

# Synesthesia

## **Saturday is Still Red:**

*Synesthetic responses from 180 college students.*

### **Abstract**

About 13% of the population claims to experience cross-sensory events (synesthesia). Our previous work demonstrated synesthetic responses among college students. When students provided colors for each day of the week, consistent patterns emerged. The present study extends those findings by examining the extent that color- preferences remain stable over time (beginning vs. end of the semester). Our results show that students generally did not pick the same colors at both tests. Despite that, overall color patterns remained relatively stable across tests. Reasons for this outcome are discussed.

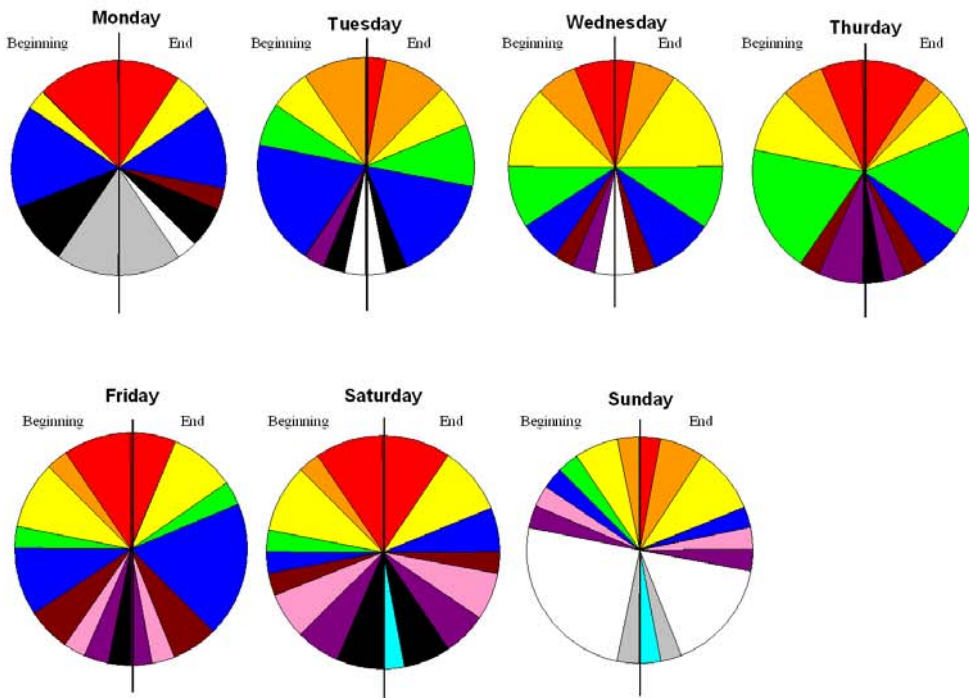
### **Methods**

A test was given to subjects at the beginning and end of a semester. In the test, the subjects were asked to name the color that they most associate with each day of the week. The test results were compared to examine how consistent the color choices were from the beginning to the end of the semester. Based on the literature, we expected that synesthetes would have the most consistent color choices from the beginning to the end of the semester.

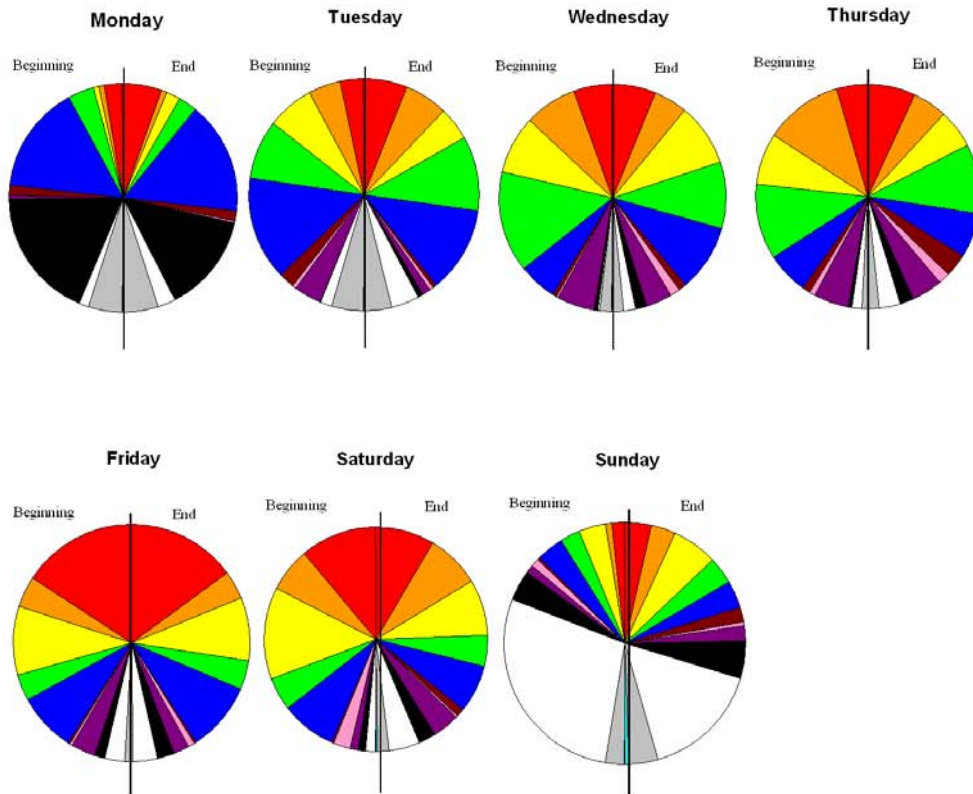
We found that 16/180 students (8.9%) named consistent colors for 5 or more days. Here are their results:

(Continued)

# Synesthetic:



# Non-Synesthetic:



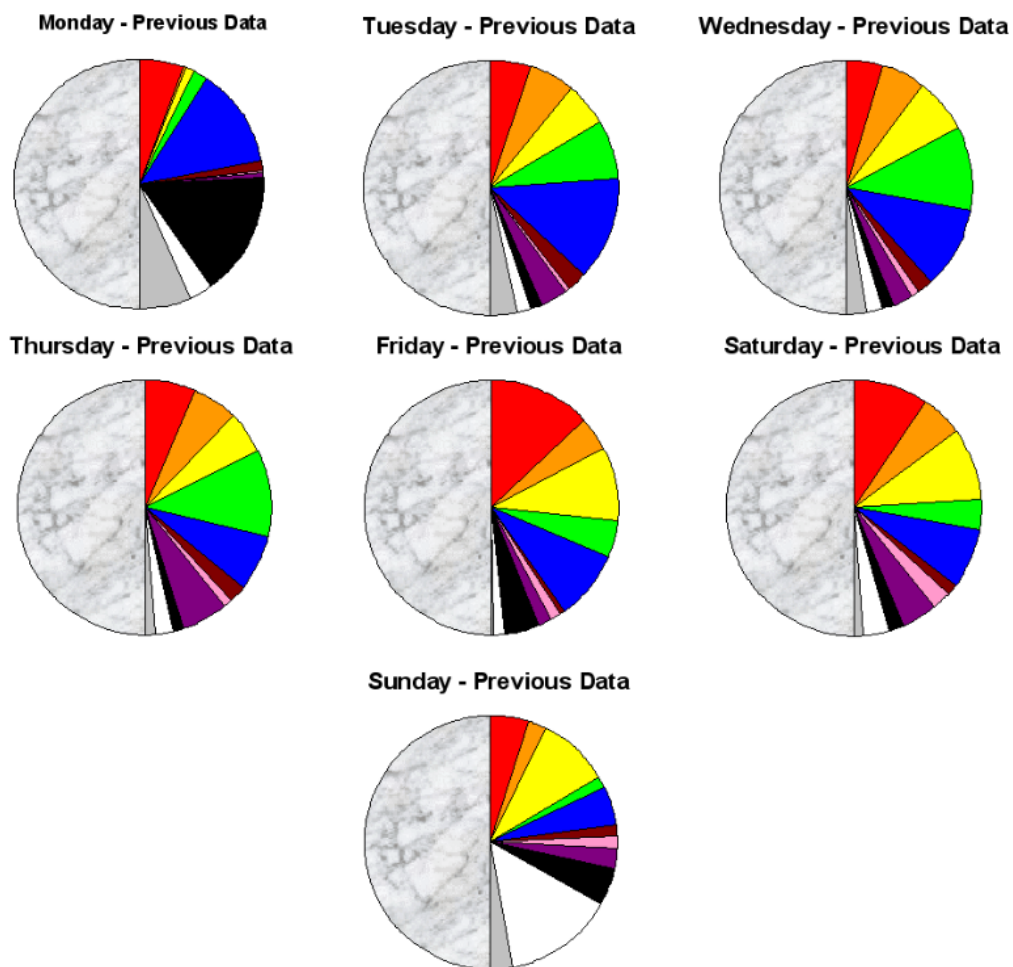
## What is it?

Synesthesia (Greek, syn = together + aisthesis = perception) is the involuntary physical experience of a cross-modal association. That is, the stimulation of one sensory modality reliably causes a perception in one or more different senses.

The word synesthesia, meaning "joined sensation", shares a root with anesthesia, meaning "no sensation." It denotes the rare capacity to hear colors, taste shapes, or experience other equally startling sensory blendings whose quality seems difficult for most of us to imagine.

## Previous Research

- Clear 'winning colors' were found for each day.
- The weekdays tended to have cooler colors - black, blue and green.
- The weekends tended to have warmer colors - red and yellow.
- In the past, we obtained results at the beginning of the semester only. Here are those results:



## Further Research

- Additional research could involve further testing with the students who gave highly consistent responses.
- Another avenue for testing would be to determine if the existing patterns hold true for larger populations. Also, other subcultures may have different ratios of color for each day.
- The current research examines only the days of the week. These may be governed by different synesthetic 'laws' than would be numbers, shapes, or letters.
- A test involving simple characters may yield different results.

## Interesting Patterns

- Consistency between the first and second surveys may indicate that the subject is synesthetic.
- 8.9% had a score of 5 or better.
- 1.1% had a score of 7.
- Only between 1/2000 (.05%) (Driesen, 2001) and 1/25000 (.004%) (Cytowic, 1995) people are actually synesthetes. Our results indicated that at least 1.1% may be synesthetes. It is possible that some of these subjects are not synesthetic, they simply have good memories.
- We found that color choices varied between the beginning and the end of the semester for individual non-synesthetic students. However, overall the distribution of color for each day remained the same.

## References

Cytowic, R. (1995). Synesthesia: Phenomenology and Neuropsychology. *Psyche*.

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Driesen, J. (2001). Synesthesia: Conceptualizing Through Rose-Colored Senses.

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## Research:

Dr. Stephen T. Paul  
Paul@RMU.edu

Poster and Conclusions:  
Andrew Russell  
Aerst2@Yahoo.com

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