1 Introduction

This paper describes a model that the author developed in order to represent the Claimant's arguments in a case before the London Employment Tribunal.[1] It records as honestly as possible the way that the conduct of the case benefited from the use of a diagrammatic model. The paper outlines the events leading to the claim and the principal legal tests that were applied. It then describes the evolution of the model by focusing on two arguments that were influential on the outcome of the case and how those were modelled. The model's chief purpose is to force the advocate into a dialogue with himself and to confront objectively the strengths and weaknesses of his client's case.

2 The Background to the Case

The Claimant was employed by the Respondent as a network architect. The principal events occurred while he was on a camping holiday with his family in the New Forest. Throughout the day he had received calls on his mobile from 2 colleagues, J and S, to help them solve some serious technical problems encountered by a client of the Respondent. Although they sat next to each other at work, J and S rarely spoke and, if so, only to trade insults. At about 8.30 pm,

after putting his children to bed and opening a bottle of wine, "the Claimant left a voicemail message on the mobile phone of J... they frequently made calls to each other outside office hours. On this occasion the Claimant left a message which purported to be from S. The message was as follows:

Hello J, it's S here. Just to say that you're a faggot and I'll bash your bollocks off anytime you want. So, if you think you're up to it, come on. Cheerio chip chip."[2]

The recipient, J, took the message at face value and made a complaint to Human Resources against S, playing them the message. It was only later, after the Claimant had spoken to J and contacted his line manager, that it became clear to the Respondent that it was the Claimant who had left the message. When the Claimant returned to work, he attended a meeting with his line manager, at which he was suspended. He went into the office 2 weeks later for a disciplinary hearing at which he was summarily dismissed for gross misconduct. At the appeal hearing his dismissal was upheld.

The Claimant sought from the Employment Tribunal a declaration of unfair dismissal. The starting point for any consideration of unfair dismissal is the Employment Rights Act 1996, s 98(4), the decision turning on whether "the employer acted reasonably or unreasonably in

treating it as a sufficient reason for dismissing the employee." The relevant case law focuses

on the concept of a band or range of reasonable responses to the employee's action.[3] The

members of the Tribunal should apply this as an objective test and decide whether the

employer's response was within the range of reasonable responses rather than consider what

they would have done themselves. The Respondent's investigation into a dismissal that arises

from alleged misconduct by the employee must also be reasonable.[4]

3   The Reasons for Using a Diagrammatic Model

This was a vital case for the Claimant. Since being dismissed he had been unemployed for over

a year and his mortgagee was threatening to repossess the house in which he lived with his

children. If he won, he was likely to receive substantial compensation, redundancy insurance

and start work again almost immediately. If he lost, he risked the loss of his house, long-term

unemployment, and a claim for legal costs by the Respondent. In that sense it had the

potentially serious impact on him that a criminal case may have on a defendant. For these

reasons it appeared sensible to be as rigorous as possible in analysing the arguments and the

evidence and to leave as little as possible to chance.

The argument was one that relied on persuading the Tribunal to take a commonsense view of

what the Claimant had done. In order to do this, reasoning about the real world had to be

combined with the evidence in the bundle and that which would be presented at the hearing.

Wigmore in his chart method provides a means of effecting this combination and that was the

spur for using his method.[5] He defines real life knowledge as "any fact judicially admitted, or

noticed as a matter of general knowledge or inference, without evidence introduced."[6] There is

an example later in his paper of an argument to discredit a witness by alleging bias, "let e.g. >

18 be the supposed general fact of actual bias and let 19 O ad 20 O be the two circumstances

tending to evidence it, 19 being the witness's relation to the defendant as a discharged

employee, 21 being another witness who testifies to this, and 20 being the impeached

witness's strong demeanour of bias while on the stand."[7] The extract from the chart represents

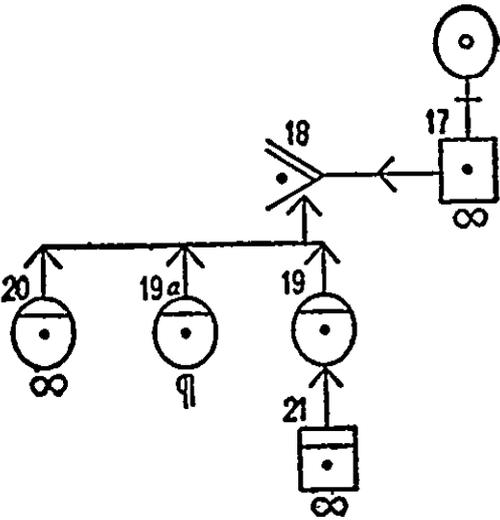this explanation in graphical form in Figure 1:

Figure 1 - Extract from Wigmore

The real world argument is represented by 19a: "Note that 19 here is supplemented by 19a, i.e. the supposed general truth that discharged employees are apt to have an emotion of hostility; the letter a added to the main number will indicate the appurtenant relation of this fact to 19."[8]

Using this diagram as a basis, it could be recast with 18 being the argument that the message

was left as a joke, 19 that the Claimant and the recipient R were friends (supported by

testimony, 21), 19a that friends are apt to joke with rather than distress their friends and 20

that J was not distressed by the call. However, there were a number of further propositions

that needed to be brought in to support the argument, for example that the Claimant's line

manager and department head had realised that it was a joke, again supported by testimony,

and that the wording and delivery of the message made it obviously so. The drawback of

attempting to represent all this in a Wigmore chart was that it would mean creating a

numbered list of facts, which it would be burdensome to maintain. Another argument against a

pure Wigmorean analysis was that the standard of proof was not the exacting criminal

standard of proof, beyond reasonable doubt, but the more easily attainable civil standard of

proof, "more likely than not". This meant that there was a lesser requirement of rigour in

establishing proof than in the criminal cases to which Wigmorean analysis is generally applied.

4   **Arriving at a Hybrid Approach using Wigmore and Object Modelling**

The natural solution appeared to be to make use of elements of Wigmore's approach but to

overlay it with a different schema that would address the problems outlined above.[9] Having

spent a number of years preparing object models it seemed that their flexibility might offer a

solution. The object classes and their dependencies would provide a suitable means of

showing relationships between facts, and the object class would provide, in its attributes, an

opportunity to place the textual description of the facts on the model and to note where the

evidence to support these facts was to be found. This evidence was principally held in the

bundle and the witness statements and would be reinforced, during and after the merits

hearing, by the hearing notes and the closing submissions. There would also be an opportunity

to distinguish between facts supporting the Claimant's contentions and those supporting the

Respondent's.[10] The object class component of the model was drawn from the original

expression of the Unified Modelling Language (UML).[11] This followed the principle, used in

the case of Wigmore, of going to the source documents which tend to be more straightforward

than later improvements. Taking the small part of the argument that has already been

discussed, the model followed the representation shown in Figure 2 overleaf.

It will be seen from the extract from the model that a number of elements of the Wigmore

method have been retained, including: (1) the distinction between a circle, indicating

circumstantial evidence, and a square, indicating evidence supported by testimony; (2) the ¶

mark to indicate real world evidence; and (3) dots to indicate strength of belief (here relocated

to the arrows). The references to evidence supporting the Claimant's case are below the

textual description and above references to evidence which the Respondent might use to

undermine the fact.[12] The proposition that "The message was clearly intended as joke" is only

one of the statements that were combined to support the probandum that the employer acted

outwith the band of reasonable responses.[13] Of particular relevance to the idea of the hybrid

model outlined here is the synthesis of the Wigmore chart method and object-oriented

Bayesian networks.[14]
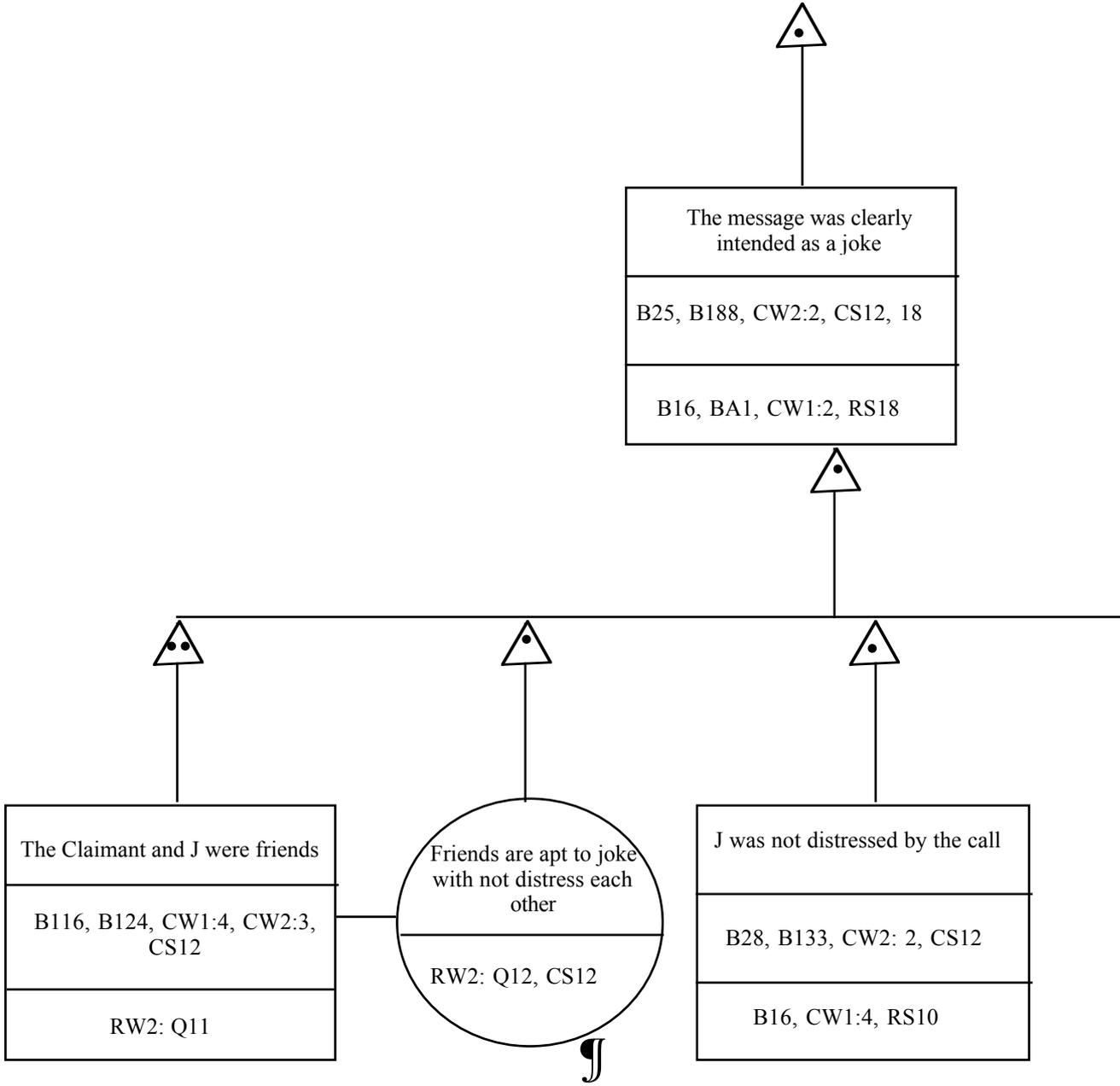
Figure 2 - The Hybrid Wigmorean Object Model (Extract)

5   **The Impact of the Model on the Hearing**

The object with the text 'The Claimant and J were friends' has as one of its attribute values

RW2: Q11, which indicates a prepared question to be put to the Respondent's second

witness (B), who had chaired the Claimant's disciplinary hearing and found him guilty of

'serious harassment'. The intention was to put the question to her in order for evidence of her

knowledge of their friendship to be admissible in argument. This was done by preparing

questions to the first witness in cross-examination.

The question were as follows:

Q11   You knew that the Claimant and J were friends, didn't you?

Q12   And it is normal for friends to joke with each other, isn't it?

Q13   And, as a friend, the Claimant would not normally aim to cause distress to J, would

he?

Q12 was not strictly necessary from the point of view of rules of evidence, but provided a

bridge between Q11 and Q13. In the event the cross-examination took a different course

because B's answer to Q1 was 'No'. The questioning then focused on whether B was able to

assess the case at all without this knowledge. This was as helpful as it was unexpected and

provided a new line of argument when it came to the Claimant's closing submissions. The

original line of argument was still valid and was expressed thus: "The message left by the

Claimant on J's voicemail was intended as a joke and for his ears alone. It was never intended

to upset anyone and nor did it do so. To dismiss him summarily was a gross overreaction by

the Respondent to an innocent and harmless piece of fun." This was reinforced by a later

section: "The Claimant and J were friends. The Claimant knew what was likely to amuse him

and what was likely to offend him, and would not have made a call in order to distress him."

This was accepted by the Tribunal in its Reasons: "In assessing the Claimant's conduct, it was a relevant factor to know the relationship between the Claimant and J. Clearly a joke between friends, even in poor taste, might be seen in a different light than if no such relationship existed."[15]

A second line of argument was based on the new evidence that had come to light during cross-examination, namely that "B was ignorant of the context of the call, and there was nothing in the investigation document to explain it to her **(A1)**.[16] She did not know of the friendship between the Claimant and J... She was not, therefore, in a position to reach a reasonable conclusion." This again was accepted by the Tribunal: "In giving evidence to the Tribunal, B stated that she did not consider the friendship between the Claimant and J as a relevant factor... No reasonable employer would have taken the view taken by B that the friendship between the Claimant and J was an irrelevant factor."[17] The argument was therefore considered to be persuasive by the Tribunal, and helped the Claimant to satisfy the requirements of the legal test. The line of questioning that enabled the claimant to run this argument was a direct result of representing the evidence in the model.

6   A Second Example of the Use of the Model

The first example dealt with the central argument about the message and, leading from it,

certain defects in the disciplinary hearing. The second example deals with the fairness of the

overall investigation focusing on the appeal hearing (see Figure 3) and introduces the

construction of a line of argument supported by legal authority.

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        │          Unfairly found guilty of                  │
        │          breaches of discipline                    │
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│ Unfairly found  │        │ Unfairly found  │        │ Unfairly found guilty│
│ guilty of       │        │ guilty of       │        │ of data protection   │
│ serious         │        │ breach of Code  │        │ policy violation     │
│ harrassment     │        │ of Conduct      │        │                      │
├─────────────────┤        ├─────────────────┤        ├─────────────────────┤
│ B12-13, B28,    │        │ B25-32, B188,   │        │ B116, B124, CW1: 4,  │
│ B66,            │        │ B192,           │        │ CW2:3, CS12          │
│ CW2:2, CS12, 18 │        │ CW2:7, CS12,18  │        │                      │
├─────────────────┤        ├─────────────────┤        ├─────────────────────┤
│ B16, BA1,       │        │                 │        │ RW2: Q16             │
│ CW1:5, RS18     │        │                 │        │                      │
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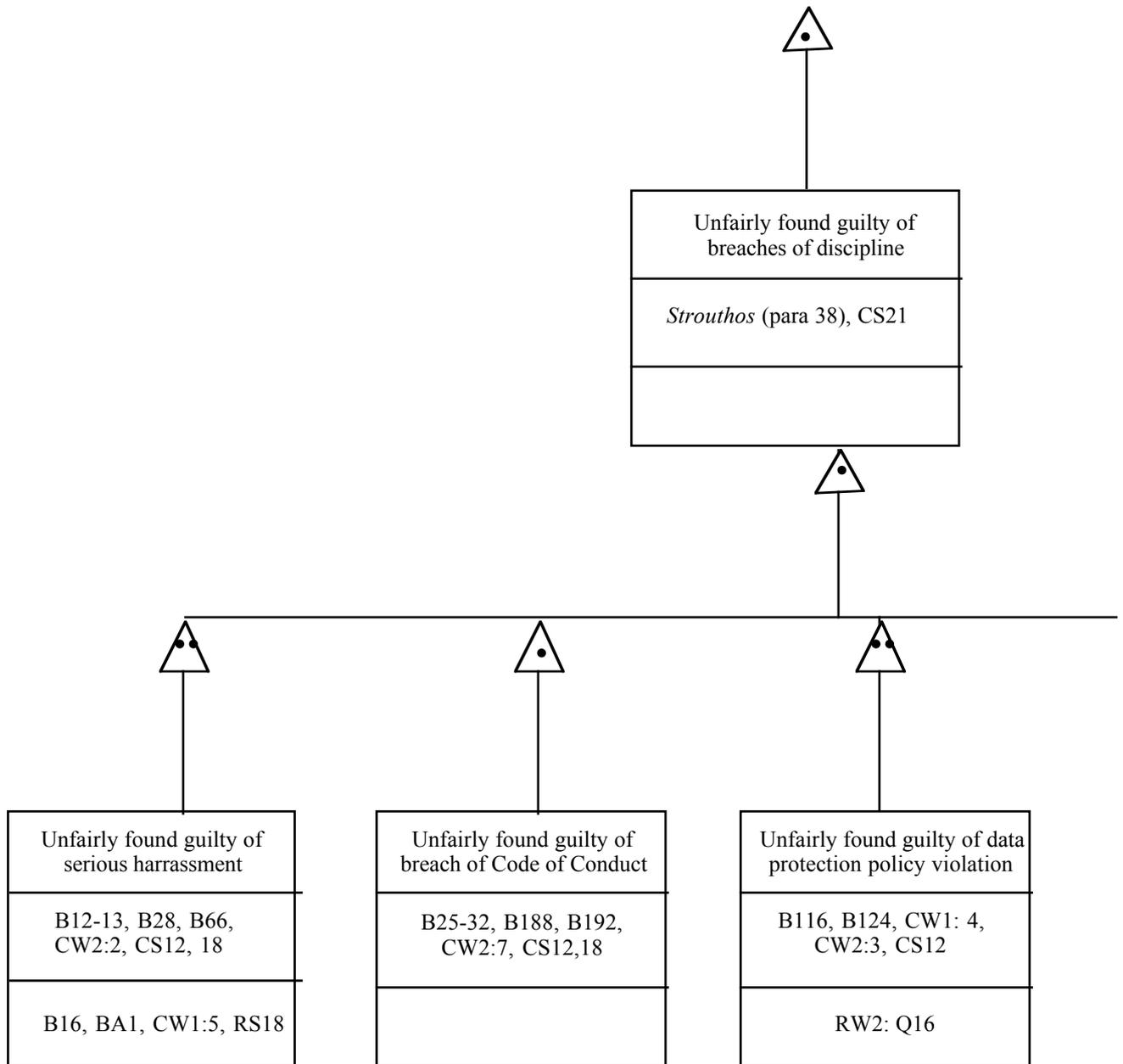
Figure 3 - Part of the Model seeking to prove unfairness in the procedure

It is settled law that a properly conducted appeal can cure the defects of an unfair disciplinary

hearing. Therefore, it was essential to bring forward evidence to show that the appeal process

was conducted unreasonably and failed to cure those defects. A characteristic of the case

against the Claimant was that it defied logic; he was accused of a number of breaches and then

found guilty of others. There is suitable authority for this being sufficient to support a finding

of unfair dismissal - Pill LJ's judgment in the Court of Appeal in *Strouthos v London*

Underground: it is "basic to legal procedures, whether criminal or disciplinary, that a

defendant or employee should be found guilty, if he is guilty at all, only of a charge which is

put to him."[18] This was a suitable focus for attacking the various shifts in the Respondent's

case and provided various lines of questioning during cross-examination. These included the

charges of serious harassment and breaches of the Respondent's code of conduct and its data

protection policy. The questioning again produced unexpectedly favourable evidence, from the

Respondent's third witness (C), regarding the appeal hearing. This was that the person P

conducting the appeal hearing had "overruled B on her finding that harassment had taken

place. However, notwithstanding overruling B on this point, P still came to the conclusion

that the decision to dismiss should be upheld. The precise basis for this conclusion C was not

able to explain satisfactorily."[19] Thus the Tribunal went beyond the argument for which

Strouthos was authority and found that at the end it was unclear where the Claimant's guilt

was supposed to lie. The model was again extremely useful in supporting a chain of inferences

that exposed logical flaws in the opponent's case.

7   Conclusions About the Wigmorean Object Model

The benefits of the model are that is relatively easy to create and maintain, comprehensible to

lawyers and, in some instances, to their clients.[20] Although simple it is sufficiently rigorous to

force advocates to examine the evidence and consider its implications. Thus it can be used as a

reasoning tool throughout the life of a case rather than just being applied in retrospect to

decided cases. It is also capable of being computerised. Indeed, Wigmorean analysis itself

"invites development and use in connection with computers"[21] and the introduction of objects

marks a transition towards a computerised model.[22] The model proved to be immensely

valuable in clarifying the arguments and met its objectives of supporting consistency of

argument, thoroughness of preparation and familiarity with the evidence, while still leaving the

advocate free to respond to unexpected developments in the testimony of witnesses. In the

case used as an example throughout this paper, the Tribunal found in favour of the Claimant,

with the caveat of a modest element (15%) of contributory fault.

[1] The case is not named in the paper. Although the hearing was held in public and the judgment is in the public domain, the names of the Claimant and the Respondent and the other main actors in the case have been withheld in this paper; this is out of courtesy rather than due to any obligation. Anyone wishing to request and read the judgment may do so, the case number being 2305718/2004.

[2] n1 *supra*, Reasons of the Tribunal, para 4.4.

[3] *Iceland v Frozen Foods Ltd* [1982] IRLR 439 confirmed by *Sainsbury's Supermarkets v Hitt* [2003] IRLR 23

[4] *British Home Stores v Burchell* [1980] ICR 383

[5] A similar method of representing real world generalisations is used in Bex, F. J. and Prakken, H., *Reinterpreting arguments in dialogue: an application to evidential reasoning*, 2004, Legal Knowledge and Information Systems JURIX 2004, IOS Press, Amsterdam, pp 119--129; the generalisation relates to the weight given to the testimony of two witnesses rather than one.

[6] Wigmore, J. H., *The Problem of Proof*, Illinois Law Review [1913] 2 77, 84

[7] Wigmore n 7 *supra*, 77, 87; it is represented by the mark ¶

[8] Wigmore n 7 *supra*

[9] Wigmore charts have been deservedly influential on recent developments in the modelling of legal argument. Indeed similar representations abound in the literature of evidence and of legal knowledge based systems. Examples would include the dependencies leading to a hypothesis in Schum (see Murphy P., Evidence, *Proof and Facts*, OUP 2003, p. 278); Roth and Verkeij's approach to argumentation as expressed in an unfair dismissal scenario; and Walton and Godden's use of the chart method to represent a chain of argumentation in online dispute resolution (Walton D. and Godden D.M., *Persuasion Dialogue in Online Dispute Resolution*, Artificial Intelligence and Law [2005] 2 273).

[10] Wigmore n 7 *supra*,

[11] Booch G., Rumbaugh J., and Jacobson I., *The Unified Modeling Language User Guide*, 1999, Addison-Wesley, Reading Mass., pp 63 and 69 *inter alia*

[12] By way of example, the following abbreviations are used: B (Bundle), C (Claimant), R (Respondent), S (Submissions), W (Witness). The actual numbers are not those from the original case.

[13] The model in its original form was scrawled on sheets of A4 and omitted the dots.

[14] See Hepler A.B., Dawid, A.P. and Leucari V., *Object-oriented graphical representations of complex patterns of evidence*, Law, Evidence and Proof, Advance Access published on June 13, 2007. A Bayesian network is a different aspect of object-oriented design from an object model and provides, for example, for the automation of 'probabilistic calculations,' something that the static model discussed here does not. However, such a synthesis indicates authority for the principle, if not the practice described here.

[15] n 2 *supra* , para 6.4

[16] The closing submissions normally refer thus to the Bundle, A1 being Appendix 1, a late addition to the bundle.

[17] n 2 *supra* , para 6.6

[18] [2004] EWCA Civ 402, para 38, its particular relevance being that the appellant had also been summarily dismissed for gross misconduct

[19] n 2 *supra*, para 6.9

[20] The author was able to use the model as a means of discussing the case with the Claimant, who was familiar with computer modelling. This contrasts with more mathematical representations of legal argument cannot normally be used by practitioners themselves: "most lawyers confronted with symbols or mathematical formulae just switch off." The quotation is from Twining, W. (see below).

[21] Twining, W., *Theories of Evidence: Bentham and Wigmore*, 1985, Weidenfeld and Nicolson, London, p 113

[22] If this representation were used on a large case with a number of lawyers working on it, sections of the case could be distributed to individuals and they could develop part of the model to greater levels of detail. A computerised version that was understood by lawyers would lend itself to being used in types of Alternative Dispute Resolution, such as online mediation, with all parties able to provide a model of their arguments to a mediator.