Book Review: Attending to Moving Objects by Alex Holcombe. Cambridge University Press, 2023. pp: £17.00. ISBN: 978-1-009-00341-4 (online); 978-1-009-00997-3 (print)

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Alex Holcombe's *Attending to Moving Objects* brings together decades of research on multiple object tracking (MOT) into a coherent and timely story. Holcombe starts by providing a clear outline of 'What's to come' in the book where he is transparent with his "desire to dispel common misconceptions about results in the literature, and to lay out the concepts needed to understand the implication of the empirical findings" (page 4). This narrative is maintained throughout the book and sets the tone for this knowledgeable piece that resonates perfectly with Holcombe's endeavours to create a more open, reproducible science.

Individual sections focus on specific areas of research that will likely be familiar to most Psychology students including Spatial Interference (Section 5), Grouping (Section 8), and Abilities and Individual Differences (Section 11), but all are clearly linked to the central theme of attending to moving objects. Throughout the book, Holcombe incorporates findings from behavioural, neuroimaging, brain stimulation, and neurophysiological studies to articulately convey his arguments. The level of detail provided about individual experiments is refreshing as Holcombe steers us through his interpretations of empirical data, providing the reader with all the steps necessary to understand the reasoning in his logic. At times, the relevance of findings to the five misconceptions outlined at the start of the book could be made more explicit, with references back to such misconceptions seeming to decrease as the sections progress. Despite a valiant attempt to build-up the complexity, readers' appreciation of some later sections in the book will benefit from existing knowledge of Cognitive Psychology and Neuroscience. For example, Section 9 'Two Brains Or One?' quickly transitions from a brief introduction to hemisphere connections in the brain to an in-depth discussion of the hemifield independence of object tracking and the mechanisms underlying this. Although the findings continue to be described clearly, more is certainly asked of a less-experienced reader. The book ends with two shorter and broader sections 'Towards the Real World' and 'Progress and Recommendation' which I think are valuable inclusions, bringing the book to an optimistic conclusion.

Whilst taking readers through the long and complex history of MOT research, Holcombe embeds important points regarding some of the wider issues in science. Holcombe nods to examples throughout the book in a style that is not over-bearing but rather invites interested readers to contemplate and consider his points. For example, in Section 7 'Object and Attentional Spread', Holcombe acknowledges the role of publication bias in creating illusions of a real effect regarding performance enhancements at cued locations. Meanwhile, in Section 11 'Abilities and Individual Differences', Holcombe talks about the need to consider the reliability of tests, outlining MOT tasks as a good example and raising an important point that spans the breadth of scientific research. Holcombe's consistent use of 'I' makes it clear that he is giving his opinions and almost encourages the reader to make their own. Perhaps of most significance for an early career researcher (like myself) is his use of direct quotes throughout the book and attempts to infer what authors *really* meant. It is both refreshing to recognise that trying to understand someone else's reasoning steps is not always trivial and illuminating to realise that your words will be taken at face value such that investing time in writing what you really mean is essential in becoming a good scientist.

This book provides a well-organised insight into Holcombe's thoughts and opinions after decades of work in this area. His explanation of the science is articulate whilst his judgements and criticisms are fair. Perhaps intentionally, this book seems to have two agendas: 1) to provide a coherent review of Holcombe's views on the MOT literature and 2) highlight wider issues in science. I think he is

successful in both, making this an interesting and valuable read for anyone with an interest in visual attention, or science more generally. The most appreciative readers are likely those either new to the field or at the start of their research careers attempting to navigate the evolving world of science. Holcombe narrates a book which rigorously reviews scientific findings whilst applying a tone of caution which, in my view, accurately captures the scientific climate at present.