onset of a new object) attract attention automatically. We examined whether the organization of some elements in the display into an object, with no abrupt onset or any other unique transient, can also attract attention automatically. Participants were presented with a display of nine elements, one of which was the target, and had to identify the target's color. On some of the trials, a subset of the elements grouped into an object. The object was irrelevant to the task and unpredictive of the target. The results show that performance on trials with an object present in the display was faster than performance on trials with no object for targets in the object area (a benefit) but was slower for targets in a nonobject area (a cost). These findings suggest that a perceptual object can capture attention in a stimulus-driven manner by its mere objecthood.

2:30–2:45 (84)

Capturing Driver Attention. CRISTY HO, *University of Oxford*, HONG Z. TAN, *Purdue University*, & CHARLES SPENCE, *University of Oxford* (read by Charles Spence)—We report a series of experiments designed to assess the relative effectiveness of spatial auditory, vibrotactile, and visual warning signals in alerting drivers to potential emergency driving events seen through the windscreen or rearview mirror in a simulated driving task. Our results show that while directional congruency between a warning signal and a target traffic event may be sufficient to facilitate performance, due to response priming, attentional facilitation typically requires the colocation of the cue and the target within the same functional region of space. Our results are discussed in terms of the distinction between the brain's processing of stimuli presented in peripersonal and extrapersonal space. We will also highlight research comparing spatial versus verbal warning signals and comparing the effectiveness of unimodal versus multisensory warning signals.

2:50–3:05 (85)

Separating Multisensory Integration From Unspecific Warning Effects in Saccadic Reaction Time. ADELE DIEDERICH, *International University Bremen*, & HANS COLONIUS, *Universität Oldenburg*—Saccadic reaction time (SRT) to visual targets tends to be faster when auditory or tactile stimuli occur in close temporal or spatial proximity, even when subjects are instructed to ignore the nontarget. The time-window-of-integration (TWIN) model for multisensory integration (Colonius & Diederich, 2004, *J. Cog. Neurosci.*) distinguishes an early afferent stage of parallel peripheral processing from a second stage comprising neural integration of the input and preparation of an oculomotor response. TWIN is extended here to allow separation of a—spatially unspecific—warning effect from true multisensory integration. TWIN is supported by SRT data from a study using 23 different stimulus onset asynchronies over a range of 700 msec, with visual stimuli and auditory or tactile nontargets presented ipsi- or contralateral to the target.

Reasoning With or About Others
Dominion Ballroom, Friday Afternoon, 1:30–3:30

Chaired by Robert L. Goldstone, Indiana University

1:30–1:45 (86)

The Propagation of Innovations in a Social Network. ROBERT L. GOLDSTONE, WINTER MASON, & ANDY JONES, *Indiana University*—Social organisms can explore solutions to problems on their own or can exploit innovative solutions discovered by their peers. Our participants guessed numbers between 0 and 100 and were shown the points earned by their guesses, based upon a hidden scoring function that either was single peaked or had three peaks (two local maxima and one global maximum). Over 15 rounds, participants received feedback not only on their own guesses, but also on their neighbors' guesses. Neighbors were determined by one of four network topologies: locally connected lattice, random, fully connected, and small world (e.g., a lattice plus a few long-range connections). For the single- and three-peaked functions, the fully connected and small-world networks, respectively, converged most quickly on the global maximum. These results suggest that complete information is not always beneficial for a group and that problem spaces requiring substantial exploration may benefit from networks with mostly locally connected individuals.

1:50–2:05 (87)

Making Decisions With Your Spouse. KATHLEEN M. GALOTTI, *Carleton College*—Parents of kindergarten students participated in a longitudinal study, tracking them up to three times over the course of a year as they made a decision for educational placement (from among seven to eight available options) for their child for the following year. Ninety-six couples have participated to date. This presentation will examine the effects of having a similar or dissimilar decision-making style with one's spouse or significant other on both performance measures and affective reactions to the process. We will also examine whether having values, goals, or criteria in common makes the process easier or harder.

2:10–2:25 (88)

Making Decisions for Others: Accuracy and Competence. GRETCHEN B. CHAPMAN, *Rutgers University, Piscataway*, & LAURA KRESSEL, *New York University*—Surrogate decisions made on behalf of a beneficiary should ideally match the decisions the beneficiary would make him- or herself. We examined two factors that affect accuracy of surrogate decisions: (1) the beneficiary's competence in providing instructions to the surrogate about his or her preferences and (2) the surrogate's competence in applying those instructions. In Experiment 1, 56 undergraduates playing the role of beneficiary completed a living will that provided instructions for medical care and responded to a series of medical scenarios. Living wills from select participants of varied competence were given to 75 undergraduate "surrogates" in Experiment 2. Surrogates read the living wills and then predicted the beneficiaries' responses to the medical scenarios. Accuracy of prediction was statistically related to both beneficiary competence in expressing instructions in the living will (as scored in Experiment 1) and surrogate competence in using information in a living will (as scored in Experiment 2).

2:30–2:45 (89)

What Do You Want? Event Indexing When Inferring Goals. JOSEPH P. MAGLIANO, JOHN J. SKOWRONSKI, & MARY A. BRITT, *Northern Illinois University*, CHRISTOPHER D. GÜSS, *North Florida University*, & CHRIS FORSYTHE, *Sandia National Laboratories*—This study investigated the processes by which one infers the goal of a stranger. Adopting a mental model view of social inferences, it was assumed that understanders monitor situational cues present during social interactions and that goal inferences are guided by the informativeness of these cues—that is, their diagnosticity and typicality. In Experiment 1, a procedure for identifying cues was developed. Experiments 2 and 3 assessed the relative importance of cue categories (space, time, characteristics of oneself, characteristics of the stranger, and stranger's behavior) and measures of cue informativeness (diagnosticity and typicality) for goal judgments. The results indicate that both measures of informativeness have a significant impact on goal judgments but that their combined impact was far greater than their unique impact. Furthermore, some cues, such as stranger characteristics and stranger behavior, affect judgments more than would be expected from measurements of their typicality and diagnosticity.

2:50–3:05 (90)

Understanding Intention From Minimal Displays of Human Activity. FRANK E. POLLICK & PHILIP McALEER, *University of Glasgow*—Social intention and meaning can be attributed to displays of moving geometric shapes, yet the visual and cognitive processes that underlie this perception of animacy are still open to debate. Typically, animacy displays are created by talented animators or synthesized