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# The Interaction of Synesthetic and Print Color and the Role of Visual Imagery

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## Introduction

**Grapheme-color synesthesia:** Graphemes, such as letters & numbers, trigger the perception of colors.

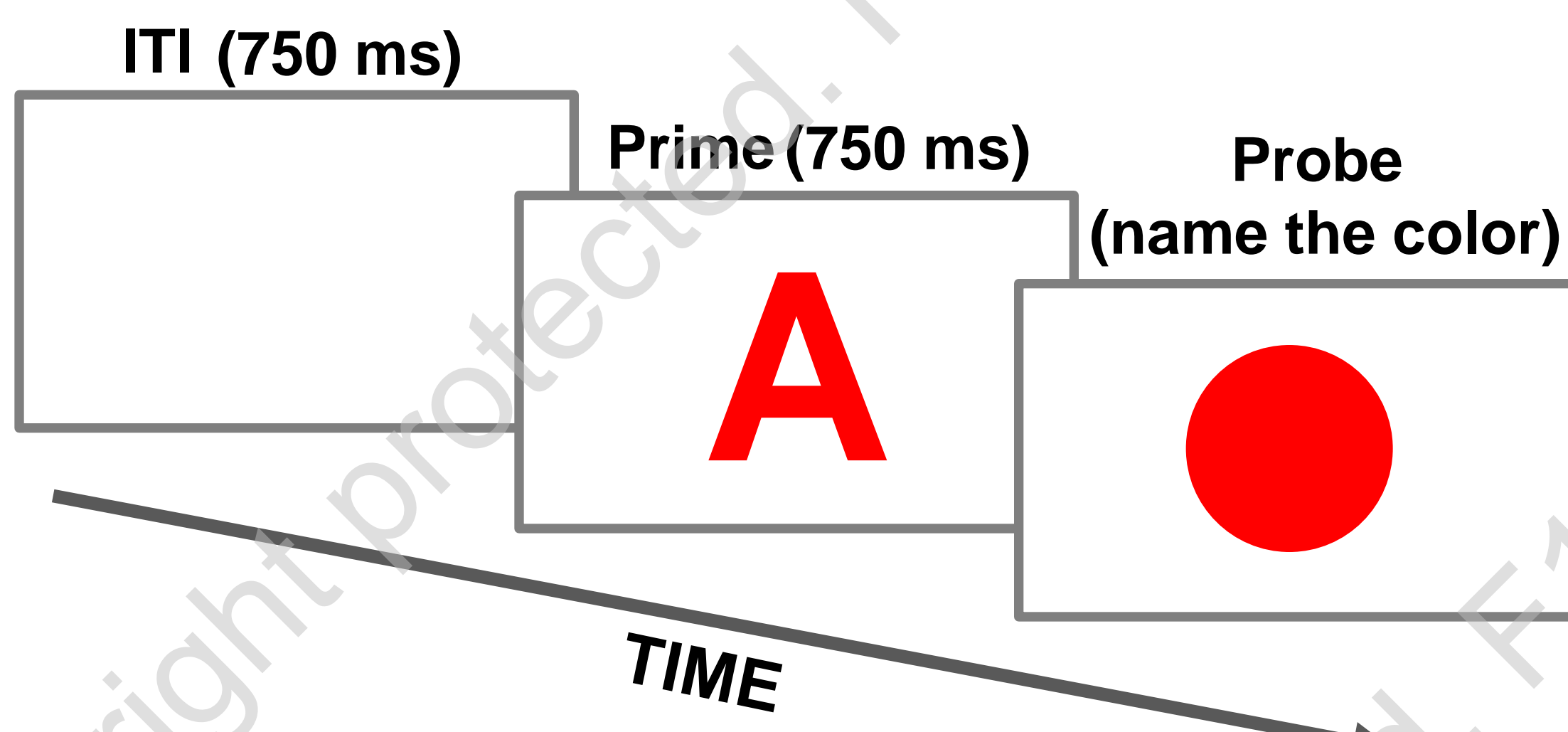


### Main Question...

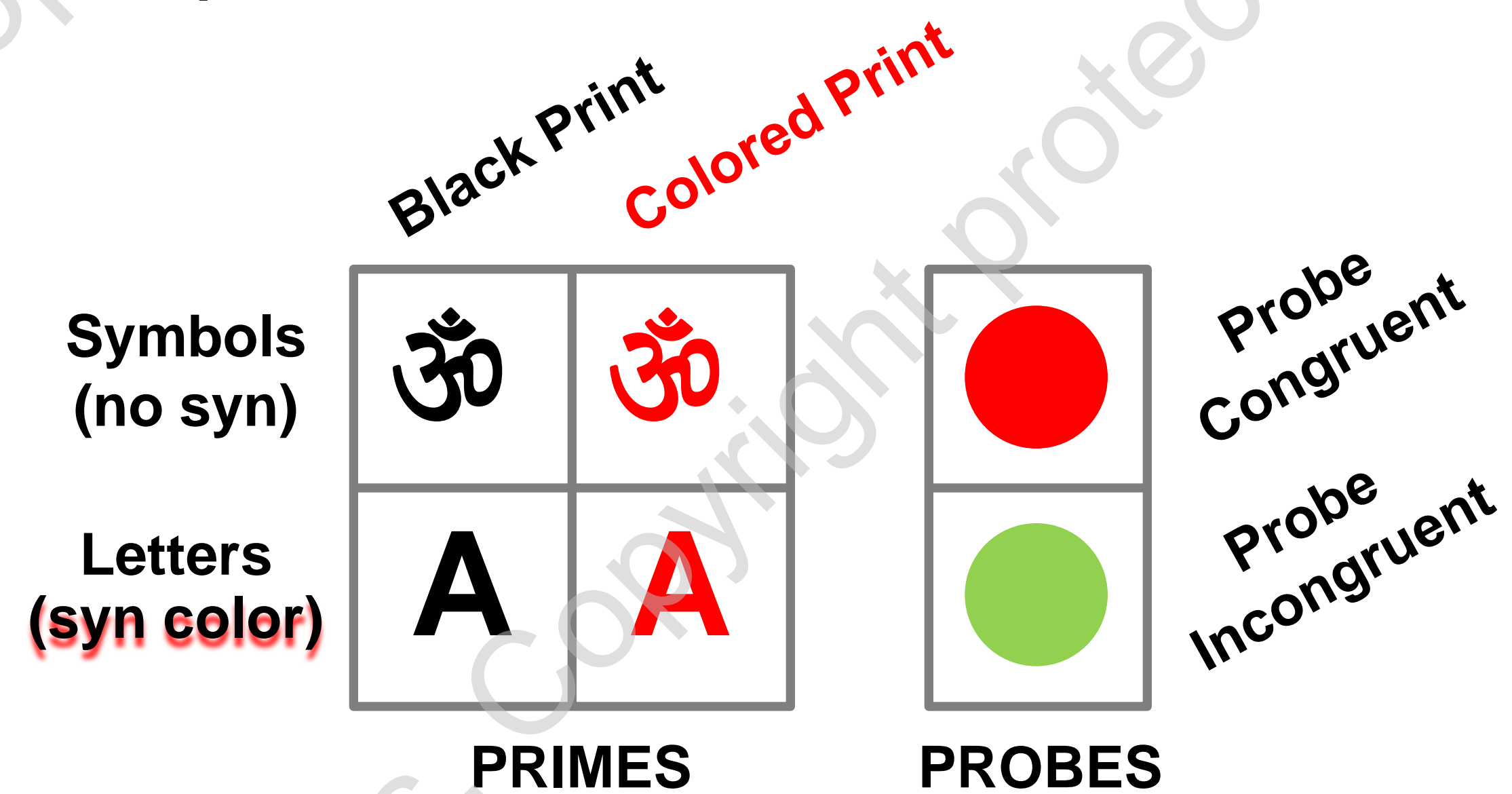
How can synesthetic and print color be co-localized without blending into one perceived color?

## Materials and methods

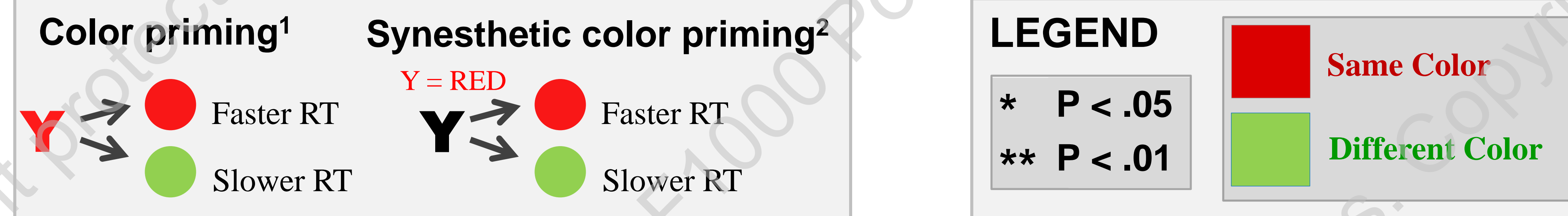
Vividness of Visual imagery (VVI) assessed with the VVI Questionnaire (Marks, 1973), and then...



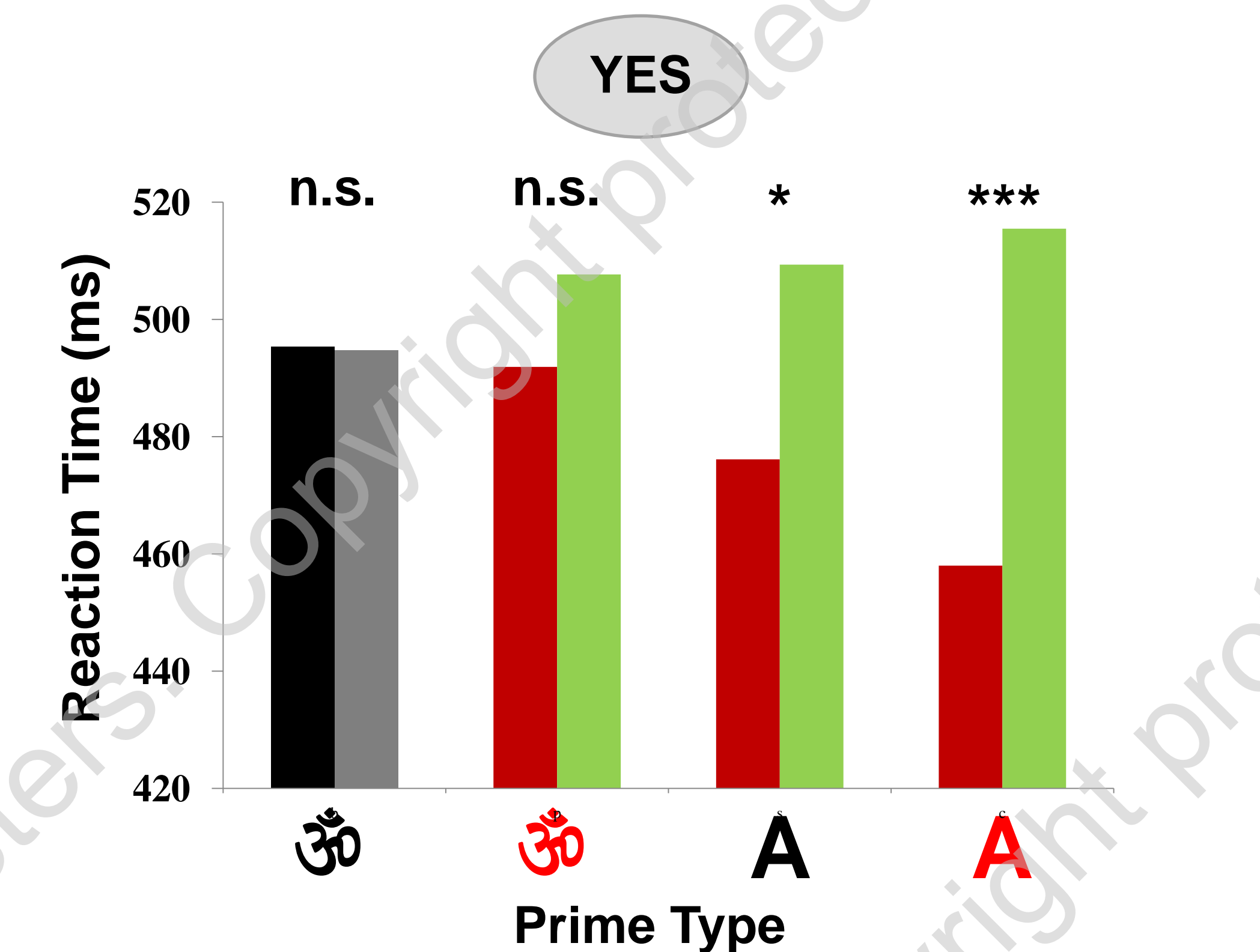
### Example Stimuli:



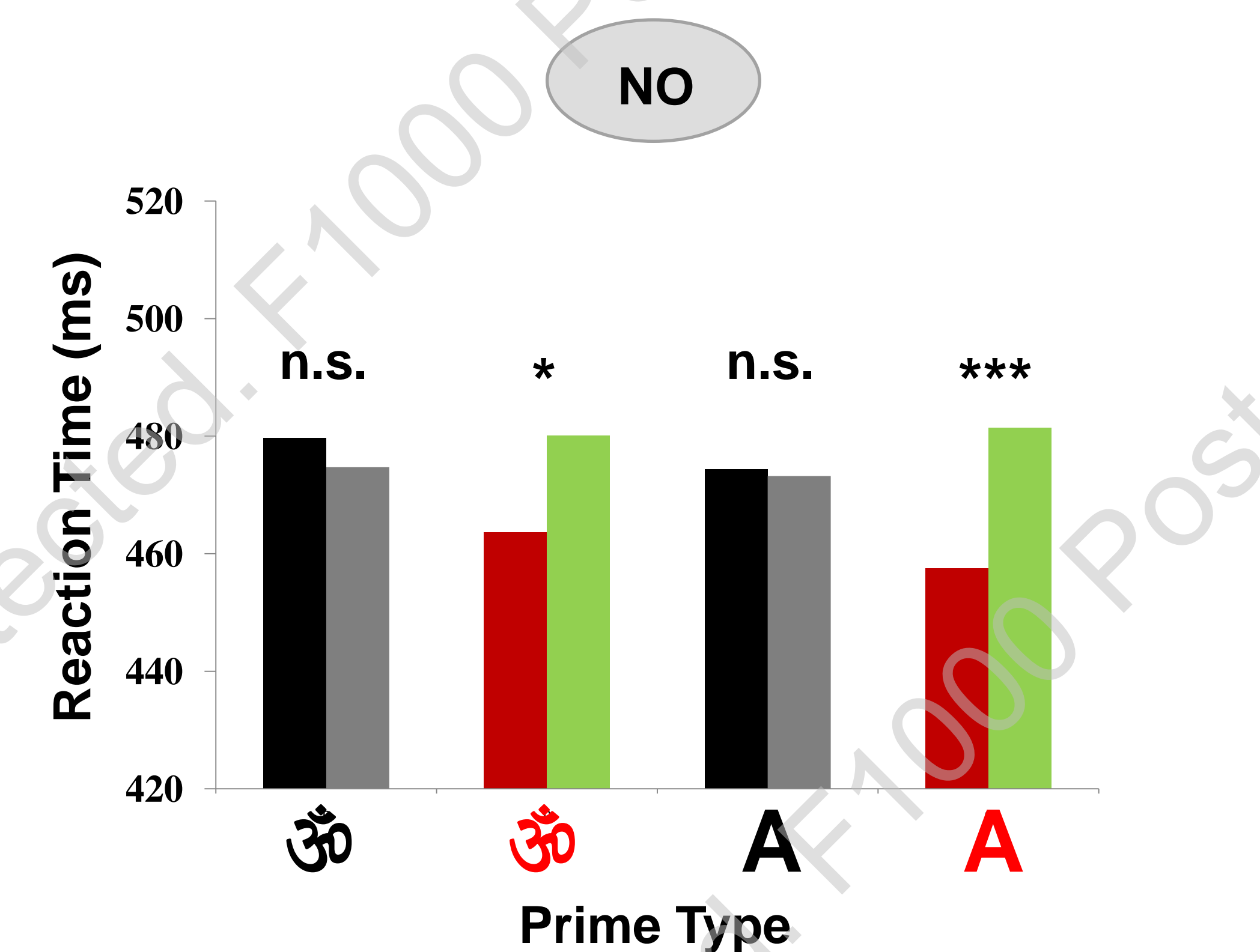
## Questions and Results



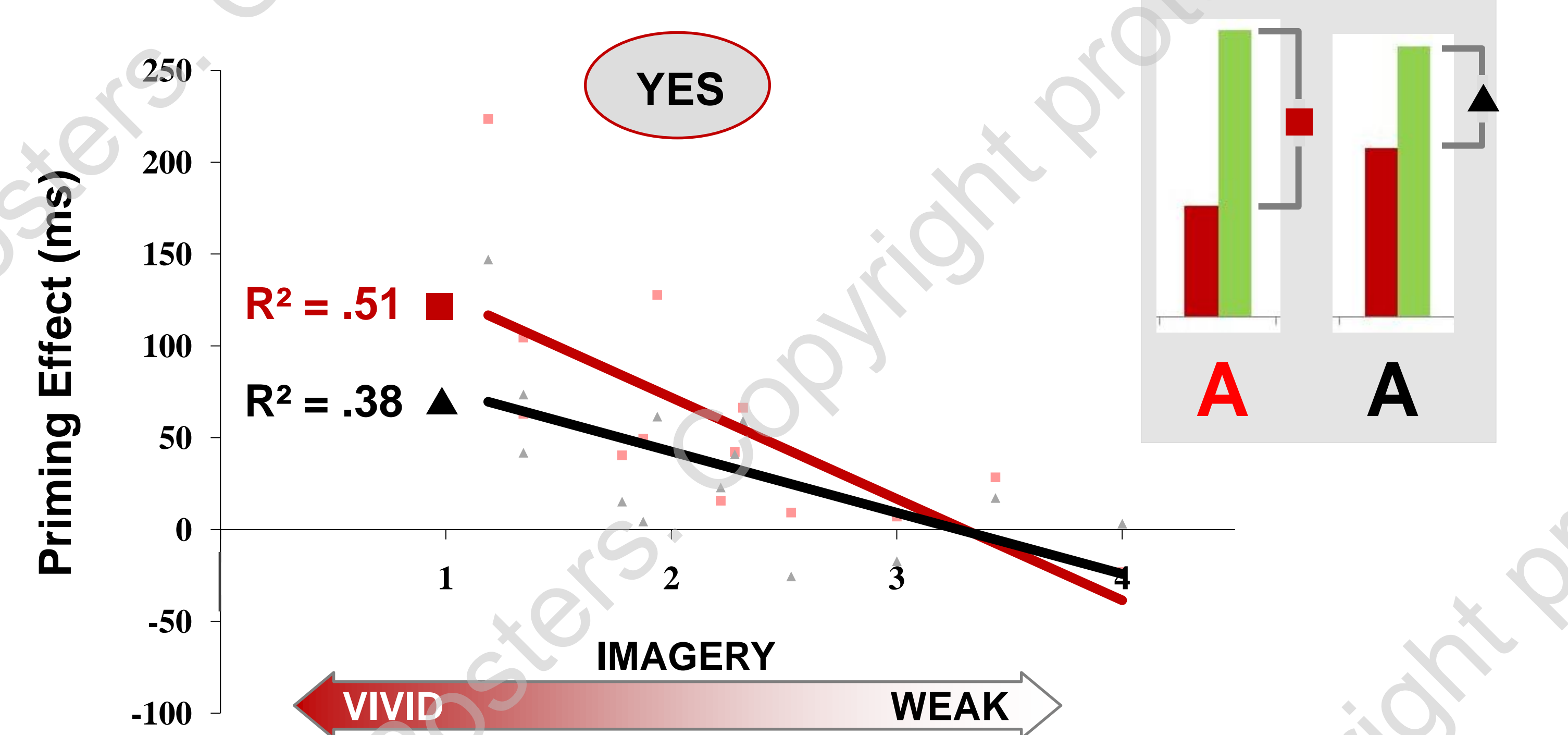
1. Can **synesthetic** (n=13) and print colors combine?



2. Do **controls** (n=13) show anything unexpected?



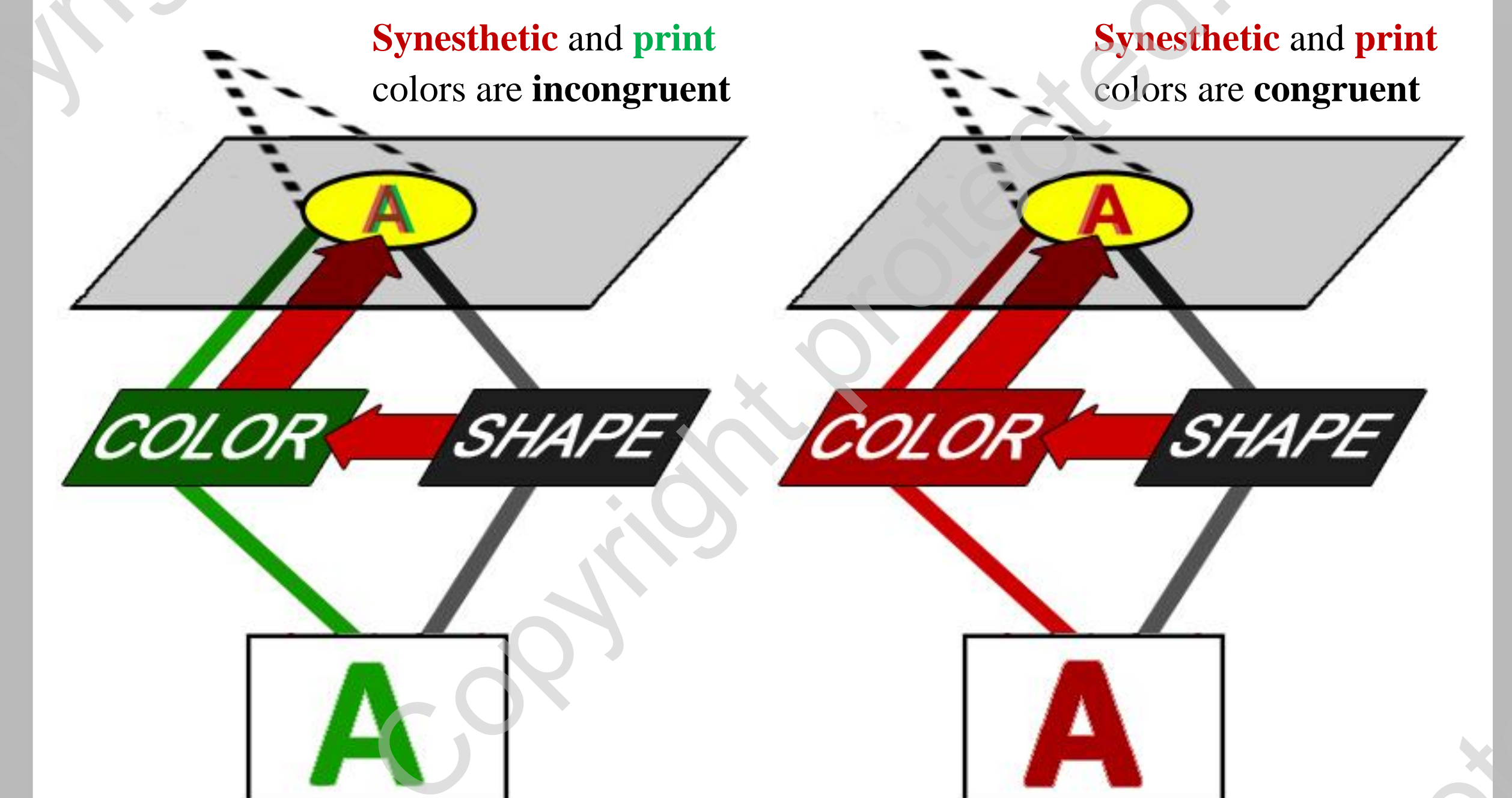
3. Does vividness of visual imagery correlate with the synesthetic priming effect? \*\*



\*\* VVI did not correlate with ॐ or ॐ conditions for synesthetes or for any conditions in non-synesthetes

## Summary

- When synesthetic and print color are matched, synesthetic color priming is amplified
- Synesthetic colors (shape-induced) and print colors arise via different mechanisms but share a feature map
- Vividness of Visual Imagery correlates with the size of synesthetic color priming effects.



## Literature cited

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## For further information

Please contact [bryanalvarez@berkeley.edu](mailto:bryanalvarez@berkeley.edu). More information on this and related projects can be obtained at <http://socrates.berkeley.edu/~lynnlab/>