

INTRODUCTION	1
CHAPTER I - REVIEW OF LITERATURE	3
Setting the Stage: Research on Unimanual Movement Control	3
Moving on: Research on Bimanual Coordination	5
The Motor Coordination Approach	6
The Action Goal- and Target-Coordination Approach	9
Goal and Target Coordination in Bimanual Coupling	12
On the Rationale of this Study	15
CHAPTER II – EMPIRICAL EVIDENCE	18
Dependent Variables	18
EXPERIMENT 1	20
METHODS	20
RESULTS	23
DISCUSSION	28
EXPERIMENT 2	30
METHODS	30
RESULTS	32
DISCUSSION	36
EXPERIMENT 3	39
METHODS	39
RESULTS	40
DISCUSSION	44
EXPERIMENT 4	46
METHODS	46
RESULTS	47
DISCUSSION	51
PRELIMINARY DISCUSSION I	52

EXPERIMENT 5	56
METHODS	56
RESULTS.....	58
DISCUSSION	62
EXPERIMENT 6.....	65
METHODS	65
RESULTS.....	66
DISCUSSION	70
PRELIMINARY DISCUSSION II.....	70
EXPERIMENT 7	74
METHODS	75
RESULTS.....	76
DISCUSSION	80
EXPERIMENT 8	83
METHODS	83
RESULTS.....	84
DISCUSSION	88
PRELIMINARY DISCUSSION III.....	89
EXPERIMENT 9	93
METHODS	93
RESULTS.....	95
DISCUSSION	97
EXPERIMENT 10.....	99
METHODS	99
RESULTS.....	100
DISCUSSION	102
PRELIMINARY DISCUSSION IV	102
<u>CHAPTER III - GENERAL DISCUSSION</u>	104
Bimanual Coupling is Target-related	104
The Transient Target-coupling Hypothesis	106

Representing the Action Environment: The Effect of different Cue-to-target Mappings	107
The Relative Spatial-position Hypothesis	110
Symbolic vs. Direct Cueing: Do we need to differentiate?.....	111
Some Final Remarks on Movement Targets and Action Goals.....	113
<u>CONCLUSION</u>	116
REFERENCES	117
APPENDIX	125