Impolitely Requesting Awareness

Summary Given that we use language strategically to coordinate our actions and beliefs, game theory offers insight into meaning. It has been argued that conventional meaning arises out of games of pure coordination and conversational implicatures can be modeled as Stag Hunts. These approaches assume that interlocutors share a single conception of the game being played. However, interlocutors may have different subjective conceptualizations of the actual game situation. We use awareness structures over signaling games to model the use of modals in requests. We show that will is used to create common knowledge of an intent to coordinate, whereas would allows for ambiguity. We give a formulation of the possibilities and suggest this difference stems from the use of would as a politeness strategy.

A Signaling Game is a dynamic game of incomplete information consisting of a tuple $G=(\{S,R\},T,\delta,M,A,U_S,U_R)$. A state $t \in T$ is drawn based on a probability distribution $\delta \in \Delta(T)$, and observed by the sender, $S$, who then chooses a message $m \in M$ to send to the receiver, $R$. $R$ then interprets the message with an action $a \in A$. An outcome consists of a triple $\langle t, m, a \rangle$. $U_S$ and $U_R$ are preference relations over outcomes. An Awareness Structure is a Kripke-Structure consisting of a tuple $A(G)=(W,w_0,Q,g)$. $W$ is a set of possible worlds, $w_0$ the actual world, $Q$ an accessibility relation, and $g$ a function that maps each world $w \in W$ onto a game $G$. Each player's conception of the game at a decision point is determined by $Q$ and $g$. Requests are designed to elicit an action on the part of the receiver. The sender prefers a specific action by the receiver, who may be unaware of the availability of that action (1a-d,2a,b'-c'), or have a different preference over outcomes (2a-c). The use of will unambiguously signals $S$'s belief that $S$ and $R$'s preferences are sufficiently aligned to render $R$ taking the action jointly-optimal; this need not be true (3a,b'-b''). Whereas using will provides $R$ with information about $U_S$ and $S$'s conception of $U_R$ and $A(3c,c')$, using would is ambiguous. Both $S$ and $R$ may have different conceptions of the game, $S$ when sending the signal (1d,2c') and $R$ when interpreting it (1d,). We provide a formal characterization of the misunderstandings that can arise out of unawareness of types (1b',2b'), actions (1d,2b,b'), and preferences (2b,3b'). In addition, we show how the ambiguous use of would as a politeness strategy creates room for disavowal (1d,1c',2b,2c') because such meanings are not self-enforcing.

Examples

1. **Steve:** Would you like to see a movie?
   a. Rachel: There are a few I'd like to see.
   b. Steve: When can I pick you up?
   c. Rachel: I didn't mean with you.
   d. Steve: I didn't mean with me.
2. **Steve:** Would you marry me?
   a. Rachel: I would... if you were rich.
   b. Steve: *Sigh*
   c. Rachel: Yes!!!
   d. Rachel: I was just asking hypothetically!
3. **Steve:** Will you marry me?
   a. Rachel: Yes!!!
   b. ? Steve: Woah, I was just asking hypothetically!
   c. Rachel: I would... if you were rich.
   d. Rachel: Um... we need to talk.
References
2. Lewis, David: Convention, Harvard University Press, 1969