Stech’s Propositions

The following are taken verbatim (emphasis deleted) from Ernest L. Stech, “A Grammar of Conversation with a Quantitative Empirical Test,” Human Communication Research, 5, 1979, 158-170, although bracketed material is my own commentary.

Rule 1: Questions asked by A are to be answered by B in interactive discourse.
Rule 1.1: Open questions asked by A are to be answered by B with statements.
Rule 1.2: Closed questions asked by A are to be answered by B with agreements or disagreements.

Rule 2: Agreements by A are responses to either statements or closed questions by B.

Rule 3: Disagreements by A are responses to either statements or closed questions by B.

Rule 4: Statements by A may be responses to questions or statements from B, may elicit agreements or disagreements from B, may precede or follow other statements by A, may precede questions or statements by B, and may follow agreements or disagreements by B.

[Propositions about turn composition:]

Proposition 1: Questions will tend to occur as single-act turns, as a string of acts constituting a turn, as the final act in a turn, or as a string of final acts in a turn.

Proposition 2: Agreements and disagreements will tend to occur as single-act turns, multiple-act turns, as the initial act in a turn, or as a string of initial acts in a turn.

Proposition 3: Statements may occur as single-act turns; as the initial, intermediate, or final act in a multi-act turn; as the initial, intermediate, or final string of acts in a multiact turn; or as a string of acts constituting a turn. [In other words, statements may occur anywhere they are not otherwise disallowed.]

Theorem 1: There are valid combinations of act types in turns consisting of two, three, four, or more acts. [That is, Propositions 1-3 are not inconsistent.]

Theorem 1.1: The following valid combinations of act types occur in two-act turns: S-S, A-Q, D-Q, A-S, D-S, Q-Q, A-A, and D-D. (S is used to represent a statement; Q, a question; A, an agreement; and D, a disagreement.) [Note: S-Q is also valid by Propositions 1 and 3.]
[Propositions about turn transitions:]

Proposition 4:  Turns ending in questions will be followed by turns beginning with statements, agreements, or disagreements.
Proposition 4.1:  Turns ending in open questions will be followed by turns beginning with statements.
Proposition 4.2:  Turns ending in closed questions will be followed by turns beginning with agreements or disagreements.

Proposition 5:  Turns ending in statements will be followed by turns beginning with statements, questions, agreements, or disagreements.

Proposition 6:  Turns ending in agreements or disagreements, which consist of agreements or disagreements singly or in strings, will be followed by turns beginning with statements or questions.

Theorem 2:  The valid combinations of acts in turn transitions between [single or] multi-act prior turns and single or multi-act succeeding turns are: OQ-S, CQ-A, CQ-D, A-S, A-Q, D-S, S-S, S-A, and S-D.  (OQ represents an open question; CQ, a closed question.)  [Note:  S-Q is also valid, by Proposition 5; D-Q is valid by Proposition 6.]

[Propositions about topic sequences:]

Proposition 7:  Topic sequences may be initiated by statements or questions.

Proposition 8:  Topic sequences by be completed by statements or agreements.

Theorem 3:  The valid combinations of acts as [topic] sequence initiations and completions are: S-S, S-A, Q-S, and Q-A.  [Here, the notation is confusing.  In this theorem, the hyphens should be taken to mean any intervening sequence of valid turns and acts.  In other words, S-S means that a topic sequence, of any length, can start and end with statements. Similarly for S-A, Q-S, and Q-A.]

[Additional Theorems that can be derived from the above:]

[Theorem 4 (Fundamental Theorem of Turns):  Let i, j, and k be nonnegative integers not all zero.  A string is a turn if and only if it can be written in one of the following two forms: AiSjQk or DiSjQk.]

[Theorem 5:  A string is a turn if and only if all of its nonempty substrings are turns.]