

LEGAL PROBABILISM

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NOTES ON PENNINGTON AND HASTIE'S 'THE STORY MODEL OF FOR JUROR DECISION MAKING'

1. The story model has three components: (a) story construction, (b) learning verdict categories, and (c) matching stories to verdict categories.
 - (a) A story is a sequence of human actions and events, connected by relations of causality at the physical or mental level (intentions). The process of story construction is complex:
 - i. Jurors construct stories on the basis of the evidence presented to them in court together with their background knowledge of the world. In constructing stories, jurors make sense of the evidence.
 - ii. Stories are made up of different parts, elements and events. Some events or elements of a story are taken as established facts, because they part of the evidence itself or directly supported by the evidence, while other events or elements of a story are inferred (see example at the bottom of page 195).
 - iii. Stories are made up of episodes (mini-stories), usually following a pattern or script (see episode schema example top of page 197).Since multiple stories can be constructed given the same evidence, jurors use criteria to assess which stories are more believable than others (pp. 198-199). These criteria are: coverage, coherence (divided into sub-criteria: consistency, plausibility, and completeness) and uniqueness. These criteria guide the selection process and the trial decision.
 - (b) Learning verdict categories is not unique to the story model. This jury task consists in learning about the law and what elements or features constitute a crime, such as first-degree murder, robbery, aggravated assault, etc.
 - (c) Finally, jurors will match verdict categories with stories, specifically, they will assess whether a certain story matches or fits the elements of a particular crime. This is a process of classification.
2. What empirical evidence is there for the story model? Pennington and Hastie conducted several experiments. In an interview study (pp. 203-209) , for example, they reenacted a murder trial and asked fictional jurors to describe their decision making process and evaluation of the evidence. The experimental findings showed that:

- (a) First, jurors do not store information in an itemized form (as a list of items of evidence as presented in court) or argumentative form (as argument for/against certain claims), but rather, they store information in a story format.

“subjects were primarily making assertions like, ‘Johnson was angry so he decided to kill him,’ (anger initiates goal to kill) rather than assertions like, ‘Johnson was a violent man. That makes me think he intended to kill him’”(The fact that Johnson was violent leads to an inference of intention to kill.) This is strong evidence that subjects were telling stories and not constructing arguments (p. 205)

“only 55% of the protocol references were to events that were actually included in testimony. The remaining 45% were references to inferred events - actions,

mental states, and goals that “filled in” the stories in episode configurations. This argues strongly against the image of the juror as a ‘tape recorder’ with a list of trial evidence in memory’ (p. 206)

- (b) Second, story structures differed significantly depending on the verdict categories the jurors selected, for example, first-degree murder verdict stories had a different story structure than non-guilty stories, even though the elements of the stories were—to a great extent—the same (see the visuals of the two story structures on page 207).
- (c) Pennington and Hastie run other experiments. One experiment showed that jurors construct stories spontaneously (pp. 209-210):

“Subjects ‘recognized’ as having been presented as trial evidence, sentences from the story associated with their verdict with a higher probability than sentences from stories associated with opposing (rejected) verdicts, for both old and new items. That is, they were more likely to correctly recognize as evidence those evidence items in the verdict story corresponding to their own verdict choices, and, they were more likely to falsely recognize as evidence those inferences in the verdict story corresponding to their decisions.” (p. 210)

Another experiment showed that story construction causes trial decisions, and not the other way around (pp. 210-212).

“[M]ock jurors were likeliest to convict the defendant when the prosecution evidence was presented in story order and the defense evidence was presented in witness order (78% chose guilty) and they were least likely to convict when the prosecution evidence was in witness order and defense was in story order (31% chose guilty, see Table 8.1). Thus, story coherence, as determined by presentation order of evidence, affects verdict decisions in a dramatic way.” (p. 211)

- 3. In contrast, there is no empirical evidence that jurors reason in agreement with the probabilistic or Bayesian model of evidence aggregation. Pennington and Hastie run other experiments showing that the Bayesian model performs poorly at predicting how jurors aggregate evidence (see detailed discussion on page 216). Now, of course, legal probabilists will respond that what they are trying to do is not so much to match the actual reasoning of jurors—rather, their focus is how jurors *should*—ideally—reason.