

# *A SYSTEM FOR EXPRESSING BELIEF ABOUT FACTS IN CIVIL TRIALS*

JOÃO MARQUES MARTINS  
([jjmarquesmartins@fd.ulisboa.pt](mailto:jjmarquesmartins@fd.ulisboa.pt))

**Evidence & Decision Making in the Law**  
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# 1. INTRODUCTORY REMARKS: SCOPE

- *Negative delimitation:* (i) not a method or technique for measuring belief; (ii) not a formal theory of evidential reasoning.
- *Positive delimitation:* (i) a set of rules intended to bring argumentative discipline to the debate about facts in civil trials; (ii) a heuristic device for internal and external clarification of the grounds for a decision on facts.

## 2. PROBLEMS ADDRESSED: LEGITIMACY / OPERATIVITY

- Reason-giving for decisions on facts is a critical feature in all modern legal systems. For two main reasons:
  - adjudication is legitimized only if it is based on a reasoned decision;
  - the right of appeal is only operative if the grounds for the decision are intelligible both to lawyers and appellate judges.
- Judges complain of not being able to clearly express the reasons of their belief: often it is heard that the trier of fact is guided by some sort of intuition.

## 2. PROBLEMS ADDRESSED: METHODOLOGICAL

- Qualification problem: although triers of fact often use abductive reasoning, a generalized awareness of that circumstance is not detectable.
- The construction of an argument may succeed even when its author ignores the type of argument he is using. Yet: identifying the argument and knowing its method may improve process and result.

## 2. PROBLEM ADDRESSED: SOME EXAMPLES

- The “makes sense” argument: *“During trial it was not given any other explanation for the disappearing of the goods besides theft. Hence, being this the only explanation that makes sense, it shall be deemed proven that the goods were stolen”* . Portuguese Supreme Court (08.09.2011)
- Hidden IBE: *“If a certain pathological frame can be attributed to different causes but there is empirical support in favour of only one of them, then the prima facie evidence indicates the occurrence of that cause, even if, compared to other possible causes, it is rare or atypical.”* BGH (14.12.1953)

### 3. THE SYSTEM'S CORNERSTONES

- The epistemological justification of a decision on facts in judicial context is obtained only if during the construction of a belief, the rules of a validation system accepted by the parties are observed.  
The only indisputable rule found in the various possible configurations of such a system is the one which prescribes to evidence the role of confirming or refuting the versions of fact submitted to trial.
- Abductive reasoning.
- Idiosyncrasy of civil procedural law.

## 4. (A) STATIC RULES

(i) The degree of epistemic support (*Des*) of a certain representation of fact (i.e. hypothesis) is expressed by numbers (limited to a decimal place) between 0-100;

(ii) It can be established a *Des* under which a *non liquet* situation obtains: I shall postulate 75 (in accordance with the Civil Law tradition);

(iii) At least two representations of fact must always be in dispute and shall be denoted by  $h, \sim h$  (or  $h_1, h_2$ );



## 4. (A) STATIC RULES

(iv) To each party shall be assigned only one hypothesis:  $h$  or  $h_1$  denotes the version of the facts brought by the party that bears the burden of allegation and of proof, normally the plaintiff;  $\sim h$  denotes the set of all the possible hypotheses but  $h$ , and shall be used whenever the party, normally the defendant, challenges  $h$  only by means of denying its veracity;  $h_2$  denotes a version of the facts (presented by the defendant) different and incompatible with  $h_1$ ;

(v) A *Des* shall be assigned to each hypothesis;



## 4. (A) STATIC RULES

(vi) The sum of all *Des* shall be equivalent to 100;

(vii) It must be assigned an initial *Des*, *i.e.*, independent from evidence, to each hypothesis submitted by the parties. The initial *Des* of each hypothesis is 50. Where, allowed by procedural rules, suitable arguments may be presented to assign a given hypothesis an initial *Des* upper or lower than 50.

## 4. (B) DYNAMIC RULES

(i) Each piece of evidence shall be to each hypothesis in a relation of confirmation or refutation;

(ii) A degree of confirmation or refutation reinforcement (to be respectively denoted by  $Dcr$  or  $Drr$ ) shall be assigned to each piece of evidence in relation to each hypothesis in dispute;

(iii) The  $Dcr$  and the  $Drr$  should be expressed in numbers (units) from 0 to 100 or from -100 to 0, as the case may be confirmation or refutation;

## 4. (B) DYNAMIC RULES

(iv) Each  $D_{cr}$  and  $D_{rr}$  implies an arithmetic variation of the  $Des$  associated with each hypothesis;

(v) This mechanism should not breach the above rule A-(vi); therefore, the confirmation or refutation of a hypothesis by evidence must be symmetrically reflected on the refutation or confirmation of the other hypothesis;

## 4. (B) DYNAMIC RULES

(vi) The *Dcr* and the *Drr* (as well as their quantification) provided by a given piece of evidence in relation to a certain hypothesis shall always be substantiated, appealing in particular to the so-called rules of experience, generalizations, *id quod plerumque accidit* or *res ipsa loquitur*);

(vii) The *Dcr* and the *Drr* induced by a piece of evidence epistemically equivalent to another one already considered should be 0.

## 5. SOME POSITIVE ASPECTS

- It is simple and operative;
- It accurately captures and defines the field, which is wide, of potential disagreement between those taking part in a civil trial: is bounded by the decision to grant (and quantify) a degree of confirmation/refutation reinforcement to a piece of evidence in relation to a certain hypothesis;
- It compels the trier of fact to order and test his evidential reasoning, i.e., to put under a critical perspective the grounds for his decision.

*Thank You!*