Describing the Development of Case Law

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ABSTRACT

This paper considers dynamic aspects of the development of case law. The underlying approach is to see law as a "moving classification system" based on Levi's notion of a three stage life cycle for case law. Our aim is to provide foundations for computational support for consideration of these dynamic aspects. We first use a fictional example to show how our approach works, and then illustrate the approach by applying it to sequences of real cases: Levi's cases starting from *Dixon v Bell*, and cases concerning the automobile exception to the US 4th Amendment, focusing on those involving luggage.

CCS CONCEPTS

• **Applied computing** → **Law**.

KEYWORDS

development of case law, reasoning with cases

ACM Reference Format:
John Henderson and Trevor Bench-Capon. 2019. Describing the Development of Case Law. In *Seventeenth International Conference on Artificial Intelligence and Law (ICAIL '19), June 17–21, 2019, Montreal, QC, Canada.* ACM, New York, NY, USA, 10 pages. https://doi.org/10.1145/3322640.3326697

1 INTRODUCTION

In this paper we wish to explore how case law develops over time. In order to investigate this phenomenon we need a model of case law which can accommodate and explain a stream of temporally ordered cases. Most other work in legal CBR either ignores the issue by having no reference to the order of cases [3], is concerned only with detecting change [20], or with modifying the analysis after change has been detected [1], or accepts change without justification [17]. There has, however been some previous work on sequences of cases. Rissland in [21] treated the cases as a sequence of examples presented to a machine learning system, specifically Mitchell's *Candidate Elimination Algorithm* [15]. Berman and Hafner [7] and [9] discussed some signs which showed that a precedent was being weakened and might cease to apply. The same sequence of cases was used by Verheij in [22] who provided a more formal account in terms of a developing series of case models which become increasingly constrained as decisions are made. Finally we have previously considered how concepts in an ontology might change in the light of a series of cases in [10].

None of that work, however, explains the aspect of development of case law that we are currently interested in, central to which is that case law is able to adapt over time to accommodate changes in the social context and changes in attitude. Whilst this may seem to give rise to inconsistencies, the common law is often able to resolve these apparent inconsistencies by reinterpreting the previous cases without changing the decisions. Whereas in earlier work cases came with their decisions, for example in [21] cases appear as positive and negative training examples, we consider not only the winning arguments but also the rejected arguments for the opposite decision. In our third extended example, which concerns exceptions to the US 4th Amendment, it may appear that evidence obtained from the warrantless search of containers in cars was at one time permitted, then suppressed and then subsequently permitted again, although the majority opinions claim that the decisions are consistent if correctly interpreted. Is this development working towards the proper articulation of some underlying, consistent, general rule or is it really inconsistent? To address this question, we are developing a model of change in case law (which we will call "LEVI") based on Levi's 1948 essay, *An Introduction to Legal Reasoning* [13]. In summary, Levi's idea is that a legal CBR system is a "moving classification system".

> A controversy as to whether the law is certain, unchanging, and expressed in rules, or uncertain, changing, and only a technique for deciding specific cases misses the point. It is both. Nor is it helpful to dispose of the process as a wonderful mystery possibly reflecting a higher law, by which the law can remain the same and yet change. The law forum is the most explicit demonstration of the mechanism required for a moving classification system. [13], p 503.

Substantive case law is seen as a set of rules, each rule defining a class of cases that satisfy that rule, but the rules are not fixed: a new case may lead to a reappraisal and reinterpretation. While the classification of old cases should, as far as possible, remain the same (although the reasons for the classification may change), the current and future cases will be classified according to the new set of rules. Levi's example in [13] concerns liability for injury to a third party caused by dangerous goods. In that example, the rule defines the class of cases in which liability to a third party will arise.

An individual rule changes – "moves" to use Levi's word – because the decision maker in every disputed case (for example, the judge in a litigated case) reconstructs the law relevant to the dispute to accommodate the new disputed case into the classification of the set of precedent cases. If the precedents established a fixed set of rules,

ICAIL '19, June 17–21, 2019, Montreal, QC, Canada

ACM ISBN 978-1-4503-6754-7/19/06…$15.00
https://doi.org/10.1145/3322640.3326697

> "it would be disturbing to find that the rules change from case to case and are remade with each case. Yet this change in the rules is the indispensable dynamic quality of law." [13], p502.

McCarthy's view of reasoning with legal cases as theory construction [14] adopts a similar view. At a larger scale Levi describes change as cyclical: "In the long run a circular motion can be seen" (p 506), consisting of a three stage life cycle of a rule in which it is first created, and then refined, before breaking down and being replaced by a new rule (or rules), whereupon the process begins again." We adopt this three stage cycle.

Levi does not explain the decision procedure in a moving classification system but his extended example suggests that the decision procedure must be based on the idea a current classification being challenged by a proposed variant on, or alternative to, that classification. Either the existing classification is accepted or the variant is chosen, in which case previous cases are reinterpreted in the light of the new classification. Any new classification should accommodate as many precedents as possible (compare evaluating a theory in [8]) but if both classifications can accommodate a similar number of precedents as well as the new case, then, systemically, there is nothing to choose between them, and the judge must choose on some other ground. Some preference might be given to the *status quo*, but if there has been a general shift in the social context which the judge believes should be reflected in a movement of the law, then the new interpretation should be adopted[1].

We consider cases as collections of facts. Some of these facts (or combinations of them) will be legally significant, and we term these *features*. Facts can become features as the case law develops. Understanding that case law is constantly liable to reinterpretation in the light of new cases, and the role played by argumentation, is particularly important now, when predicting legal decisions by applying machine learning techniques (e.g. [2]) to past cases is becoming increasingly popular. These techniques require that a model based on past cases will apply to future cases also, and so effectively deny the dynamic aspects of case law. We claim that the dynamic aspects are significant, and absent from many other classification tasks where there is little or no evolution in the items to be classified, such as poisonous fungi and many other datasets in the UCI Machine Learning Repository[2]. This paper prepares the ground for a specification of LEVI, by describing the three stages of his life cycle and the associated arguments as they play out in three different domains.

Although our governing criterion is that the classifications able to account satisfactorily for more precedent cases should be preferred, there are a number of characteristic types of argument used. Generally, as well as *stare decisis*, which supports the existing rule and constrains any variant [11], we see three other types of argument deployed to justify or to resist changes to the rule:

- *logical stopping point*, or *floodgates*, arguments: these introduce (reject) a feature on the grounds that without (with) it too many potential examples would be included or excluded. (cf. Tompkin's argument in *Pierson v Post* (Supreme Court of New York - 1805).
- *class membership* arguments, often called *bright line* arguments, in which a precise borderline between in and out (the switching point of [18]) is established.
- *logical similarity* arguments, in which rules with the same outcome are combined together into a single rule.

These arguments tend to occur at different points of the cycle. In the first stage the rule is refined using class membership arguments until a bright line is established, enabling unequivocal application of the rule. Once the class is established, in the second stage a number of distinctions - cases covered by other rules - and exceptions are made, very often justified using floodgates arguments. Finally, the third stage is entered when there are too many exceptions and distinctions to permit a useful and coherent rule. At this stage logical similarity arguments will be used to propose a new rule subsuming some of the distinctions and exceptions. This cleaner rule then begins the first stage of a new cycle.

The paper is organised as follows. Section 2 describes our approach by means of a worked example concerning a fictitious welfare benefit. Section 3 applies the mechanism with reference to Levi's third party liability example. Section 4 further explores this account of development of case law by relating it to the automobile exception to the US Fourth Amendment, focussing on cases involving luggage. Section 5 offers a discussion, including a sketch of how LEVI might be realised, and Section 6 some brief concluding remarks.

2 A WORKED EXAMPLE

In this section we will describe our understanding of the process, using a series of cases relating to a fictitious welfare benefit, *Independence Allowance* (IA). We start with a fictitious benefit, since this offers a clean set of cases allowing a clearer illustration of the process. IA is paid to enable a measure of financial independence to those who are not expected to work. There may be other conditions (such as residence), but the issue relating to the expectation of work will be what we will focus on.

Each case will be accompanied by two arguments, one to pay and one to withhold. One will be based on the existing rule, the other a new proposal which should be consistent with the precedents, but which would produce a different outcome in the current case. One of these will prevail, and become the current classification rule. The case itself will be an instance of the application of the rule, positive if benefit is granted and negative if it is withheld. For the earliest cases focus will be on age. But, although age is, of course associated with a number, opinions are likely to be given in qualitative terms allowing the rule to have a degree of generality. Table 1 shows a number of ways in which age may be categorised in UK law. Note in particular, the way several of the classifications, such as school leaving age, change as society develops. Additionally there are a number of vaguer notions, such as infant, child, adolescent, middle aged, elderly and old, not associated with any precise ranges.

Now we will consider a case C1, where the claimant is aged 4[3]. An argument to pay is that the claimant is a child, and an argument to withhold is that the claimant is an infant, and hence too young to need the allowance.

[1] As Mr Justice Marshall put it in *Furman v Georgia* "*stare decisis* must give way to changing values".

[2] http://archive.ics.uci.edu/ml

[3] The facts for all the cases in the series are summarised in Table 7.

Table 1: Characterisations of age in UK. *Pensionable* age is when a pension can be claimed conditional on retirement: *retirement* age is when a person is deemed to be retired and so the pension is unconditionally paid.

0	birth
5	primary school age
9	youngest working age (1833 Factory Act)
11	secondary school age
13	current youngest working age
14	1918 school leaving age
15	1944 school leaving age
16	age of consent, 1972 school leaving age
17	driving age
18	post 1970 age of majority, post A-level, 2016 school leaving age, drinking legal
21	pre 1970 age of majority, can adopt children
25	full minimum wage
60	age concessions, traditional women's pensionable age
65	traditional men's pensionable age
67	current pensionable age
70	retirement age
80	free tv licence
100	queen's telegram

- Pro-Pay argument: Pay if child
- Pro-Withhold argument: Withhold if infant

If the outcome is pay, then the initial rule adopted will be

- **R1**: pay if child

The life cycle can now begin. The second case, C2, will concern a 40 year old. The arguments will be:

- Pro-Pay argument: Pay if not elderly (broaden R1)
- Pro-Withhold argument: Withhold if not child (The most obvious argument for withhold is to suggest that R1 can be used as if and only if)

Here Pro-Withold can use a class membership argument to justify withholding: the class *child* is not intended to include all the non-elderly. We thus modify R1 to R1a:

- **R1a**: pay if and only if child

We now have a classification capable of deciding any future case. Case 3 will concern a 12 year old. The argument to pay comes from R1a, but we could narrow the rule to get *withhold if schoolage*. We may suppose that this narrowing of the class is considered excessive, and would result in too many people being denied. C3 is considered payable, and thus endorses R1a.

C4 concerns a 30 year old. This time R1a would lead to withholding. An argument for paying would be to broaden the rule to *pay if young*. Again this can be rejected as distorting the motivation underlying the existing class.

C5 concerns a 9 year old. Here R1a says pay, and an argument for withhold such as *Withhold if primary school age* would both unduly narrow the rule and be inconsistent with C3, and so is likely to be rejected because it fails to account for as many precedents.

C6 concerns a 27 year old. R1a says withhold, but an argument, consistent with C4 would be to *pay if under 30*. This argument may be presumed to fail, both because it distorts the current class without good reason, and because it attempts to draw a rather arbitrary boundary, using a cut off unrelated to any of the ages in Table 1. In these cases we have been using class membership arguments, gradually bounding the class to move towards a well defined class. At this point we can view the extension of R1a as shown in Table 2. We have positive instances and negative instances. As yet we have no exceptions, cases in which the rule does not have its normal consequence, and no distinguished cases, cases which are properly governed by a different rule.

Currently our rule uses"child" which lacks sharp boundaries and so we have no "bright line". C1-C6 have all concerned people who are unarguably children or not children. But C7 involves a 17 year old. Unlike the previous cases, at 17 it is by no means clear whether the claimant is or is not still a child. The arguments for both sides are class membership arguments, but whereas previously there was a considerable distance between the current concept and the alternative proposed, this time it would be helpful to provide a bright line so that the borderline ([18]'s *switching point*) can be resolved. The best way to give a bright line would be to replace the vague *child*, with one of the well defined concepts from Table 1. Thus the arguments might be:

- Pro-Pay argument: Pay if minor (broad interpretation of R1a).
- Pro-Withhold argument: Withhold if above school leaving age[4] (narrow interpretation of R1a).

This withhold argument represents quite an advance on the established bound of 27, but would give a good rationale as to where payments should cease (as does the pro-pay argument when taken as if and only if).

Suppose the decision is to pay. Now we modify the vague R1a to a precise **R1b** *pay if and only if minor*. This is consistent with C1-C6, but reinterprets the rule, so as to provide sharp boundaries. Both "minor" and "school leaving age" build movement into the classification, since the definitions of "minor" and "school leaving age" can (and do) change. "Minor" went down from 21 to 18 in the UK in 1970, and some now argue that it should be further reduced to 16. By framing the rule using these terms, the classification will move with the wider context, reflecting social change. This may, however, not be desirable: although the trend is enter the work force later, the use of "minor" will push the benefit in the opposite direction. School leaving age pushes in the right direction, and although it had not risen far enough in 2014, now it would perhaps be a more appropriate characterisation of under 18s, because likely to move in the right direction. Moreover this would conform to the idea (which will emerge with C9) that being in full time education is a reason to be not expected to work. Given that the school leaving age has risen, it would, if the age of minority were reduced, perhaps be right to reinterpret the rule as *school leaving age* rather than *minor*, which

[4]Assume that his case was heard in 2014, before the school leaving age was raised (see Table 1). Were this rule to have been adopted, a claimant with the same facts could have used the rule to argue for award of benefit after 2016 when the school leaving age was raised. This shows how the classification can implicitly move to accommodate social changes.

Table 2: Situation after 6 cases with R1a

	Positive	Negative	Exception	Distinguished
R1a	C1, C3,C5	C2,C4, C6		

Table 3: Situation after 8 cases for R1b

	Positive	Negative	Exception	Distinguished
R1b	C1, C3,C5,C7	C2,C4, C6		C8

Table 4: Situation after case 9 for R1b

	Positive	Negative	Exception	Distinguished
R1b	C1, C3,C5,C7	C2,C4, C6	C9	C8,C8a

Table 5: Situation after case 12 for R3

	Positive	Negative	Exception	Distinguished
R3	C1, C3,C5,C7	C2,C4, C6	C9 (+ve)	
	C8,C8a, C12	C9a	C10, C11 (-ve)	

would then unduly narrow the classification. Currently, however, *school leaving age* and *minor* are the same and we have a bright line and can consider stage 1 at an end.

Next consider C8, which involves a claimant aged 90. Clearly R1b gives an argument to withhold, but it is clear that many people do not expect a 90 year old to work. It can therefore be argued that R1b is not appropriate to C7 and we need a new rule *pay if elderly*. If we accept this argument and pay we now have a second rule **R2**, and being elderly distinguishes one's case from R1b. The Table for R1b now is as shown in Table 3.

R2 will also have a life cycle. It uses a vague term, *elderly*. This might be clarified in a subsequent case C8a, involving a 67 year old. The argument for pay would be to use *pensionable age* rather than *elderly*. An argument for withhold, might be to set the lower bound at 80. Suppose the pay argument is accepted. Note that this still leaves some room for adaptation, since *pensionable age* might be construed as 60, 65 or 67, since people over a certain age are still permitted to use the traditional, gender dependent, ages. This would need clarification in future cases before we have a bright line. Certainly these days it would be difficult to argue for a gender difference,

Next we get C9, in which we have a 20 year old in full time education (FTE). Although 20 is adult, people in FTE are not expected to work full time (although many students do have part time, typically low paid, jobs). Here the argument to pay is that an exception should be made for those in FTE. Suppose that this is accepted (the current social climate encourages people to remain in FTE). We now reach to situation shown in Table 4. Note that this has introduced a second feature, FTE, which was not considered in the previous cases. The argument for the exception is that age alone is insufficient to determine the logical stopping point.

Now suppose a 35 year old in FTE presents himself (C9a). Although the exception from C9 would suggest payment, it might be felt that this exception is too large, suggesting a floodgates argument to withhold: for example to restrict the exception to those in continuing FTE: once one has entered the labour force, one puts oneself outside this exception. This modifies the second feature to *continuing FTE*. At this point we could merge R1b and R2 into a single rule, and so eliminate the distinguished category. For example

- **R3**: Pay if and only if not working age or in continuing FTE

would cover all the cases (although implicitly moving away from minor to the current school leaving age), and recognise C9 as an exception. This simplification empties the distinguished category using a *logical similarity* argument, based on a feature in common between the existing rules. This ends the first cycle. Since we already have tight bounds on *working age*, (from school leaving age to retirement age), we will move straight into stage two.

C10 concerns a 70 year old, and so can be seen as entitled under R3. However, the claimant in C10 is also in prison, and from time to time the UK press exhibits outrage at what they consider unduly soft treatment of prisoners. It could therefore be argued that the benefit should be withheld from prisoners, to avoid paying the benefit to the undeserving. Moreover the independence which the benefit is meant to enable is not available to prisoners. C10 introduces a further exception, this time a negative one, and another relevant feature, *prisoner*.

C11 concerns an 80 year old, but this time the claimant has spent some 75 years abroad. As such it might well be felt that he had insufficient connection with the UK to be entitled to the benefit, a classic floodgates argument, since payment could open the benefit to anyone in the world, should they come to UK. This could be handled as another negative exception, with the exact amount of absence to be determined by subsequent cases. But the amount of absence might depend on age, since children usually have no choice in the matter. In C12 the claimant, a 16 year old, was granted benefit,

Table 6: Situation after case 12 after reassessment with 2 new rules

	Positive	Negative	Exception	Distinguished
R4	C1, C3,C5,C7,C9,C12	C2,C4, C6, C9a		C8,C8a,C11
R5	C8,C8a	C11	C10 (-ve)	C1, C3,C5,C7,C9,C12,C2,C4, C6, C9a

Table 7: Features for all IA Cases

Case	Age	Prisoner	Full Time Education	Absence	Too much absence	Allowance Payable	Effect
C1	4	Assumed No	Assumed No	?	Assumed No	Yes	Infant then yes
C2	40	Assumed No	Assumed No	?	Assumed No	No	Adult, then no
C3	12	Assumed No	Assumed Yes	?	Assumed No	Yes	Child, then Yes
C4	30	Assumed No	Assumed No	?	Assumed No	No	Adult, then no
C5	9	Assumed No	Assumed Yes	?	Assumed No	Yes	Child, then Yes
C6	27	Assumed No	Assumed No	?	Assumed No	No	Adult, then no
C7	17	Assumed No	Assumed No	?	Assumed No	Yes	Minor then Yes
C8	90	Assumed No	Assumed No	?	Assumed No	Yes	Introduces too old
C8a	67	Assumed No	Assumed No	?	Assumed No	Yes	Fixes Retirement age
C9	20	Assumed No	Yes	?	Assumed No	Yes	Introduces FTE
C9a	35	Assumed No	Yes	?	Assumed No	No	Limits FTE to continuing
C10	67	Yes	No	?	Assumed No	No	Introduces Prisoner
C11	80	No	No	75	Yes	No	Introduces Absence
C12	16	No	Yes	13	No	Yes	Modifies Equation

despite 13 years of absence. so restricting the negative exception to adults. The final situation is shown in Table 5.

At this point, with exceptions mounting both in number and complication, it may be considered time for a radical reassessment of the rules. This may also be motivated by an increasing proportion of people remaining in FTE after 18 (now the majority in the UK), and by the increased mobility of labour (which might decrease after UK leaves the EU). One idea might be two rules, one to cover the young and one to cover the old. These rules are based on logical (dis)similarity to distinguish those not yet liable to work, and those considered to have paid their dues. The rules incorporate the absence exception (applicable to the old only).

- **R4**: Pay if has not entered labour force
- **R5**: Pay if part of UK labour force for 45 years unless prisoner

R4 and R5 are jointly necessary: claimants who do not satisfy either R4 or R5 will be denied benefit. Although we have two rules, it is always clear which should be applied and prisoner is now the only exception. The situation with R4 and R5 are shown in Table 6. Although the case outcomes are the same, the conceptualisation of the benefit is now different. Whereas originally work was seen as the default, and special circumstances were required to pay the benefit, now the view is more balanced, with work normally confined to a period in midlife. This is perhaps more in tune with a rights oriented view of benefits.

3 LEVI'S THREAD OF CASES

In this section we apply our approach to a simplified selection of the cases described by Levi in [13]. In the descriptions 'C' is the claimant and 'D' is the defendant. The pre-existing rule, at the beginning of the thread, might be stated as:

- **LR1** *IF manufactured goods cause injury to a third party and not [exceptions] THEN manufacturer not liable*.

Note that this rule itself began as an exception (the *third party* exception) to the rule ascribing liability to a manufacturer if his goods cause injury. Now the rule is considered to be a rule in its own right, the cases falling under it will become distinctions relative to the original rule.

Levi's thread and his first stage begins with the creation of a new rule. This was done in Dixon v Bell (*DvB*). The facts were that D owned a gun. D sent a young servant to fetch it. In playing with the gun, the servant shot C's son (the third party). The defendant was found to be liable, so *DvB* was found to be a singular exception to the pre-existing rule LR1. This was based on the unusual feature that guns are dangerous things ("The law requires of persons having in their custody instruments of danger, that they should keep them with the utmost care"), and so did not affect the consistency of the pre-existing rule LR1.

In Langridge v Levy (*LvL*), D sold a defective gun to C's father falsely declaring it to be in safe working order. It injured C (the third party). The decision that D was liable was based on the false representation, so that it was distinguishable from the pre-existing rule because not grounded on the nature of the item, and so forms part of a different lineage, relating to false representations, rather than the nature of the thing sold. In *LvL* the court refused to endorse the exception to the pre-existing rule created in *DvB* by finding an exceptional feature common to *LvL* and *DvB* because, on our analysis, it would give rise to too large a class: the court rejected forming a category of dangerous articles, because it

> "should pause before we made a precedent by our decision which would be an authority for an action against

> the vendors, even of such instruments and articles as are dangerous in themselves, as the suit of any *person whomsoever* into whose hands they might happen to pass and who should be injured thereby."

This might be construed as a floodgates argument, but its purpose is also to explain why they wished not to rely on *DvB*, but decide on the different issue of false representation. This may suggest that the court may have considered the rule proposed in *DvB* imprecisely expressed, believing that the category of dangerous items needs narrowing: after all since any item which was the subject of such a claim had, in fact, caused harm, it must, in some sense, be considered dangerous, However, there was no need to commit on this issue since the false representation provided an independent means of resolving the dispute.

In Longmeid v Holliday (*LvH*), the class of *DvB* was narrowed. A third party bought a defective lamp from D. It exploded and burned C. The court rejected the claim because the lamp was held not to be *dangerous in itself*, but only dangerous because defective, and so modified the exception in *DvB*, based on the feature of being dangerous in itself, rather that simply dangerous. This represents a narrowing of the *DvB* rule, although still covering *DvB*, since a gun, unlike a lamp, can be considered dangerous in itself. The brings us to the extensional definition shown in Table 8 and the intensional definition:

- **LR2** *IF thing dangerous in itself and not [exception] THEN liability to third party*.

Note that the new rule was created by a combination of a positive precedent (*DvB*) and a negative precedent (*LvH*) rather than from two positive precedents and that *LvL* remains distinguished as having been decided under another rule relating to false representation (although, since it also concerned a gun, it might, even though defective, have fallen under LR2, the intensional definition of *LvH*).

Levi's second stage begins with George v Skivington (*GvS*) in which D, a chemist, made some shampoo that was toxic. It was used by C, the wife of purchaser of the shampoo. She was injured by it. The court found in favour of C by application of the new rule, holding that toxic shampoo is dangerous in itself (rather than because defective) and so in the class. *LvL* can also now be reinterpreted as a positive precedent, since despite the false representation, it was a gun, and so dangerous in itself.

In Cadillac v Johnson (*CvJ*) C bought a faulty car manufactured by D. It turned over and C was injured. The new rule was applied, but the car found not to be dangerous in itself, but only dangerous because defective, and C did not recover, and so this case became a negative precedent. In giving its decision the court used a class membership argument:

> "One who manufactures articles inherently dangerous, e.g. poisons, dynamite, ... is liable in tort to third parties which they injure, ... On the other hand, one who manufactures articles dangerous only if defectively made, ..., e.g., ..., carriages, automobiles, and so on is not liable to third parties ". quoted in [13] p 514.

Levi's third stage begins and ends with McPherson v Buick (*MvB*) in which the facts were very similar to *CvJ*. C bought a faulty car manufactured by D. It turned over and the C was injured. C was successful as the court widened the feature to include defectively made items, by looking at their current state rather than their purpose: "McPherson v Buick renamed and enlarged the danger category ..." [13], p 517. The rule now was (as expressed in [13], p 516):

- **LR3** "If the nature of a thing is such that it is reasonably certain to place life and limb in peril, when negligently made, then it is a thing of danger" .

This brings to an end the life-cycle of the rule. The extensional definition is shown in Table 9. Note that *CvJ* is no longer active as a precedent, since it has the wrong outcome to be a positive precedent, and the wrong facts to be a negative precedent. The cases may be reinterpreted, but the decisions remain. If, in future, a case with the facts of *CvJ* were to be brought, liability could be found on LR3, and D would not be able to use *CvJ* as a precedent.

4 THE AUTOMOBILE EXCEPTION CASES

As a further illustration of our account of the development of case law, we will review a sequence of cases from the automobile exception to the Fourth Amendment to the US Constitution using the ideas underlying our approach . The Fourth Amendment is intended to safeguard the privacy of citizens by prohibiting "unreasonable" search, stating that

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated.

Unreasonable search is taken to be search without a warrant, issued on grounds of probable cause. This is a thread of cases well-studied in AI and Law [19], [4] [6], [5]. There are several exception rules to the 4th Amendment, including searches incident to lawful arrest and searches of automobiles. There is also a positive affirmation that warrantless searches of packages is not permitted, dating back to the 1878 case *ex parte* Jackson[5].

> "Letters and sealed packages of this kind in the mail are as fully guarded from examination and inspection, except as to their outward form and weight, as if they were retained by the parties forwarding them in their own domiciles. The constitutional guaranty of the right of the people to be secure in their papers against unreasonable searches and seizures extends to their papers, thus closed against inspection, wherever they may be."

Packages were later taken to include luggage. This can be seen as more or less straightforward application of the Fourth Amendment.

The thread that we have chosen is those cases that fall within the overlap between the automobile exception and the affirmation that evidence from warrantless searches of packages must be suppressed.

The automobile exception thread begins with Carroll v United States[6], in which it was held to be lawful to search an automobile without a warrant, where there was probable cause to believe it was transporting contraband. The feature was that there was *probable cause to search an automobile*, giving the intensional definition

[5] Ex parte Jackson :: 96 U.S. 727 (1878)

[6] The cases we discuss are: Carroll v United States 267 U.S. 132 (1925), United States v Chadwick 433 U.S 1 (1977), Arkansas v Sanders, 442 U.S. 753 (1979), California v Acevedo, 500 U.S. 565 (1991), New York v Belton 453 U.S. 454 (1981), Chimel v. California, 395 U.S. 752 (1969), Robbins v California 453 U.S. 420 (1981) and United States v Ross 456 U.S. 798 (1982).

Table 8: Extensional Definition of LR2 after Longmeid v Holliday

Positive precedents	Negative precedents	Exception precedents	Distinguished
Dixon v Bell	Longmeid v Holliday		Langridge v Levy

Table 9: Extensional Definition after McPherson v Buick.
There are no exceptions or distinguished cases. Cadillac is no longer active as a precedent.

Positive	Negative
Dixon v Bell	
George v Skivington	Longmead v Holliday
Langridge v Levy	*Cadillac v Johnson*
McPherson v Buick	

- **4thR1** IF search of automobile and probable cause to search automobile and not [exception] THEN search valid.

In the following descriptions 'R' is the respondent. In United States v Chadwick R had disembarked from a train in Boston and was putting a footlocker[7] into the boot of a car. On the probable cause of a belief that the footlocker contained drugs[8], R was arrested and the footlocker, in the car, opened (despite being double locked) and searched without a warrant. The government argued that the automobile exception ought to be extended by analogy to apply to luggage in automobiles. Mr Justice Burger delivered the opinion of the Court which distinguished luggage from automobiles and applied the rule that required a warrant to be obtained for the searching of packages to luggage, even if the luggage was in an automobile. The reasoning being that in *Chadwick* the probable cause (based on the intelligence from San Diego) applied only to the footlocker (which could have been detained before being put in the automobile): there was no probable cause at all to search the automobile

Chadwick is found not to be an exception to *Carroll*, but to be distinguished from it and, therefore, part of a different lineage (effectively the fact that the luggage was in an automobile was not considered significant). This makes *Chadwick* a positive precedent for the treatment of luggage under the Fourth Amendment and *Carroll* is distinguished. The rationale was that, although luggage is mobile, the expectations of privacy for luggage are much greater than for automobiles, which may routinely be stopped and inspected for traffic violations, and luggage may be more easily detained while a warrant is obtained.

In Arkansas v Sanders, the police had been told that R would be carrying a suitcase containing drugs. They saw R put a suitcase into the boot of a taxi and drive away. They stopped the taxi, opened the boot, and without a warrant, opened the suitcase and found the drugs. The search was suppressed. The opinion of the Court delivered by Mr Justice Powell, identifies the distinction between *Carroll* and *Chadwick* noted above and presents the case in terms of a class membership argument:

> "We thus are presented with the task of determining whether the warrantless search of respondent's suitcase falls on the *Chadwick* or the *Chambers*[9]/*Carroll* side of the Fourth Amendment line. Although in a sense this is a line-drawing process, it must be guided by established principles."

The Court's opinion was that it fell on the *Chadwick* side of the line. These cases yield a new rule:

- **4thR2** IF personal luggage in automobile and no probable cause to search automobile and not [exception] THEN suppress search.

The dissenting judgment of Mr Justice Blackmun came to a different conclusion, influenced by significant differences beween the footlocker of *Chadwick* and the suitcase. The suitcase was much smaller than the 220 pound footlocker of Chadwick, and was unlocked (rather than double-locked). Blackmun felt the need of a different bright line which would limit the items falling under luggage to the exceptional items such as that featuring in *Chadwick*.

> "In my view, it would be better to adopt a clear-cut rule to the effect that a warrant should not be required to seize and search any personal property found in an automobile that may, in turn, be seized and searched without a warrant pursuant to Carroll."

This view was eventually to prevail in California v Acevedo, albeit with a differently composed Court.

In New York v Belton, the police stopped a speeding car and saw an envelope on the floor which they could see probably contained marijuana. They arrested the people in the car, searched the passenger compartment and found cocaine in R's coat, which had been left in the car. The search was permitted under the 'search incident to lawful arrest' exception. Chadwick and Sanders were distinguished on grounds that neither involved searches incidental to lawful arrest. A key precedent here was Chimel v California, in which it had been held that

> "a lawful custodial arrest creates a situation which justifies the contemporaneous search without a warrant of the person arrested and of the immediately surrounding area. Such searches have long been considered valid because of the need 'to remove any weapons

[7] A footlocker is a large (220lb) piece of luggage.
[8] The Boston police were acting on intelligence received from San Diego, where R had boarded the train.
[9] A case in which the automobile exception had applied, but no luggage was involved. The issue in *Chambers* was that the car had been removed from the roadside, and so the urgency was very much reduced. The principle used was that once a warrantless search had been possible, it remained possible.

Table 10: Extensional Definition lf 4thR2 after US v Ross.
***Falls under Automobile exception **Falls under incidental to arrest exception.**
Minority opinions are italised. Reinterpreted opinions are in square brackets

Positive	Negative	Distinguished
		Carrol*
Chadwick		Belton**
Sanders	*Sanders(Blackmun)*	Ross*
Belton(Brennan)		[Robbins*(post Ross)]
Robbins		[Belton*(post-Ross)]

> that [the arrestee] might seek to use in order to resist arrest or effect his escape,' and the need to prevent the concealment or destruction of evidence." (from the majority opinion of Mr Justice Stewart in *Belton*).

The majority wished to distinguish Belton from the automobile cases, since although the envelope gave probable cause to search the vehicle, the expectations of privacy in a garment such as a coat might align it with luggage and so bring it under 4thR2. The dissenting opinion of Mr Justice Brennan begins:

> "In Chimel v. California, . . . , this Court carefully analyzed more than 50 years of conflicting precedent governing the permissible scope of warrantless searches incident to custodial arrest. The Court today turns its back on the product of that analysis, formulating an arbitrary 'bright-line' rule applicable to 'recent' occupants of automobiles that fails to reflect Chimel's underlying policy justifications".

He then puts a logical stopping point argument to justify deciding *Belton* under the packages rule 4thR2:

> "As the facts of this case make clear, the Court today substantially expands the permissible scope of searches incident to arrest by permitting police officers to search areas and containers the arrestee *could not possibly reach* at the time of arrest." (Italics ours)

Since the arrested men could not reach the coat, the justification given in Stewart's opinion above, that the arrestee might seek to conceal or destroy the evidence, did not hold in *Belton*. Whereas the majority wished to limit the extension of 4thR2, Brennan was quite prepared to enlarge it. His concern was rather to limit the "possible scope" of the incidental on arrest exception to that expressed in *Chimel*.

In Robbins v California, the police stopped R's car and searched it. They found packages wrapped in opaque plastic. They unwrapped them and found drugs. The search was suppressed because the closed packages were not subject to search, following 4thR2. The government's argument against following that rule was similar to that given by Blackmun in Sanders, that the nature of the container may reduce the constitutional protection (arguing that suitcases are protected while paper bags are not). Mr Justice Stewart answered this with a logical stopping point argument, in giving the opinion of the Court:

> ". . . it is difficult, if not impossible, to perceive any objective criteria by which that task [of deciding whether the container was dignified enough] might be accomplished."

In United States v Ross, the police stopped R's car and searched it, arrested him and then searched the boot in which they found a paper bag which they opened and found smaller bags of heroin inside it. Mr Justice Stevens delivered the opinion of the Court. It permitted the search on grounds that it fell within the automobile exception and not within the container rule, ie, it was held that in the course of a lawful warrantless search of a car, the police are permitted to search containers that are in that car. The key point was that "Unlike Chadwick and Sanders, in this case, police officers had probable cause to search respondent's entire vehicle." This interpretation would also have permitted the search in *Belton*, had it been retrospectively decided that Brennan's argument had been the stronger, and that search of the coat was not considered as incidental to the arrest, so that the case could not be distinguished from the automobile and package cases. Further the argument may well have justified the search in Robbins, but the argument was not advanced ("Unlike Robbins, in this case, the parties have squarely addressed the question whether, in the course of a legitimate warrantless search of an automobile, police are entitled to open containers found within the vehicle."), the state relying instead on the nature of the container. The opinion of the Court makes an appeal, as does the opinion in *McPherson v Buick* to unchanging underlying principles: "we are convinced that the rule we apply in this case is faithful to the interpretation of the Fourth Amendment that the Court has followed with substantial consistency throughout our history." This was despite the conflict with *Robbins*: "although we reject the precise holding in Robbins, there was no Court opinion supporting a single rationale for its judgment, and the reasoning we adopt today was not presented by the parties in that case."

The dissenting judgement of Marshall uses several arguments. There is a clear logical stopping point argument: "The majority today not only repeals all realistic limits on warrantless automobile searches, it repeals the Fourth Amendment warrant requirement itself."; a class membership argument arguing that the proposal does not give sufficient guidance: "the majority's new rule is theoretically unsound, and will create anomalous and unwarranted results" and a second class membership argument, arguing that the majority have conflated two distinct classes: "The Court today ignores the clear distinction that *Chadwick* established between movable containers and automobiles". Essentially Marshall wishes to retain the status of packages and luggage, even if they are found within an automobile for which probable cause to search exists.

> " I conclude that any movable container found within an automobile deserves precisely the same degree of

> Fourth Amendment warrant protection that it would deserve if found at a location outside the automobile."

The position following Ross is summarised in Table 10. The key distinction is the scope of the probable cause. This give us two modified rules, making the scope clear:

- **4thR1a** IF probable cause to search automobile and not [exception] THEN search of automobile and contents valid.
- **4thR2a** IF probable cause to search only package or luggage and not [exception] THEN search of automobile and contents not valid.

Throughout the stream of cases the justices have been divided: Marshall and Brennan are liberals, concerned to protect privacy, and to insist that wherever a warrant could be obtained it must be obtained. Other justices are more concerned with facilitating the enforcement of laws and so do not want to put obstacles in the way of the police. Consequently Brennan and Marshall wish to limit the scope of the automobile exception, while others, such as Blackmun and Reinquist, wish to limit the scope of 4thR2 to exclude certain classes of luggage and packages (e.g. Blackmun's questioning of whether the unlocked suitcase in *Sanders* has sufficient expectations of privacy). The recognition of 4thR1a in *Ross* represents a defeat for Marshall and Brennan, since it removes Belton and Robbins from the scope of 4thR2. This represents a shift in value preference away from privacy towards law enforcement, so that presence in the automobile cancels the protection of the luggage where there is probable cause to search the automobile.

The final case in the thread is California v Acevedo, which was heard by a rather different court from the earlier cases with all the recent appointments being made by Republican presidents. In this case R was seen emerging from a flat which was known to contain several packages of marijuana carrying a paper bag which he placed in his car. As R made to drive away he was stopped by police who searched the car and found marijuana in the paper bag. Probable cause was held to apply only to the bag, not the car, and the California Court of Appeal suppressed the evidence, following Chadwick. The Supreme Court, however, reversed this decision. Blackmun gave the majority opinion:

> "Until today, this Court has drawn a curious line between the search of an automobile that coincidentally turns up a container and the search of a container that coincidentally turns up in an automobile. The protections of the Fourth Amendment must not turn on such coincidences. We therefore interpret Carroll as providing one rule to govern all automobile searches. The police may search an automobile and the containers within it where they have probable cause to believe contraband or evidence is contained."

The minority opinion, in contrast, did not find the line at all curious. It was given by Mr Justice Stevens, who had formulated the line in *Ross*. His opinion was based on the idea that the automobile was irrelevant to *Avecedo*, and the package was, like *Chadwick* and *Sanders*, subject to an entirely separate rule concerning packages and luggage.

> "For surely it is anomalous to prohibit a search of a briefcase while the owner is carrying it exposed on a public street, yet to permit a search once the owner has placed the briefcase in the locked trunk of his car. One's privacy interest in one's luggage can certainly not be diminished by one's removing it from a public thoroughfare and placing it – out of sight – in a privately owned vehicle."

Thus while the majority appear to see the rule about packages as an exception to the automobile exception, and as such to be rejected as unnecessary, the minority see it as a standard application of the 4th Amendment to which the Automobile exception does not apply. The majority opinion clarifies the issue as

- **4thR3** IF probable cause to search package and package in automobile and not [exception] THEN probable cause to search automobile and package.

Effectively this brings packages within the scope of the automobile exception. Whereas Mr Justice Stevens (in Coolidge v. New Hampshire, 403 U.S. 443 (1971)) had held that "the word 'automobile' is not a talisman in whose presence the Fourth Amendment fades away and disappears", it seems that *Avecedo* has made it so. The situation in *Chadwick* cannot arise, because if there is probable cause to search the luggage there is probable cause to search the vehicle.

5 DISCUSSION

In all three of our examples we can see the following. The rule divides potential cases. This division represents the existing balance between two motivations (cf. [12]). In the Independence Allowance example, the balance can be seen as between generosity and self-reliance; in the Levi cases between the interests of the third party and the interests of the manufacturer and in the 4th amendment cases between privacy and law enforcement. As time passes, the idea of what balance is appropriate will change, and the common law "moves" to permit this. In a new case it can be argued either that the existing rule should be applied and the existing division maintained, or that it should be moved, so as to increase the size of one of the divisions at the expense of the other. Thus in the worked example we can see the extent of the benefit being made more generous in the light of social change as the age for beginning work rises, in accordance with what is normal in society. The exceptions fine tune the balance, favouring those in continuing education, reflecting the growing normality of this situation, and acting against those who are in prison or who have largely chosen to reside abroad as not deserving of state support.

In the Levi cases the original rule was strongly in favour of the manufacturer: *DvB* moved this in favour of the purchaser, but was seen as over shooting the mark, and was corrected in *LvH*. But this over corrected, by excluding all defectively made items, dangerous or not. This in turn was corrected in *MvB*, so that items dangerous by defect as well as design were included. Thus we can see the movement here as gradually homing in on the desired balance.

In the 4th Amendment cases we have two competing values: privacy and law enforcement, and a divided Supreme Court. Over the course of the thread of cases we see a shift in the balance away from privacy towards law enforcement. Thus *Chadwick* is distinguished from the automobile exception cases, and decided under a rule which straightforwardly applies the 4th Amendment to packages and luggage. Similarly with *Sanders*. In Belton we see a shift towards law

enforcement: although Belton could have been decided under 4thR2, as Brennan suggested, the court chose to distinguish it and decide it under the search incidental to arrest exception. *Robbins* does fall under 4thR2. *Ross*, however, represents a significant move away from *Robbins*, by allowing the search of packages in an automobile, where there is probable cause to search the automobile. *Avecedo* completes the move away from privacy, by arguing that if it is known that a suspicious package in an automobile, that gives cause to search the automobile, bringing *Avecedo* under the automobile exception as applied in *Ross*. This would also have allowed the searches in *Chadwick*, *Sanders* and *Belton*, and so consolidates a significant shift. This shift, however, does not change the rule itself, but rather denies that the rule can be applied, because the situation in which there is probable cause to search luggage in an automobile but not the automobile is said not to occur.

5.1 Possible Implementation of LEVI

If we apply this analysis to the computational modelling of reasoning with legal cases, we can say the following. First, that LEVI is not currently able to make, or even predict decisions: whether the *status quo* should be maintained, or the classification should move depends of social and other factors which we currently leave to the judge or other user. As [13] puts it, common law shows "the decisive role which the common ideas of the society and the distinctions made by experts can have in shaping the law."

What can be done, however, assuming the case is represented as a set of facts, some of which are features appearing in the antecedents of existing rules, is the following.

(1) Pre-existing rules can be applied to the case: it may be that one or more rules apply. If no rule applies, an existing rule can be broadened, or a fact not currently used as a feature may form the basis of a new rule.
(2) If more than one rule applies, one is chosen and the other rule distinguished, establishing a priority between the two rules.
(3) The chosen rule now forms the basis of an argument for a classification of the case. For the remainder of this discussion we will assume that it is positive. The discussion would equally apply, *mutatis mutandis*, to negative instances.
(4) There are three possible ways to produce a counter argument:
  (a) Choose a fact of the case not currently a feature and claim it is an exception.
  (b) Argue that the current class should be narrowed, by including a fact absent from the case in the antecedent, and refine the existing rule accordingly.
  (c) Chose a fact not currently a feature and propose a new rule.
(5) Compute the consequences of the proposed exceptions and rule modifications. This will take the form of new extensional definitions.
(6) Compare the new extensional definitions with the one for the existing rule. Note the cases that have moved.
(7) Reject unacceptable reinterpretations (those that fail to cover enough precedent cases, or which reclassify cases in an undesirable way).
(8) Choose (using floodgates and class membership arguments) whether to adopt any of the acceptable reinterpretations, or remain with the existing rule.
(9) Use Inductive Logic Programming or similar [16] to induce candidate new rules from the entire precedent base, and consider whether a simplification reducing exceptions and distinctions is possible, initiating a new cycle.

The computational support is largely a matter of guiding the user through the possible choices and their consequences, so that the user may make an informed decision. If the user is counsel for one of the parties, these may help to inform the choice of a line of argument.

6 CONCLUDING REMARKS

We have identified a way to drive changes in case law, using characteristic arguments at various stages of the life cycle. Implementing the decision procedure sketched above will enable us to explore the rationales for accepting and rejecting proposed rule refinements and exceptions. We currently follow Levi in believing that there is no simple criterion capable of automation. As he says, "The law forum is the most explicit demonstration of the mechanism required for a moving classification system" [13]. Our proposal is that the decision to change is made by users, participants in the law forum, according to their views of the current social climate, to which they can adapt the law so that the most appropriate balance is struck.

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