

Table 2.1: Table of biases, the normative models they violate, and their explanations

BIAS	NORMATIVE MODEL	EXPLANATION
I. ATTENTION		
I. A. Availability, attention to here and now, easy, and compatible		
errors in syllogisms	logic	limited search
four-card problem	logic	limited search
anchoring and underadjustment	right answer to the question asked	underadjustment
availability in causes of death	right answer	availability
fault tree effect	probability additivity	availability
asymmetric dominance	independence of irrelevant alternatives	neglect of difficult judgment
evaluability effect	invariance principle	neglect of difficult
dynamic inconsistency	consistent discounting	attention to short-term
preference reversal for gambles	invariance principle	response mode compatibility
identifiable victim	utilitarianism	proportionality
planning fallacy	regression to the mean	individuating information
I. B. Heuristics based on imperfect correlations		
gambler's fallacy	independence of events	representativeness
hindsight bias	right answer	availability
outcome bias	right answer	availability
information bias	value of information	information heuristic
congruence bias	value of information	congruence heuristic
status-quo bias	invariance principle	status-quo heuristic
ambiguity effect	EU (expected-utility) theory (sure-thing principle)	missing information heuristic
omission bias	EU or utilitarianism	do-no-harm heuristic
punishment without deterrence	utilitarianism	reciprocity heuristic
natural bias	utility theory	naturalness heuristic
proportionality bias	EU theory (linear in p)	proportionality heuristic
zero-risk bias	EU theory	proportionality heuristic
extra cost effect	utility theory (only future consequences matter)	confusion of marginal and total cost
sunk cost effect	utility theory (future)	no-waste heuristic
ex-ante equality	utilitarianism	equality heuristic
voter's illusion	cause-effect	cause-correlation confusion
diversification	utility theory	adaptation heuristic

BIAS	NORMATIVE MODEL	EXPLANATION
I. C. Focus on one attribute with unawareness of others		
neglect of priors	Bayes’s theorem	representativeness
nonregressiveness in prediction	regression to the mean	representativeness
conjunction effect	logic and probability	representativeness
illusion of control	contingency	attention to outcome
prominence effect	invariance	importance heuristic
neglect of ranges	multiattribute utility theory	importance heuristic
single mindedness	multiattribute utility theory	limited attention
failure to integrate	utility maximization	isolation
fixed-pie assumption	multiattribute utility theory	failure to see tradeoffs
parochialism effect	utilitarianism	self-interest illusion
II. MOTIVATED BIAS - MYSIDE BIAS AND WISHPFUL THINKING		
inappropriate extreme confidence	calibration	myside bias in search, re- gression to the mean
wishful thinking	independence of belief and value	effect of desire on belief
selective exposure	fairness toward evidence	selective exposure
biased assimilation	neutral evidence principle	biased assimilation
polarization	neutral evidence principle	biased assimilation
belief overkill	uncorrelated beliefs	myside bias
illusory correlation	true correlation	biased assimilation
primacy effect	order principle	biased assimilation
distortion of fairness by self-interest	universalizability of morality	wishful thinking
morality as self-interest illusion	self-other distinction	belief overkill
III. PSYCHOPHYSICAL DISTORTIONS		
certainty effect	EU theory (linear probability)	diminishing sensitivity
overweighting low probabilities	EU theory (linear probability)	diminishing sensitivity
declining marginal disutility	increasing marginal disutility	diminishing sensitivity
framing effect for gains and losses	invariance principle	diminishing sensitivity
dynamic inconsistency	consistent discounting	diminishing sensitivity to time