A Future for Presentism

Craig Bourne

CLARENDON PRESS · OXFORD

Contents

Preface and Acknowledgements	xi
Introduction	I
I What is a theory of time?	I
II Initial plausible options for a theory of time	3
III What conditions must any adequate philosophical	
theory of time satisfy?	14
Part I The Presentist Manifesto	19
I When am I?	21
I The Present Problem	21
II Tensed theories toppled	24
III Tensed truth-conditions: token-reflexive or	·
non-token-reflexive, that's not the question	33
2 A theory of presentism	39
I The parameters of the problem	39
II A radical response	40
III Priorian presentism	41
IV Reductive presentism	47
V Ersatzer presentism	52
VI Branching time for presentists	61
VII The advantages of ersatzer presentism	65
3 Some outstanding problems for presentism met	70
Problem 1 McTaggart's argument	70
I McTaggart's position	71
II McTaggart's argument	73
III How ersatzer presentism avoids McTaggart's argument	76
Problem 2 A deontic, semantic, and paradoxical need for	
other times	78
I The deontic need	78
II The semantic need	79

III	The paradoxical need	80
Pro	blem 3 Future contingents, non-contradiction, and the	
law	of excluded middle muddle	82
Pro	blem 4 Transtemporal relations (I)	95
I	Earlier than and defining tenses	96
II	Determinables	98
III	Qualitative relations	98
Pro	blem 5 Transtemporal relations (II): reference	99
1	Prior, proper names, and presentism	99
II	Rigidity for Russellians	102
III	Who wants to be a Millianaire?	103
IV	Passing the nominal parcel	104
4 Tra	instemporal relations (III): causation	109
I	Formulating theories of causation within presentism	110
II	The direction of time and causation: the counterfactual	
	connotation of causation	115
III	The direction of time and causation: the means-end	
	connotation of causation	121
IV	Mellor's argument against causal loops	131
V	Presentism and backwards causation	134
Part 1	I Presentism and Relativity	127
Iall	r rresentisin and relativity	137
5 Phy	vsics for philosophers	141
	Basic notions	141
	Essentials of special relativity	146
	Minkowski space-time diagrams	151
IV	Minkowski's philosophical conclusions	157
6 Th	e present dialectic in special relativity	160
I	Putnam's thesis	160
II	Stein's antithesis	162
III	Questioning the grounds for adopting Einstein's	
	definition of simultaneity	172
IV	Understanding and defining absolute simultaneity	173
	The interpretation of the Lorentz transformations	176
	The 'conspiracy of silence' objection	179
	Simplicity and surplus content	182
VIII	The Present Problem revisited	184

IX Conclusion	185
7 Becoming inflated	187
I The Mellor-Rees argument against tense theories	187
II Can expansion combat such wrinkles?	191
III Event and creation horizons	197
IV Bursting the balloon	198
8 All the time in the worlds: Gödel's modal moral	204
I Gödel's philosophical position on the nature of time	205
II Establishing part 1 of Gödel's argument	206
III Part 2 of Gödel's argument	212
IV Using TNT as ammunition against Gödel's conclusion	213
V Tenseless time: one way to dispose of TNT safely	214
VI The essential properties of time	216
VII Another way to dispose of TNT-although taking	
great care to do it safely	217
Bibliography	225
Index	239