

CONTENTS

1	INTRODUCTION	1
1.1	Why auditory cues are useful for attention management	1
1.2	Auditory cue characteristics	3
1.3	Spatial attention	11
1.4	Thesis overview and discussion	20
1.5	Declaration of contribution	31
2	INDIVIDUAL DIFFERENCES IN RESPONDING TO AUDITORY CUES	35
2.1	Abstract	35
2.2	Introduction	35
2.3	Related work	38
2.4	Study	41
2.5	Discussion	49
2.6	Conclusion and outlook	51
2.7	Acknowledgments	52
3	BRAIN RESPONSES TO SEMANTICALLY EQUIVALENT AUDITORY CUES	53
3.1	Abstract	53
3.2	Introduction	53
3.3	Related work	56
3.4	Study methods	62
3.5	Results	67
3.6	Discussion	68
3.7	Conclusion and future work	73
3.8	Acknowledgments	75
4	TEMPORAL DYNAMICS OF AUDITORY LOOMING CUES	77
4.1	Abstract	77
4.2	Introduction	77
4.3	Experiment 1: Do auditory looming sounds enhance peripheral tilt-discrimination performance across its presented duration?	81
4.4	Experiment 2: Can the sustained performance benefit of an auditory looming sound at late CTOAs be attributed to its high intensity when the visual target appears?	83
4.5	Discussion	84
4.6	Methods	88
5	NEURAL CORRELATES FOR THE AUDITORY CUE BENEFIT	93
5.1	Abstract	93
5.2	Introduction	93
5.3	Methods	96
5.4	Results	102

5.5	Discussion	111
5.6	Conclusion	117
6	APPENDIX: THE PERSISTENCE OF THE AUDITORY LOOMING CUE BENEFIT POST CUE PRESENTATION	119
6.1	Introduction	119
6.2	Methods	120
6.3	Results and discussion	121
	References	125