

**The Research Grants Council of Hong Kong**  
**Prestigious Fellowship Scheme under the Humanities and Social Sciences Panel**  
**Completion Report**  
*(for completed projects only)*

**PART A: Project and Award Holder**

**1. Project Title**

A review and update of the Boolean map theory

**2. Award Holder and Academic Department/Unit Involved**

Name/Post	Unit/Department/Institution	Contact Information
Prof Huang, Liqiang/Associate Professor	/ Dept of Psychology / The Chinese University of Hong Kong	Email: lqhuang@psy.cuhk.edu.hk Tel: 26096503



**PART B: The Report**

**5. Workplan**

**5.1 Workplan as per original application**

September 2017: Gathering relevant studies and relevant data sets.

Oct 2017–Feb 2018: Reading articles and re-analyzing data sets.

Mar 2018–May 2018: Formulating and revising the updated theoretical framework.

Jun 2018– Aug 2018: Writing a review paper to present an updated version of the BMT.

**5.2 Revised workplan**

**5.3 Realisation of the workplan**

**Timetable of the proposed research**

This work has been completed as planned. It was delayed for half a year because the conceptual development of the theoretical frame goes a bit beyond my original plan. Eventually, I decided to present the work in two parts (see below).

**6. Dissemination plan**

**6.1 Dissemination plan as per original application**

The final product of this fellowship will be a review paper that presents an updated version of the BMT. I will try to publish this paper in a leading journal in this field, such as Psychological Review, Cognition, or Behavioral and Brain Sciences. If the paper is not accepted in any of these journals, I am confident that I will be able to publish it in another peer-reviewed, internationally well-respected journal.

Many relevant researchers will have access to this paper once it is published. I will also directly email a dozen of the most relevant researchers. Additionally, although there is usually not enough time to present a complete theoretical framework in a 15-minute conference talk, I will choose some of the most important points from the framework and present them separately at various conferences.

**6.2 Revised dissemination plan**

**6.3 Realisation of the dissemination plan**

I decided to present the work in two parts (see below). The part that is more closely related to the original Boolean map theory has been published (Huang, L. (2020). Unit of visual working memory: A Boolean map provides a better account than an object does. *Journal of Experimental Psychology: General*, 149(1), 1 – 30.) Although this journal is called an “experimental psychology” journal, it is well known for the papers’ theoretical significance, and this paper is definitely on the theory-heavy side.

The part that is more focused on the development of the FVS framework is now under review in *Psychological Review*. It is taking longer than usual perhaps because of the Covid-19 pandemic. I am confident that it will ultimately be published either in *Psychological Review* or in another well-respected journal.

**7. Other impact** (*e.g. award of patents or prizes, collaboration with other research institutions, knowledge transfer, etc.*)

N/A

**RGC Reference 3400817**  
**Appendix to Section 6.3**

**1. Peer-reviewed publication(s) arising directly from this fellowship**

*(Please attach a copy of the publication and/or the letter. All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)*

The latest status of Publications				Author(s) (denote the corresponding author with an asterisk*)	Title and Journal/Book (with the volume, pages and other necessary publishing details specified)	Attached to this report (Yes or No)	Acknowledged the support of RGC (Yes or No)	Accessible from the institutional repository (Yes or No)
Year of publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Attached to this report (Yes or No)					
2020				Liqiang Huang	Huang, L. (2020). Space of preattentive shape features. <i>Journal of Vision</i> , 20(4), 10.	Yes	Yes	Yes
2020				Liqiang Huang	Huang, L. (2020). Unit of visual working memory: a Boolean map provides a better account than an object does. <i>Journal of Experimental Psychology-General</i> , 149, 1–30.	Yes	Yes	Yes
2020				Liqiang Huang	Huang, L. (2020). Distinguishing target biases and strategic guesses in visual working memory. <i>Attention, Perception, &amp; Psychophysics</i> , in press.	Yes	Yes	Yes
		Yes	Yes	Liqiang Huang	Huang, L. (under review). FVS 2.0: a Unifying Framework for Understanding the Factors of Visual Processing, <i>Psychological Review</i>		Yes	

**2. Recognized international conference(s) in which paper(s) related to this fellowship**

**was/were delivered** *(Please attach a copy of each conference abstract)*

Month/Year/Place	Title	Conference Name	Attached to this report (Yes or No)	Acknowledged the support of RGC (Yes or No)	Accessible from the institutional repository (Yes or No)