

Arguing about Balances

A position paper for the **Workshop on Argumentation and AI and Law**
International Conference on AI and Law, Rome, Italy, June 2013

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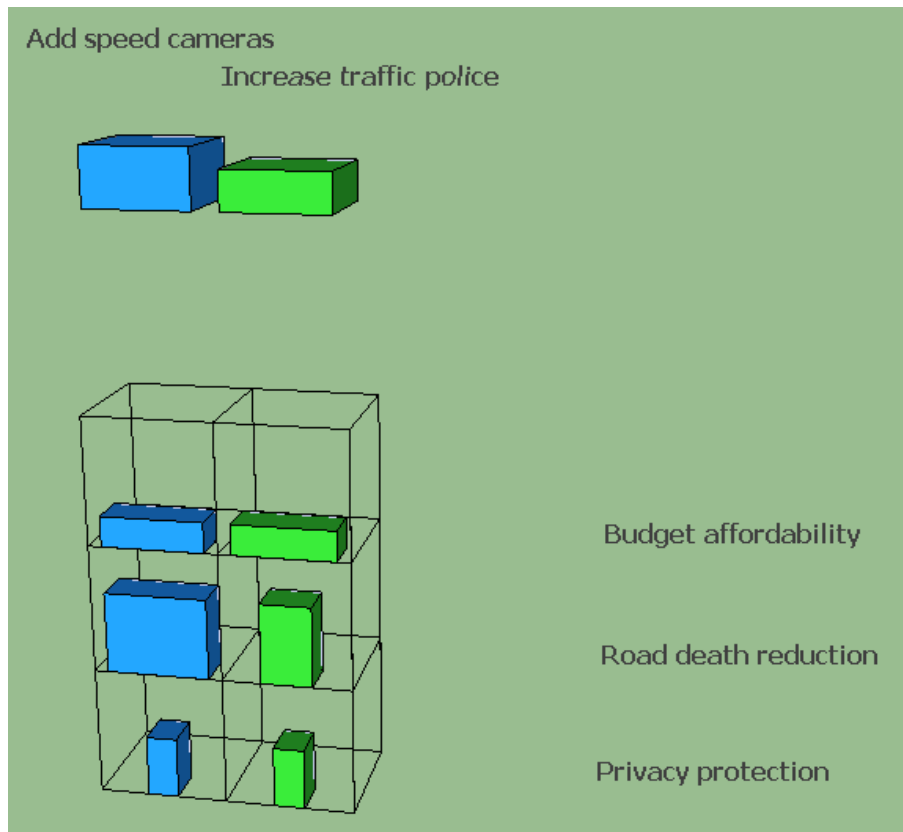
Many practical arguments end up being about which position has the strongest set of good reasons in its favor. In other words, which way an imaginary balance tips once all the considerations pro and con the various arguments are stacked onto corresponding pans of a metaphorical scale. Rather than embodying a complex structure of attack and support relationships, with rebutters, undercutters, and underminers, some arguments simply come down to debates about how much ‘weight’ the considerations deserve and which outcomes are most favored once all have been taken into account. Rather than being most naturally modeled in inference trees, such arguments lend themselves to representation in simple arrays, in which reasons for competing outcomes are summed and compared.

The same is often true in contexts of public deliberation, where candidate policies are judged against multiple criteria and where constituents differ both in terms of the relative ‘goodness’ of candidates on the criteria and the relative importance of the criteria. To use an example explored by Bench-Capon, Prakken, and Visser at ICAIL 2011 (‘Argument schemes for two-phase democratic deliberation’), imagine two citizens with different views of two possible strategies for reducing deaths:

Citizen 1	Citizen 2	Summary	Factor Weight Summary
Scores:	Rank: 2 71.19	Rank: 1 84.09	
	Add speed cameras	Increase traffic police	
Road death reduction Weight 5	7	8	
Budget affordability Weight 7	8	4	
Privacy protection Weight 10.0	3	7	

Citizen 1	Citizen 2	Summary	Factor Weight Summary
Scores:		Rank: 1 93.75	Rank: 2 75.00
		Add speed cameras	Increase traffic police
Road death reduction Weight 5		7	8
Budget affordability Weight 5		8	4
Privacy protection Weight 0.0		3	7

These two citizens happen to agree on their assessment of the *effect* of the policies, but differ on the *values* that are implicated. You can imagine them expressing their views more graphically, where widths and heights are used rather than numbers for effect assessments and value weights respectively, and total 'volumes of relative goodness' are shown at top:



The author has pursued this approach to modeling arguments and deliberations about balances in his work on a 'choiceboxing' system. The attached case study summarizes how that system supported recent deliberations by a national community of experts on the uses of technology in legal services for the poor in the United States. In that process thirty people expressed views about ten possible initiatives, judged against eleven criteria. The case study provides a concise summary of the method and an encouraging example of its successful deployment.

For purposes of this workshop, the follow questions are suggested:

1. In addition to its apparent practical uses, does choiceboxing facilitate theoretical investigations? Might it serve e.g. as a convenient way to express at least the states in an argument or deliberation 'game'? Can such games be understood as states of a choicebox and transitions between them?
2. Are many arguments in legal contexts adequately modeled by choicebox-style representations?
3. What aspects of argumentation and deliberation go beyond what can effectively be reflected in such models? (Note that the full choiceboxing system includes value functions that accommodate non-linear utility curves and necessary/sufficient logic.)
4. How might preferred semantics and other formal frameworks be used to impart greater intelligence to environments in which participants manipulate choicebox-like representations of their claims and positions as they argue and deliberate?