Values in legal case-based reasoning

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What if the previous schemes do not apply?

- Which decisions are allowed by a body of precedents?
  - Precedential constraint
- Where do preferences then come from?

Basic scheme for value-based reasoning with precedents

Deciding *case* pro when it contains *P* promotes value *V*

Deciding *current* pro promotes set of values *V1*
Deciding *current* con promotes set of values *V2*
V1 is preferred over *V2*
Therefore, *current* should be decided pro

D.H. Berman and C.D. Hafner. Representing teleological structure in case-based legal reasoning: the missing link. In *Proceedings of the Fourth International Conference on Articial Intelligence and Law*, pages 50-59, New York, 1993. ACM Press.

Scheme for inferring value orderings from cases

Deciding *precedent* pro promotes set of values *V1*
Deciding *precedent* con promotes set of values *V2*
precedent was decided pro
Therefore, *V1* is preferred over *V2*

Wild animals example

- **Pierson v Post**: *Plaintiff is hunting a fox on open land. Defendant kills the fox.*

- **Keeble v Hickersgill**: *Plaintiff is a professional hunter. Lures ducks to his pond. Defendant scares the ducks away*

- **Young v Hitchens**: *Plaintiff is a professional fisherman. Spreads his nets. Defendant gets inside the nets and catches the fish.*

Slide by Trevor Bench-Capon

Factors in the wild animals cases

- *Pierson* – defendant
  - NotDefLiv: Defendant not pursuing livelihood (p)
  - NotPlLiv: Plaintiff not pursuing livelihood (d)
  - NotOwnLand: Plaintiff not on own land (d)
  - NotCaught: Plaintiff had not caught animal (d)

  {NotDefLiv} < {NotPlLiv,NotOwnLand, NotCaught}

- *Keeble* – plaintiff
  - NotDefLiv: Defendant not pursuing livelihood (p)
  - PlLiv: Plaintiff pursuing livelihood (p)
  - OwnLand: Plaintiff on own land (p)
  - NotCaught: Plaintiff had not caught animal (d)

  {NotDefLiv,PlLiv, OwnLand} > {NotCaught}

- *Young* – (defendant)
  - DefLiv: Defendant pursuing livelihood (d)
  - PlLiv: Plaintiff pursuing livelihood (p)
  - NotOwnLand: Plaintiff not on own land (d)
  - NotCaught: Plaintiff had not caught animal (d)

  Pro = {PlLiv} > {NotOwnLand,NotCaught,DefLiv}

  Con = {PlLiv} < {NotOwnLand,NotCaught,DefLiv}

Values in the wild animals cases

- *Values*
  - Cval: Certainty and avoidance of litigation
  - Eval: Economic benefit for society
  - Pval: respecting Property

- *From factors to values:*
  - Deciding pro when case contains PlLiv promotes Eval
  - Deciding pro when case contains OwnLand promotes Pval
  - Deciding pro when case contains Caught promotes Pval
  - Deciding con when case contains NotCaught promotes Cval
  - Deciding con when case contains DefLiv promotes Eval

Values in the wild animals cases

- *Pierson* – defendant
  - NotDefLiv: Defendant not pursuing livelihood (p)
  - NotPlLiv: Plaintiff not pursuing livelihood (d)
  - NotOwnLand: Plaintiff not on own land (d)
  - NotCaught: Plaintiff had not caught animal (d)   Cval

$$\{\} < \{Cval\}$$

- *Keeble* – plaintiff
  - NotDefLiv: Defendant not pursuing livelihood (p)
  - PlLiv: Plaintiff pursuing livelihood (p)   Eval
  - OwnLand: Plaintiff on own land (p)   Pval
  - NotCaught: Plaintiff had not caught animal (d)   Cval

$$\{Eval, Pval\} > \{Cval\}$$

- *Young* – (defendant)
  - DefLiv: Defendant pursuing livelihood (d)   Eval
  - PlLiv: Plaintiff pursuing livelihood (p)   Eval
  - NotOwnLand: Plaintiff not on own land (d)
  - NotCaught: Plaintiff had not caught animal (d)   Cval

$$Pro = \{Eval\} > \{Eval, Cval\}$$

$$Con = \{Eval\} < \{Eval, Cval\}$$

Further refinements

- Promotion and demotion of values
- Degrees of promotion or demotion
  - Absolute or marginal
- Probability of promotion or demotion