Priming is observed when the performance of a task is affected by a recent experience, even though performance of the task does not

- The current study concerns specifically the timing, or mental chronometry, of the information processing underlying the effect of the auditory prime.
- Rosch found that priming diminished as the time between the auditory prime and visual stimuli decreased. This is called the stimulus onset asynchrony (SOA).
- However, Rosch confounded the SOA with the instructions given to the subjects about how to process the auditory stimulus (i.e., active versus passive priming).

- Figure 1. ! "#\$%" # ' () *\$ \() + " , \(\) . / , \(\) * 1\(2\) 4\(() \) 2\(\) \$\(\) \(3\) 4 " \(\) 4\(\) 1\(\) 8\(\) 4\(\) 5\(\) #\(\) 4\(\) 6 7 8\(\) ' * \$4\(\) () * \$\(\) 5\(\)
- Subjects were recruited from the USF Psychology Department participant pool, and they were awarded course credit. Data were collected by a computer in individual subject booths in the Memory Modeling Lab.
- A 2 (Active vs. Passive processing) x 2 (SOA: .25, .50. 1.0, 2,0) x 2 (same vs. Different Stimuli) x 2 (Primed vs. Unprimed) mixed-factorial design was utilized with processing and SOA varied between-subjects.
- Each subject was shown two visual stimuli (see above), then they heard a
 word naming a color matching at least one member of the pair of visual
 stimuli or a neutral word (e.g., "red" or the word "blank"). They pressed a key
 to respond same or different.
- In the Active condition, subjects were required to repeat the word they heard aloud, and in the Passive condition they were not given this instruction.

- The results are presented in Figure 1.
- Overall, RTs were slower in the Active condition than in the Passive condition.
- Priming was observed in the Active condition, but not in the Passive condition.
- Priming was observed in both same and different conditions under the Active conditions.
- There appears to be a non-linear effect of the SOA on RTs.

References