminal responsibility and make sense of murderous acts.

Historical trial evidence elucidates the often contradictory ways in which criminal responsibility has been defined, interpreted and articulated in the contexts of Canadian law and society. By taking into consideration the importance of context (historical, social, geographical, political, cultural and institutional) in understanding the way in which responsibility was decided and represented on a case-by-case basis, it is not difficult to identify several legal and extra-legal processes that make the possibility of engineering a 'technical' representation of responsibility knowledge unlikely.

Before I go further, I wish to qualify a distinction between a guilty verdict, which represented the formal application of the rules of law, and the narratives that came together to help define the boundaries of criminal responsibility. In reading the broader socio-political significance of the guilty verdict it is important to consider the interpretation and application of law, but also the specific meaning of criminal responsibility as it was understood in each case. Evaluations of responsibility and the meaning of legal decisions cannot be simply based on the final outcome or verdict in a case. The cases I will discuss are of individuals found guilty for murder—therefore representing cases in which formal defences or claims of mental deficiency failed in the legal sense. Nevertheless, there were variable degrees to which each accused was held responsible, either by nature or by circumstance.21

During the early 20th century, the trials of individuals charged and convicted for murder brought together different sources of knowledge on the issue of criminal responsibility that varied in form, content and meaning.22 The trial was a rare discursive site where multi-disciplinary discussions about human nature openly took place along side those of the lay public. Efforts to synthesize seemingly divergent forms of knowledge about responsibility, for instance, produced ongoing disputes between, and among, psychiatric experts and various legal actors who struggled to make sense of each case and find just resolutions within the boundaries of law. Meanwhile, beyond the legal arena where men of

21 It was most convenient for this analysis to look to the collection of capital case files kept at the National Archives of Canada (NAC) in Ottawa, Ontario. The NAC collection includes every case in which a death sentence was pronounced (although not necessarily carried out) from Confederation to 1976, when capital punishment was abolished in Canada.

22 Foucault described the trial as "an event that provided the intersection of discourses that differed in origin, form, organization, and function". See I, Pierre Revière, having slaughtered my mother, my sister, and my brother... A Case of Paricide in the 19th Century (Lincoln, NB: University of Nebraska Press, 1975) x–xi.
law and medicine battled, members of the community also battled to make sense of a horrific event that had taken place in their midst. Interested members of the public often formed their own ideas about the issue of responsibility in certain cases of murder, regardless of incongruent legal decisions or psychiatric accounts. There is strong evidence in the files of capitaly convicted individuals to suggest that legal decision-makers were very interested in public opinion, and in the opinions of common folks.

The concept of "public opinion" is certainly over-inclusive in that it suggests some degree of uniform thinking. The phenomenon has been defined a number of ways and will not attempt to provide a thorough analysis of what is public opinion. It would be an exhaustive, and perhaps impossible, undertaking to document anything resembling a complete representation of "public opinion" during this period. However, it is possible to tap into some of the ways in which legal officials calculated and reported measures of public opinion in relation to each case, and in some instances, to make fair estimates of the influence public opinion may have had on legal decisions. The point is that public opinion mattered in these highly political cases, and evidence shows that attempts were regularly made by court officials to gage dominant trends in public attitudes—even if "the public" was not fully represented.

Like the phenomenon of popular opinion, much has been written about the notion of "common sense" and the defining characteristics of "common sense knowledge." Again, I will not attempt to provide a grand theory about what is

---

23 This seemed to be done primarily by collecting news reports, editorials, letters from the public and petitions. Occasionally, professional writings would also be consulted in order to gage how doctors, for instance, made sense of particular kinds of cases, conditions, or people. This supplementary information would be passed on to the Minister of Justice for consideration and sometimes summarized in the remissions report.

24 In particular, it was considered an important role of the Chief Remissions Officer to detail in his report to the Minister of Justice what the "community sentiment" was in each case. See Carolyn Strange, "Capital Case Procedure Manual" (1998) 14 Criminal Law Quarterly 184, and "Mercy for Murderers? A Historical Perspective on the Royal Prerogative of Mercy" (2001) 64(2) Sask. L. Rev. at 559. For other contemporary studies on the media as representing public opinion and on ways in which judges continue to gage public opinion or community standards in sentencing decisions, see Douglas Walton, Appeal to Popular Opinion (Pennsylvania 1999); J.V. Roberts, L.J. Stalans, D. Indemaur and M. Hough, Penal Populism and Public Opinion: Lessons from Five Countries (Oxford 2003); and Mariana Valverde, Law’s Dream of a Common Knowledge (Princeton 2003) 47.

common sense, rather I am interested in how common sense was understood and articulated by legal actors (judges, juries, lawyers, experts and witnesses) as well as non-legal actors (professional writers and other writers form the lay public) regarding questions about responsibility. Given the closed-door nature of commutation decisions, we cannot know for certain the degree to which public opinion influenced legal outcomes; however, we can observe in the files of convicted murders the complex ways in which lay, or common sense, interpretations of causation and accountability provided an important backdrop for legal decisions.

For example, in 1920, the remissions report on the trial of Marie Anne Houde (Gagnon) opened as follows:

The Accused is a French-Canadian, thirty years of age, and was charged with the murder of her step-daughter, Aurore Gagnon, ten years old. The very nature of the crime—Aurore was ill-treated, beaten and tortured by her step-mother, from August 1919 until 10th February 1920, when she died as a result of the wounds inflicted upon her—aroused great indignation, and public feeling, especially in Quebec, ran very high. ...[D]efence [counsel] ... admitted that Aurore died as a result of the wounds inflicted upon her by the accused ... and repeatedly qualified the behaviour of the prisoner as atrocious and monstrous, and entered a plea of insanity.26

Transcripts from Houde's trial indicate that of the three expert witnesses who testified for the defence, only one supported the official defence of insanity. Meanwhile, seven experts (including one of the original defence witnesses) testified for the Crown, each of whom claimed Houde was sane during the

“Lay Versus Scientific Knowledge: The Value of a Dichotomy” (1991) 11(3) European Bulletin of Cognitive Psychology 307; Edmond V. Sullivan, “Commonsense and Valuing” (1983) 78(1) Religious Education 5; and Bonaventura de Sousa Santos (translator), Toward a New Common Sense: Law, Science and Politics in the Paradigmatic Transition (New York and London 1995). While it may be, as Martin Roiser (1987, 414) put it, that the “concepts of commonsense and of public opinion resemble one another quite closely”, I consider them to be quite different phenomenon. Public opinion can be seen as a collection of individual statements on a subject, which is assumed to be based in large on common sense understandings of the subject and its context. Public opinion can be polled, counted, and is subject to 'scientific' analysis and interpretation. Common sense, on the other hand, is a more difficult concept to nail down. According to Elizabeth Sousa (1991), lay knowledge is much more “confident” than expert or scientific knowledge because it does not require justification or evidence in order to be validated (308–309). Edmond Sullivan (1983) offers a more political account of common sense as a reflection of agreement among members of society, which in turn organizes and orders that society (5). Sullivan also suggests that common sense is prone to error, given its lack of scientific basis (10–11).

26 Marie Anne Houde (Gagnon) (1920), National Archives of Canada (NAC), reference group (RG) 13, vol. 1507. During this period, every capital case file was sent to the federal Minister of Justice in Ottawa for review in council. While seldom deviating from the recommendations of the trial judge and the Chief Remissions Officer, who wrote a summary of the case for the Minister, it was the Minister who decided whether or not a death sentence would be carried out or commuted to life in prison.
months she tortured her step-daughter. In the eyes of medical and legal authorities, Houde was most certainly sane and guilty of murder. However, based on her gender and commonly accepted theories about the negative mental effects of consecutive pregnancies, the debates continued, both in and out of the courtroom, regarding her actual level of responsibility under such circumstances.

The legal verdicts of “guilty” and “sane” in Houde’s case did not, however, displace the strong public opinion, given the admittedly horrific nature of her crime, that she must have suffered some form of insanity. In the eyes of the public, Houde was an “abhorrent and loathsome freak”.27 Her actions, one citizen reported, were either that of “a depraved female beast in human form, or a human imbecile”.28 The idea that she acted intentionally with a normal mind seemed to be beyond the public’s comprehension.29 This was also reflected during the commutation stage where government officials rejected the psychiatric opinion that she was sane, going instead with the popular opinion that the condemned woman must have been in an abnormal state of mind to commit such a crime. Her death sentence was subsequently commuted to life in prison. The case of Marie Anne Houde typified the way in which responsibility was negotiated at different stages of the judicial process and simultaneously articulated through a number of legal and non-legal narratives of mind-state. In particular, interpretations of Houde’s behaviour were bound by the common sense logic that a sane woman/mother could never do such a terrible thing.

Not all condemned women were the subjects of mercy, however. In December, 1935, Elizabeth Tilford was the first woman to be hanged in Ontario in 62 years. Her trial, conviction and death sentence for the poisoning of her husband captured the attention of thousands, many of whom had conflicting ideas about the nature of her behaviour and the degree to which she should be held criminally responsible. According to the police inspector in charge of the investigation, the Tilfords were poor, lived loosely and in sordid conditions. Mr. Tilford was described in the police report as an “ignorant type” with little ambition,30 and there seemed to be little doubt in the small community of

27 Ibid., see news clipping stamped 28 September 1920, titled “The Gagnon Woman” (source unknown).

28 Ibid.

29 See letter from the Canadian Prisoners’ Welfare Association, dated 17 September 1920. The CPWA organized a substantial petition signing campaign which they claimed represented “all classes of society and, though mostly from this province [Que.], includes some signatures from further afield. Clergymen, prominent commercial men, medical men, lawyers and industrial workers are among the signatories.”

Woodstock that Mrs. Tilford was guilty of the clever crime. In fact, the inspector claimed that "it would be hard to find a more 'cunningly conceived' way of getting rid of someone.31 By his account of the event, Mrs. Tilford wanted "free rein" and killed her husband because she was, "we imagine ... a person overly sexed" and he had "proven to be quite useless for her".

Elizabeth Tilford pleaded not guilty and maintained at every point of the investigation and trial that she did not kill her husband. However, she could not muster much public support on claims of her innocence. It is interesting, however, that while there seemed to be unanimous agreement that she was legally guilty of the crime of murder, there was division among observers as to the motive for her behaviour and how morally responsible she was under the circumstances.

For instance, several local women wrote letters to the Minister of Justice arguing that the execution of a "Christian" woman and "mother" would bring a particular brand of "dishonour" to Canada.32 Others insisted the sheer nature of her crime indicated some form of "sickness" or mental abnormality, which they attributed to a range of internal and external factors including menopause, poverty, feminine nature and domestic disharmony.33 Some commentators were more concerned with the social damage that the execution of a woman would cause in the midst of a national economic Depression, and clearly recognized the powerful social role of law in such times. As Mr. and Mrs. Keill wrote:

In these days of depression such executions tend to further sadden and embitter the people while, on the other hand, a show of mercy raises the spirits of those enduring great trials. Nothing can be gained by this woman's death. Considerable can be gained by clemency at this time.

Still others argued that the practice of capital punishment was barbaric in times of "enlightenment" and "scientific attainments" and called for expert intervention and treatment for the "troublesome" woman.34 In a newspaper editorial entitled "Mrs. Tilford Should Not Be Hanged", the author extolled the modern advances of science and psychiatry during the early 1900s on the nature of criminality and called into question the fundamental principles of punishment itself:

31 Ibid. at 1.
32 Ibid., see letters from Miss E. S. Warner of New York; Mrs. Margaret Sim of Hamilton, Ont.; Mr. and Mrs. Keill of Fort William, Ont.; and newspaper articles titled "Letter From Student on Executions" and "Capital Punishment" (sources unknown).
33 Ibid., see letters from Mrs. M. A. Nicklin of Guelph, Ont.; Mrs. C. Fraser of Montreal, Que.; Countess S. Fontaine of New York; and a newspaper article from The Observer entitled "Mrs. Tilford Should Not Be Hanged" (nd).
34 Ibid. Letter from Mrs. Margaret Sim of Hamilton, Ont.
It seems to me therefore that instead of the short and simple but sometimes hideously unsatisfactory method of getting troublesome people off our hands justice demands that the highest psychiatric skill and experience should be utilized to determine what treatment society should mete out to so extraordinary an individual in the interest of social protection and her own possible redemption. It seems a most deplorable thing that the more unnatural and shocking a crime is the stronger is the demand for swift and passionate vengeance, when the very nature of the crime should moderate the instinctive wrath by suggesting the more powerfully that the wrong-doer is less of a devil and more of a victim of an abnormal temperament.  

While the formal guilty verdict and decision to execute Elizabeth Tilford without a recommendation for mercy reflected a judgment made within the doctrines of Canadian criminal law, and through the application of legal rules, assessments of her responsibility were simultaneously articulated in a variety of ways. Documentary evidence compiled in Tilford's case file, and the case files of others convicted for murder, reveal the textured and contingent representations of criminal responsibility that came together to produce several accounts of a single event, and suggest we need to take a closer look at the processes through which responsibility knowledge has been and continues to be structured. We need to consider the social-cultural and institutional processes that shaped different narratives and meanings of criminal responsibility and deconstruct the remarkably transparent prejudices that structured the practices of law.

For instance, when Louis Jones was convicted for the murder of his estranged wife in 1927, his lawyer wrote the following testimonial to the Chief Remissions Officer regarding Jones’s character:

I want you to take into consideration the general character of the half white.... they are usually people of very strong passions and feelings, possessing a good deal of the white mans vanity and pride, without the mental qualities to offset them.  

And to establish the relative social and political insignificance of Jones’s case, the lawyer further pointed out:

There is no great public principle involved in this case ... at the moment there is hardly anybody in Halifax who would bother noticing the fact if the sentence were commuted to life imprisonment. So far as the public is concerned 'this is just another nigger'... to extend clemency to this man will have no effect on the public one way or anther; and if he is hanged it is all the same. He is not regarded as a suitable example at all.

The racist theory that the mixing of blood caused degenerative effects had long been the subject of scientific research programs in Canada and the United States. In an article titled, “Psychological Traits of the Southern Negro with

---


37 Ibid.
Observations as to Some of his Psychoses", published in a prominent North American psychiatric journal, Dr. W. M. Bevis discussed his findings on the "the insidious addition of white blood to the negro race" and its effects on the latter. According to the doctor,

If the original white parent were always even an average representative of his race, mentally and morally, the hereditary effect upon the more or less mulatto offspring would naturally be that of improvement of the traits and mentality of the colored race, but unfortunately the white mane by whom this fusion of blood starts is most often feeble-minded, criminal, or both ... . [T]he race may have gained in an intellectual way but not in a moral. 38

Bevis further described "all negroes" as naturally lacking initiative, uninterested in education, and too interested in sexual matters, crime and vice. Women were described as "promiscuous" from a "remarkably early age" with a low moral sense towards gratifying "their natural instincts and appetites." 39

Returning to the case of Louis Jones, we can observe the way in which essentialist beliefs around race mixed with concerns about sexuality and social order to produce particular interpretations of responsibility. According to official records, Jones and his wife separated because she had been unfaithful in their marriage. When she left their home and moved to another city, he followed her claiming he had forgiven her and was prepared to take her back. She refused to return and angrily informed him she was having a sexual relationship with someone she considered to be better than him. Almost immediately after his wife’s confession, he stabbed and killed her. Jones’ defence was not guilty on the grounds of extreme provocation, causing him to have no recollection of the actual killing. According to his counsel, "the words which this woman uttered to this man ... were of such a character" that any "reasonable man" would be so provoked to "lose control of himself and commit this act". 40

An insanity plea was never officially raised and when Dr. William Forrest, the jail physician, attempted to answer a question from the Crown about Jones’ mental condition, defence counsel entered into a lengthy debate with the judge regarding the ability of any doctor to comment on such a thing. He argued that "no man is an expert" on another man’s "conscious recollection" and it was for a jury to decide whether or not "those words were so provocative" that they had an effect on his mind. 41

38 W.M. Bevis, "Psychological traits of the Southern Negro with Observations as to Some of his Psychosis" (1921) 1 American Journal of Psychiatry 69.
39 Ibid.
40 Louis Jones (1927); trial transcript at 102.
41 Ibid.
In assessing the viability of the defendant's claim that he was provoked, the trial judge, in his final charge to the jury, cited the nature of the victim's language as evidence of her bad character. The judge considered the description of her words as being so vile that he questioned the defendant's account of the events leading to the murder, doubting that any "woman ever used language like that". After the trial, Jones' lawyer responded to the judge's presumption that all women were incapable of such language in a letter to the Minister of Justice. He argued, "It is evident that [the judge] has no acquaintance with the coloured race. I have found this language very popular among this class of people".  

The lawyer further pointed to the importance of certain conjugal prerogatives and racial tendencies:  

No matter what the man's record was, this woman was his wife. They had had their troubles it is true, but what else are we to expect between people of this class. ... Jones was exceedingly jealous of a woman who was his own property and was regarded as handsome and something to be desired. There is no great public principle involved in this case such as the case of shooting an officer. It is a row between husband and wife.  

The central importance of race in judicial deliberations, and the power of the law to reinforce racial difference as a social fact, is well demonstrated here. In defence counsel's letter to the Remissions Officer, he cautioned that "this coloured fellow may have had a fair trial, but for the reasons I have given he has not had what is popularly called a fair show."  

Once the trial was over, the jury foreman disclosed that he "disliked niggers because they are niggers". The lawyer expressed to the Remissions Officer that the juryman's "decided feeling towards all niggers" was a reflection of the sentiment of "most whites here [in Halifax]." Despite obvious racial prejudices, the jury recommended mercy for Jones, but their decision seemed to be based primarily on the questionable character of the victim. The judge did not support the jury's recommendation, nor did the Remissions Officer, and Jones was executed. The question in this case, and other cases involving racialized individuals, is not whether race mattered—it always mattered. The question is how did it matter? Narratives of race and constructs of order and difference based on race—as well as gender, geography and socioeconomic status—had a profound effect on the way in which responsibility was assigned and articulated in each case.

42 Ibid., letter from Jones and Mahoney at 3.
43 Ibid. at 4.
44 Ibid. at 3.
45 Ibid.
From this analysis of the variable dynamics that shaped and informed trial processes, it seems that a formal verdict of guilty actually tells us little about the production and application of knowledge forms used to define the boundaries of legal responsibility.\(^{46}\) Many defendants found guilty of murder, including Marie Anne Houde, Elizabeth Tilford and Louis Jones, were understood by certain legal decision-makers and the public alike to be less than fully responsible for their actions. The contradiction between the strict legal decision of guilty and the more qualitative understanding of responsibility in certain cases suggests the legal criteria for criminal responsibility were well defined and did not accommodate subtler social-cultural, moral and political shadings. Only if such shadings were not integral to the decision-making process would it be possible to imagine a representative of legal knowledge based on cause and effect logic. However, unlike the strict requirements for establishing legal guilt—supposedly determined in the absence of information about life circumstances, ancestry and disposition—decisions about criminal responsibility (inherent in the legal notion of guilt) necessarily included consideration of these very factors in addressing questions of mind-state, knowledge and intention.

Therefore, the notion of guilt may appear to be a well-fixed, measurable and predictable concept in Canadian law, but responsibility is a much more fluid concept that is continuously negotiated according to the terms and circumstances of each case, and through a cross-section of legal and non-legal factors and actors. While this unevenness between legal doctrine and legal practice in findings of responsibility is a noteworthy observation, it is hardly a revolutionary, or even interesting, observation from a socio-legal perspective. The frequently pointed out gap between the law on the books and the law in action seems to have always existed, and some would argue that it serves an ideological function by defining and sustaining "legality as a durable and powerful social institution".\(^{47}\) I am not so much concerned with this inevitable, perhaps even desirable, gap as I am with the production of a distinct knowledge about responsibility in each case, and how that knowledge informed and provided meaning to trial and commutation outcomes.

As other social historians have shown, the murder trial provides the quintessential portal through which to glimpse the influence of social-cultural attitudes on the processes of legal decision-making.\(^{48}\) Elizabeth Tilford's case

\(^{46}\) Before 1962, there were no degrees of murder in Canada. Therefore, a jury could only find a defendant guilty of murder, not guilty, or not guilty by reason of insanity.

\(^{47}\) Patricial Ewick and Susan Silbey, “Common Knowledge and Ideological Cratique: The Significance of Knowing That the 'Haves' Come out Ahead” (1999) 33 Law and Society Review 4 at 1036.

\(^{48}\) For examples see; Carolyn Strange, “Wounded Womanhood and Dead Men: Chivalry and the Trials of Clara Ford and Carrie Davies.” In Franka Iacovetta and Mariana Valverde (eds.), Gender Conflicts: New Essays In Women's History (Toronto: University of Toronto
clearly demonstrates that Canadian murder trials during the early twentieth century were very much public affairs. In the pre-dawn of television and other more technologically sophisticated forms of mass communication, newspapers routinely reported on every minute detail of the spectacle of overflowing courtrooms and the keen interest of community members in trial deliberations. Legal officials, too, gauged the public’s view towards mercy in each case to determine the subsequent message their decision to execute or commute would send. Individuals and groups from across Canadian society made their sentiments on a particular case known by writing to newspaper editors and government officials in the form of organized petitions, eloquent letters drafted on business letterhead with personalized stationery, near-illiterate scribbles on scraps of paper, or through the pen of a third party who would write for those who could not.

The murder trial was (and continues to be) an intensely social and political process that brought together a range of ideas, institutions and individuals with the common goal of trying to make sense of, and determine just responses to, acts of murder. But there were limits to what counted in law as a legitimate explanation and response in each case. Narratives of rationale and justice were bound by a deep sense of British-Anglo identity and a pragmatic understanding of the social role of the rule of law. To better understand the ways in which systems of language and knowledge were organized by and through social institutions and interactions to produce particular accounts of criminal responsibility in individual cases, we must also consider the historical development of ideas: ideas about criminality; ideas about human nature; and ideas about legality. For instance, to appreciate how knowledge about responsibility has developed, we need to take into account the way in which medical-legal standards for defining responsibility through assessments of intention and mental capacity were formed according to essentialist claims about individual difference and scientific certainty. As well, we need to consider that as ideas about criminality and responsibility formed over time and from


49 For studies in the symbolic nature of British law and the social role of the rule of law, see works by Douglas Hay. In particular, see Albion’s Fatal Tree: Crime and Society in Eighteenth-Century England (London, 1975). For Canadian examples, see generally works by Carolyn Strange, Jim Phillips and Tina Loo.
case to case, the specific socio-political meanings of those ideas were simultaneously transformed.

For example, the emergence of an anthropological/scientific knowledge about "race" origin and difference in the nineteenth century provided early twentieth century Anglo-Canadians—concerned with the identity, quality and security of the Anglo race—with a system of knowledge or logic within which to interpret, order, articulate and respond to criminality. The categorizations of race in and through criminological knowledge further led to the ideological and scientific formation of criminal classes, types or kinds based on theories about race difference. So when the defence lawyer for Louis Jones implored the Minister of Justice to consider the "expected" level of violence and vulgarity among people of his client's "class", 50 or when the constable who arrested George Dvernichuk, a Ukrainian immigrant, for the murder of his neighbours in 1930, described his behaviour as "typically foreign", 51 there was already in place a knowledge about types of people that acquired specific meaning through the processes of fact-finding and legal advocacy, to become legal knowledge.

IV. CONCLUDING THOUGHTS

What can be learned from these cases, from the ways in which legal responsibility has been negotiated in the past? And what significance might this consideration of historical representations of responsibility knowledge have for claims or representativness in contemporary legal knowledge engineering? The cases of women and men convicted for murder reveal quite vividly the social tensions and institutional frameworks that defined the parameters of responsibility knowledge, as well as a particular direction of reasoning in methods of legal decision-making. In these cases we can see what James Walker describes as "the operation of common sense on the perception of problems and consequences, and on the choice of solution". 52 Historical evidence suggests that we need to attend to the more subtle dynamics in decision-making not represented in the rules of law, the reporting of legal decisions, or in the opinions of experts. We need to examine the shifting ideas about what counted as knowledge towards establishing criminal responsibility in each case and at particular moments in time. We need to keep in the fore of any analysis of legal knowledge the contingent relations between and within law and society.

50 Louis Jones (1927), NAC, RG 13, vol. 1545; see letter from Jones and Mahoney, at 3.
51 George Dvernichuk (1930), NAC, RG 13, vol.1564; see report of the Alberta Provincial Police signed by Detective R.C. Rathbone.
In the same way that certain aspects of legal, expert or common sense knowledges are selected and omitted during the judicial process to reflect a particular path of interpretation, the selection, omission and structuring of knowledge assumed to be representative of the domain task of deciding responsibility will also project a particular "direction of reasoning". 53 Further, if we accept that what counts as legal knowledge about responsibility is, at least in part, constituted by that which decision-makers claim to 'know' about certain 'types' of people, then we need to ask how decision-makers come to 'know' things, what it means to have knowledge about something, and how 'knowing' becomes legal knowledge.

Using the example of criminal responsibility, we might consider how the law has defined the cognitive and philosophical aspects of "knowing" that an act or omission is legally and/or morally wrong. According to R. v. Oommen, the concept of knowing embraces not only the intellectual ability to determine right from wrong in an abstract sense, but also the ability to apply that knowledge in a rational manner. 54 It appears from this legal conceptualization that knowledge is based, firstly, on the idea that it is a by-product of logical processing, and secondly, that it is applicable (read functional). This seems fairly straightforward and, in reproducing a functionalist framework, it could conceivably be mapped into a functional ontology of law. The challenge here would be to navigate the technology around the morally charged concept of 'wrongfulness'. Recall one of the objectives of Valente's ontology of responsibility knowledge, and other legal knowledge systems, is to diverge from simple principles of moral blame and deontological reasoning in general.

This two-tiered representation of knowledge, as logical (in fact-finding) and functional (in establishing responsibility), may indeed be the idealized model of task-based legal decision-making, but historical evidence suggests that it is not representative of the practice and nature of legal decision-making. In Canadian criminal law it is presumed that logic is employed to establish the facts of a case and to direct final decisions about responsibility. However, the deductive process of logical decision-making has historically been conflated with the notion of common sense reasoning—meaning that there seemed to be an assumption that common sense reasoning was in fact logical. This can be seen in trial transcripts where, in the final charge to the jury, judges would routinely call upon jurors, as men of a respectable class and character, to draw on their life experience, reasoning power, and good common sense in making their final decision.

This conceptualization of common sense as a from of logic is also reflected and further reified through programs of information technology. According to

53 Visser, see supra note 9 at 2.

Benjamin Kuipers, "AI researchers, like psychologists, are trying to understand the scientific basis of such squishy terms as 'mind,' 'intelligence' and 'common sense'." An example of this phenomenon is the "Open Mind Common Sense" initiative established in the United States in 1999. The reported aim of this project is to "construct a database of common sense knowledge through the collaboration of a distributed community of thousands of non-expert citizens [internet citizens]". Using natural language, this knowledge acquisition and representation strategy is then combined with a search engine application "that employs simple common sense reasoning to reformulate problem queries into more effective solution queries". While the researchers appear to acknowledge a distinction between "formal logic" and "natural language" they not distinguish between "formal logic" and "common sense". Therefore, while the "Open Mind Common Sense" initiative may be successful in producing an elaboration of reasoning to incorporate common-speak, any attempt to encode common sense knowledge nevertheless requires elements of deductive, and reductive, logic.

It appears the next question has to be, what is the nature of the logic—the "direction of reasoning"—used in legal knowledge acquisition? And from where do we draw the information that will constitute legal knowledge? According to Valente and Breuker, "The process of knowledge acquisition for building systems relies on existing knowledge and is not aimed at creating new knowledge", although the concede it may be a "side-effect". However, the very enterprise of producing, or claiming to have produced, any representation of law with functionality in mind is creating a new form of legal knowledge, a form of legal knowledge that is being engineered for consumption and sold back to us as legal knowledge.

This brings me back to my opening concerns regarding the potential impact of knowledge management technology on the future of legal decision-making. If knowledge banks are to be an important resource tool in the practice and interpretation of law, then we ought to be mindful of set marketing objectives, ontological developments, and content of knowledge management systems. At


57 Singh, ibid. at 1.

58 Supra note 14 at 10.
the same time, we ought to be mindful of the necessary limitations, exclusions and distortions of legal knowledge representations. In other words, we ought to keep open the question—what is legal knowledge?