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The Conversation MOP: III. Timing of Scenes in Discourse

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The perspective of the conversation MOP (*M*emory *O*rganization *P*acket) was used to generate predictions of how the routines of informal, initial interactions can be adapted to differing acquaintance goals. The conversation MOP groups topic-centered scenes into subsets; the subsets are arranged so that people tend to progress through them in an orderly fashion as they engage in initial encounters with others. One source of flexible adaptation of this routine comes in how subsets of topics are timed in the conversational stream to pursue various conversational goals. As a primary goal of initial interaction is to become acquainted, varying people's desire to get to know others was predicted to alter the timing of subsets of scenes in the conversation MOP. Support was obtained for the prediction that the more people wanted to become acquainted, the faster they would move through early subsets of scenes (topics) in the conversation MOP and the more slowly they would move through later subsets of scenes in the conversation MOP.

Meeting another person for the first time is often an experience that is unique in its occurrence as well as mind numbing in its routine. Routines are available for everything from greetings to goodbyes with rituals of topic sequencing (Berger, Gardner, Clatterbuck, & Schulman, 1976), question asking (Berger & Kellermann, 1983; Kent, Davis, & Shapiro, 1978, 1981), lexical and topic coherence (Brown & Yule, 1983; Craig & Tracy, 1983; McLaughlin, 1984; Reichman, 1978), sequentially dependent events such as adjacency pairs and speech acts (Jose, 1983; Levinson, 1983; McLaughlin, 1984), and fixed linguistic expressions (Kellermann, Broetzmann, Lim, & Kitao, 1989; Sorhus, 1977). Yet despite such routinized behavior, initial interactions are not interchangeable events; they reflect a great deal of situationally adaptive and flexible behavior.

One source of motivation for adaptation of conversational behavior stems from the goals and expectations people have for particular encounters. Although people typically view initial interactions as a means of getting to know others (Berger & Calabrese, 1975; Berger & Kellermann, 1983, 1989; Douglas, 1983, 1984; Kellermann, 1984a; Kellermann & Berger, 1984; Kellermann & Lim, 1989), they do vary in the degree they wish to accomplish this goal. Among other acquaintanceship goals, people meeting for the first time vary in the extent to which they want to acquire personal information about others, reveal themselves to others, and anticipate future interaction with those others (Kellermann, 1984a, 1984b; Kellermann & Lim, 1989). Differing acquaintanceship goals lead to situational adaptation of conversational routines. For example, when people want to acquire personal information about others, they adjust their conversational behavior not only by asking more questions but also by altering their question asking to have others provide explanations for beliefs and actions as well as statements of goals and intentions (Berger & Kellermann, 1983). In a similar vein, when people anticipate meeting again in the future, they tend to exchange more biographic/demographic information (Calabrese, 1975) and focus on conversational topics about which they are personally knowledgeable (Kellermann, 1986). On those occasions when people wish to remain opaque to others, they typically reduce the clarity, specificity, and interest level of what they say (Berger & Kellermann, 1989). Thus, even though initial conversational encounters are highly routinized, the routine is not inflexible; persons do vary their interaction behavior to adapt to changing circumstances, partners, and goals.

One recent perspective on conversational behavior embraces this apparent dilemma of routine but flexible behavior as one of its fundamental tenets (Kellermann, Broetzmann, Lim, & Kitao, 1989). This perspective models conversation as a series of relatively small routines that are flexibly deployed so as to adapt to situational features and demands, thus permitting the routines of acquaintance (or its prevention) to be adjusted online as conversation progresses. In this perspective, a knowledge structure called a conversation MOP (*M*emory *O*rganization *P*acket) organizes these smaller routines and deploys them in the service of people's goals and expectations. This perspective is based on Schank's (1982) dynamic memory theory, wherein MOPs are identified as knowledge structures that organize behavioral sequences appropriate to a given situation to achieve one's goals; MOPs organize scenes (the small routines) so that some higher level goal(s) can be accomplished.

Research has demonstrated that an informal, initial interaction MOP exists that organizes scenes in conversations to become acquainted (Kellermann, Broetzmann, Lim, & Kitao, 1989). The scenes in this conversation MOP are topic centered, and each topic (scene) consists of a set of utterances having a single, overarching content objective. Among scenes included in the MOP are greeting, introduction, health (e.g., how are

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you?), present situation, education, occupation, people known in common, hometowns, interests, family, social relations, near-future activities, evaluation of the encounter, "until laters," reason for terminating, and goodbyes. The ordering of the scenes is not strictly linear; scenes are only weakly ordered. At any particular point in time, multiple scenes (topics) are likely, though the nature of the scenes that are appropriate at different points in time varies. For example, when people are meeting for the first time, it is common to discuss the situation in which the conversation is occurring, the reason each is present, what has been happening in the area/world recently, people known in common, and where each is from. Although these scenes tend to occur near the beginning of initial interactions, any of these topics is appropriate at that point; no one of these topics must come before the others. However, talk on these topics tends to occur before talk on such topics as interests and family. Stated differently, scenes are organized into subsets of scenes so that any of the scenes in a given subset is a candidate for the next action in the conversational encounter as long as that subset is currently where the conversation is.

This cognitive structure (i.e., the conversation MOP) parallels the discourse structure exhibited in informal, initial interactions. Strong correspondence between the scenes in the MOP (the cognitive structure) and the scenes in actual discourse has been observed (Kellermann, Broetzmann, Lim, & Kitao, 1989). Moreover, the order of scenes in the MOP (the cognitive structure) matches the order of scenes observed in actual discourse for a variety of acquaintanceship goals (mean ρ = .72, range = .55 to .80; Kellermann, Broetzmann, Lim, & Kitao, 1989; Kellermann, in press-b). The subsets of scenes identified in the conversation MOP were also found to correspond in content and location with those identified in actual discourse structure (Kellermann, Broetzmann, Lim, & Kitao, 1989). Finally, movement from scene to scene in actual conversations was found to be predictable from the conversation MOP (i.e., the cognitive structure). Specifically, the vast majority of topic changes occurred as predicted by the conversation MOP (Kellermann, in press-b). These and other results suggest that discourse structure is reflective of people's cognitive representation of that structure. Consequently, whereas the remaining discussion is framed in terms of the discourse structure corresponding to the conversation MOP, it should be recognized that this structure nicely matches the cognitive structure for representing that discourse.

Six subsets of scenes have been identified in the first 5 min of actual discourse structure for informal, initial interactions (Kellermann, Broetzmann, Lim, & Kitao, 1989). Along with other information to be described later, Figure 1 provides a diagram of these six subsets of scenes as found in actual discourse. The scenes typed in capital letters and involved in the first six subsets are those identified in the research as representing the discourse structure of the conversation MOP. Scenes involved in conversational endings are not presented in this figure as the research on which it is based interrupted ongoing interactions after 5 min. Other research (Albert & Kessler, 1978; Kellermann, Broetzmann, Lim, & Kitao, 1989; Kellermann, Reynolds, & Chen, 1989; Knapp, Hart, Friedrich, & Shulman, 1973; Schegloff & Sacks, 1973; Summerfield & Lake, 1977) lends support to the existence of conversation-ending scenes, their grouping into subsets, and their relative necessity of inclusion in the termination phase of a conversation.

Figure 1 was constructed in previous research (Kellermann, Broetzmann, Lim, & Kitao, 1989) by ordering scenes on the basis of their *mean adjusted ranks*—that is, the average rank of each scene in relation to other scenes after adjustment for the differing numbers of scenes that can and do occur across encounters. The mean adjusted ranks are obtained by first assigning scenes within each conversation raw ranks (from 1 on down), adjusting the raw ranks to account for variations in the total number of scenes contained in any conversation (by converting the raw ranks to a common 100-point scale), and then averaging the adjusted ranks for each scene across the conversations making up the data base. For example, if a given scene were the 5th of 20 generated in one conversation and the 3rd of 15 in another conversation, the adjusted rank for that scene for each conversation would be 25 and 20, respectively. The adjusted ranks for each scene are averaged across all conversations to obtain a mean adjusted rank for each conversational scene. These mean adjusted ranks were used in the previous research to obtain the ordering of the scenes in Figure 1. This procedure is described in more detail in Kellermann, Broetzmann, Lim, and Kitao (1989) and was used on two different data sets in that research: one data set tapping the cognitive representations people hold of conversations (158 participants) and one data set tapping the behavior of people holding "normal" conversations (86 participants). Figure 1 is the result of this procedure for the 86 participants holding "normal" conversations in this first research project. Verification that the order in Figure 1 can be generalized to other persons can be found in Kellermann (in press-b), in which it was demonstrated not only that the scenes contained in normal conversations are equivalent to those contained in conversations of people with a variety of different acquaintance goals but that they are placed in a similar order as well. Again, note that the actual discourse structure presented in Figure 1 was found to match the cognitive structure defined by the conversation MOP in previous research (Kellermann, Broetzmann, Lim, & Kitao, 1989).

In Figure 1, the normative progression of the first 5 min of informal, initial interactions is also provided; that is, the six subsets composing the first 5 min of informal, initial interactions (though not the scenes contained within) were found to be linearly ordered (Kellermann, Broetzmann, Lim, & Kitao, 1989). Support is available that this sequential progression of conversations through subsets of scenes is normative and that the progression does not seem to vary as one's acquaintanceship desires vary (Kellermann, in press-b). Specifically, it was found that people tend to transit to scenes in the same or next subset as expected by the conversation MOP (the cognitive structure) rather than "jumping around" from scenes in one subset, to scenes in a much later subset, back to scenes in an earlier subset, and so on. Ninety-five percent of all topic transitions in a variety of informal, initial interactions were accounted for by the normative sequencing embodied in the cognitive structure of the conversation MOP. Additionally, the same progression through the conversation MOP occurred whether people wanted to acquire information about their partners or not,

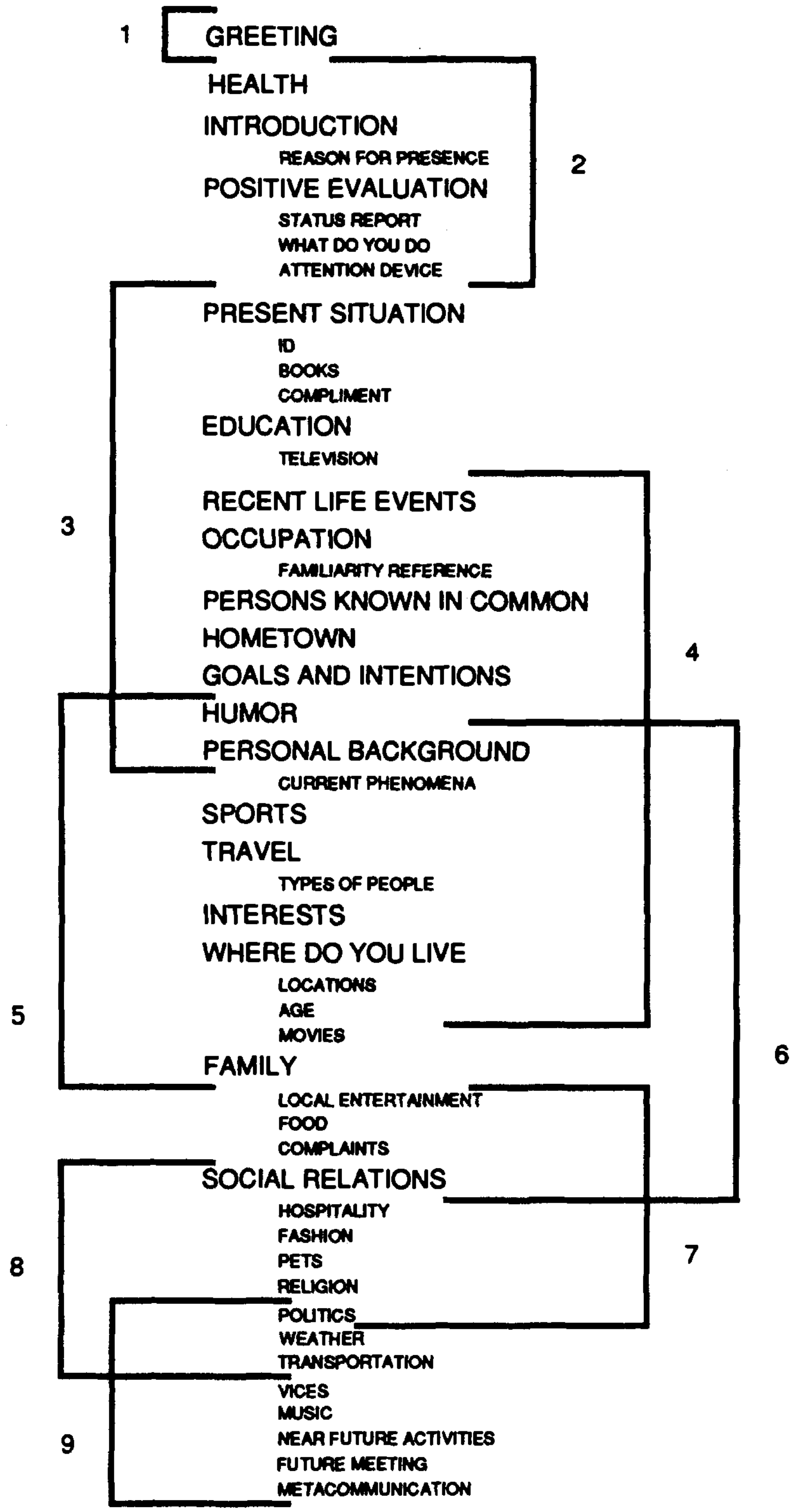


Figure 1. Discourse structure of the conversation Memory Organization Packet (MOP) including low-frequency scenes.

whether they wanted to reveal information about themselves or not, and whether they anticipated interacting in the future with their partners or not.

This invariance in sequential progression does not mean to imply that conversations between people with varying acquaintance desires develop at the same rate or reach the same point or that the people involved become equally acquainted. Rather, it simply suggests that for whatever point is reached, and at whatever rate the conversation progresses, the sequencing can be predicted.[1] Indeed, if the conversation MOP is to be a feasible production mechanism for flexible deployment of routines, then it would seem necessary that this normative sequential progression be coupled with adaptation in scene deployment and use—in other words, what is routine is the progression through scenes in conversations and what is adaptive is the deployment and use of those scenes. The task this research undertakes is to begin to explore how scenes can be flexibly deployed and used.

Three possibilities suggest themselves for flexible deployment and use of scenes by the conversation MOP.[2] First, "routine variance" can exist as part of the enactment of scenes. Each scene (or topic) in initial, informal conversations was found to occur with limited variations (Kellermann, Broetzmann, Lim, & Kitao, 1989). In the perspective of dynamic memory theory, these limited variations are "scripts" that serve to "color" the general actions of each scene. For example, in an introduction scene, one script might involve specific actions related to shaking hands, and another script might involve specific actions revealing the relationship between oneself and a partner (e.g., saying one is a student in the other's class, saying you have met before). As a result, the routine introduction scene can exhibit some routine variance dependent on the use of specific scripts to color the more general actions involved in exchanging names.

A second means for flexibly deploying and using scenes in the conversation MOP concerns scene development—that is, the choice to maintain talk on a topic or to switch to other topics. In this case, routine flexibility could occur through a mechanism called the universal scene (Kellermann, Broetzmann, Lim, & Kitao, 1989; Kellermann & Lim, 1989). *Universal scenes* are defined as generalized action sequences that are role related but context free (Schank, 1982). A universal scene must apply to some general role domain (such as interlocutor) but can be used in any particular context related to that role. The universal scene in the conversation MOP essentially provides a means of pursuing or developing talk on any scene (topic). The universal scene in the conversation MOP contains six generalized acts: get facts, discuss facts, evaluate, explain, discuss goals/intentions, and discuss enabling conditions for the goals/intentions. For example, when applied to the hometown scene, talk might proceed as follows: where are you from? (get facts), what is there to do there? (discuss facts), do you like it there? (evaluate), why do you or don't you like it? (explain), do you want to go back there to live? (discuss goals/intentions), and could you get a job there? (discuss enabling conditions). This structure (i.e., the universal scene) is capable of organizing talk on each of the scenes in the informal, initial interaction MOP.

The existence of this universal scene does not imply that people will pursue such detailed talk on all topics that arise during initial interactions. Rather, to the extent a topic (scene) is pursued, talk tends to be structured according to this universal scene. People might simply get facts on a number of scenes (what is your name? what is your major? where are you from?) or they might decide, out of interest or other motivation, to elaborate on particular scenes. Even a decision to elaborate on some particular scene does not imply the entire universal scene must be used; rather, talk on a topic can be exhausted at any stage—be it getting facts, discussing them, evaluating, or explaining. The point to be made is simply that the extent to which the universal scene is deployed for talk on some specific scene also offers flexibility in the use of routines. A routine manner of developing talk on a topic can be used to hold a conversation on a given topic (scene) or to move it to another topic (scene).

A third means available for flexibly deploying and using scenes is to alter which scenes are selected within each subset of scenes. It is possible to quantitatively select different numbers of scenes per subset, avoid/choose bridge scenes, or accept/refuse scenes offered by one's conversational partner. Through these actions, people could attempt to control the pace of conversations: to hold them at particular points or try to move them forward. In summary, use of scripts to color scenes, use of the universal scene to develop talk on a topic, and use of scenes in each subset are three ways that adaptation might occur in con-

[1] To a degree, this research presumes a certain competence among people engaged in initial interaction. Certainly people can talk about the topics in the MOP in any given order, though doing so is likely to lead others to reject them socially or judge them to be communicatively incompetent. Furthermore, prior research indicated that sequential progression was ordered as predicted by the MOP and linguistically marked otherwise. People are capable of following different sequential progressions, and on occasion, the sequential progression exhibited will not be as predicted by the MOP. However, people opt to follow the sequential progression of the MOP even to the extent they sometimes feel they do not have a chance to raise a topic they desired to because the moment had passed them by (Kellermann, in press-b).

[2] An additional means of adaptation, not focused on here, concerns the role of the present situation scene. Previous research (Kellermann, in press-b) suggests that the present situation scene is a pivotal scene in the MOP for adapting conversational behavior. Specifically, the present situation scene allows for the importing of topics that would normally occur later in conversation or would even be very unlikely to occur otherwise. For example, at a political rally, it would not be at all unusual for two people to discuss politics very early on in the conversation; in such a case, the present situation scene seems to be importing the politics scene as politics defines the present situation. The present situation scene offers a means for routinely introducing what might otherwise be considered unlikely topics into the conversational stream for the purpose of situational adaptation. The importation role of the present situation scene would predict that people meeting in grocery stores might talk about the food (a low-frequency scene normally but part of the present situation in a grocery store) or that people meeting after a church service might talk about religion (another low-frequency scene normally but part of the present church setting). Such importation of other low-frequency scenes retains the normative sequencing of conversations through the MOP while permitting situational adaptation.

junction with normative sequencing to generate routine but flexible conversational behavior.

Two of these three means for adapting conversational behavior involve altering what might be called the pace, rate, or timing of conversational sequences without affecting the structural (sequential) progression of the conversations. For example, people can go slowly or quickly through a subset by selecting many or few scenes for enactment and by "going down" or opting out of the universal scene. Selecting many scenes in a given subset and discussing each one exhaustively would yield a very slow rate of sequential progression through that subset, whereas selecting few scenes and simply eliciting an opening fact before shifting scenes would produce a very fast rate of sequential progression through that subset. The research reported here explores these types of timing differences in the sequential progression through the conversation MOP.

Timing differences have repeatedly been found to be important in understanding conversational behavior. For example, people engaged in initial interactions demonstrate cyclicity in their verbal behaviors (Berger & Kellermann, 1983, 1989; Kellermann, 1984a; Kellermann & Berger, 1984). Specifically, question-asking cycles over the course of conversations as do explanations for behavior and information about goals/intentions: rising up in frequency and then dropping in frequency and then rising and dropping again and again. Pacing of conversations through scene selection and use of the universal scene provides an understanding of how this cyclicity in conversational behavior occurs. For example, as each scene in the conversation is initiated, question asking would be expected to be high as per the question-driven nature of the first get facts stage of the universal scene. However, as people move toward the discussion-based stages of the universal scene of evaluation, goals/intentions, and enabling conditions, interrogation sequences diminish while statement-based linguistic forms increase. As new scenes are selected, question asking should increase again. Thus the use of a universal scene is consistent with the cyclicity results found in other research.

In addition, this prior research found that people desiring to become acquainted initiate their cycling in a trajectory following the same pattern as those not desiring to become acquainted, though they cycle at an elevated level that is roughly 1 to 2 min ahead (in terms of the trajectory) of people who don't desire to get to know each other. It is as if people who want to get to know each other pull ahead in conversational progression when compared with those who are less committed to acquaintanceship. In the perspective of the conversation MOP, these results might suggest that people desiring to become acquainted move through the early subsets of the MOP more quickly than people not particularly interested in getting to know each other and that people vary the deployment of scenes in the MOP as a function of their goals and expectations. Such an implication is consistent with the nature of the subsets in the MOP. Early subsets contain scenes that are relatively impersonal (present situation, education), whereas later subsets contain scenes that are more personal (goals/intentions, personal background, interests, family, social relations).[3] The early subsets focus on cultural and sociological information, but the later subsets tend to focus on psychological information (i.e., information that uniquely defines the person, that makes the person different from others; G. R. Miller & Steinberg, 1975). Thus people wishing to become acquainted with others should seek to speed their progression through the earlier subsets containing less psychologically useful, nonpersonal information but slow their sequential progression through the MOP in the later subsets in which information that will more readily help them become acquainted can be obtained. By contrast, persons engaged in informal, initial interactions in which they are not particularly interested in becoming acquainted with their partner could do so by spending more time in the early subsets of the MOP in the less personal scenes and by spending relatively little time in later subsets of scenes.

This research explores this timing hypothesis in terms of sequential progression through the conversation MOP. The focus on timing provides an explanation for why people having different acquaintance desires produce scenes following the expected normative sequencing order and yet do not become acquainted to the same degree. We suggest that the degree to which people become acquainted is a function of variations in the timing of scenes that are deployed by the MOP rather than a function of variations in sequential ordering of those scenes. The general prediction guiding this research is that the more people want to become acquainted, the faster they should move through early subsets in the MOP and the slower they should move through later subsets; the more people do not want to become acquainted, the slower they should move through early subsets in the MOP and the faster they should move through later subsets. This general prediction is examined across three different goals/expectations associated with becoming acquainted: desire to seek information, desire to reveal information, and expectation of future interaction.

This general prediction results in two, more specific, hypotheses. The first hypothesis examines the distribution of the subsets in the MOP; the second hypothesis examines the pattern of the distribution over time. First, if people's acquaintanceship goals influence the rate of movement through subsets in the MOP, then the distribution of subset occurrence should be different in conversations in which people are interested in getting to know each other versus those in which people are uninterested in becoming acquainted. *Hypothesis 1:*

> Of the total number of scenes produced in a conversation, proportionally more of those scenes should be in early subsets for people with depressed information seeking, information revealing, and anticipation of future interaction goals/expectations, and proportionally more of those scenes should be in later subsets for people with elevated information seeking, information revealing, and anticipation of future interaction goals/expectations.

Second, whereas it is expected that progression will occur over time as per the normative sequencing through subsets in the

[3] Previous research (Kellermann, Broetzmann, Lim, & Kitao, 1989; Kellermann, Reynolds, & Chen, 1989) did suggest that one way that people indicate wanting to begin to wind down conversations is by returning to topics that are less personal (near future activities, etc.). Consequently, subsets at the transition point for initiating conversational termination quite likely are defined by less personal scenes.

MOP, the relative timing of that sequencing is the focus of the second hypothesis. Wanting to get to know others should engage a preference for individuating information that is more easily found in scenes in later subsets of the MOP and, as a result, encourage people to move toward that information more rapidly. By contrast, when people do not want to get to know each other, this individuating information can be avoided by concentrating conversational effort in scenes involving more cultural and sociologically based information that occur in the early subsets of the MOP. *Hypothesis 2:*

> Movement from early to later subsets is expected to occur more quickly in time for people with elevated information seeking, information revealing, and anticipation of future interaction goals/expectations than for people with corresponding depressed acquaintanceship goals/expectations.

Method

Participants

Participants in this study were undergraduate students from various communication courses at Northwestern University and the University of Wisconsin. Data from the conversations of 394 people paired into 197 dyads were used in the analyses that follow. These 197 dialogues compose a conversational sample used for testing the generalizability of the MOP in previous research (Kellermann, in press-b) and, consequently, provide an excellent base from which to be able to determine whether timing differences occur in progression through the MOP.

Procedure

When people were asked to participate in the experiment, they were informed they would be videotaped in conversation with another student who was a stranger to them. When participants arrived at the research center, they were greeted by the experimenter and asked to read an instruction sheet. All instruction sheets informed the participants that they would be conversing with a stranger, that the conversation would be videotaped, and that their identity would be held in confidence. In addition, participants were informed that the conversation should be similar to one they might hold in an informal setting such as a party. At this point, the instructions diverged in order to provide three different replications of tests of the hypotheses. The first group of instructions created different levels of anticipation of future interaction. Future interaction (FI) instructions indicated that when the individual returned for a second videotaping, he or she would be conversing with the same person again. No future interaction (NFI) instructions indicated that when the individual returned for a second videotaping, he or she would be conversing with another person who would also be a stranger. The second group of instructions varied people's information-seeking desire by telling participants to find out as much (high seekers or HS) or as little (low seekers or LS) as they could about their partner during their conversation. The final group of instructions varied participants' desire to reveal themselves to others by instructing them to reveal as much (high revealers or HR) or as little (low revealers or LR) about themselves as they could to their partner during the conversation. Normal (N) instructions provided no information about how much participants should seek information, reveal information, or anticipate future interaction.

Ten dyadic conditions were created by pairing people with others having the same or different goals. The first group of instructions concerning expectations of future interaction resulted in three dyadic pairings. FI–FI dyads (n = 18) were composed of two persons with future interaction expectations; FI–NFI dyads (n = 33) consisted of a person with future interaction expectations and a person with no future interaction expectations; and NFI–NFI dyads (n = 17) paired two persons with no future interaction expectations. The second group of instructions concerning information-seeking goals also yielded three dyadic pairings. HS–HS dyads (n = 12) consisted of two persons with high-seeker goals; HS–LS dyads (n = 12) paired a high seeker with a low seeker; and LS–LS dyads (n = 12) consisted of two low seekers. The third group of instructions concerning information-revealing goals also produced three dyadic pairings. HS–HR dyads (n = 15) paired a high seeker with a high revealer; HS–N dyads (n = 17) paired a high seeker with a person with normal instructions; and HS–LR dyads (n = 18) paired a high seeker and a low revealer. FI–FI, HS–HS, and HS–HR dyads operationalize various goals/expectations associated with elevated desires to become acquainted while NFI–NFI, LS–LS, and HS–LR dyads operationalize goals/expectations associated with depressed desires to become acquainted. Dyads with incompatible or inconsistent goals were included (FI–NFI, HS–LS, and HS–N) for external validity as were N–N dyads (n = 43), representing "typical" conversations.

After participants read the instructions, they were given identification numbers, taken to a room where the conversation would take place, and asked to begin their conversation by announcing their identification numbers. Each dyad was videotaped in conversation for 5 min and 15 s; timing started with the first word spoken after the identification numbers had been announced. Participants were not informed of this conversational length a priori, though they probably anticipated a 10–12 min conversation because of the total time they were asked to set aside for doing the experiment. On completion of the videotaping, participants completed postinteraction protocols and were then debriefed and thanked for their participation.

Scene Coding

Three coders were trained to isolate the scenes occurring in the conversations on the basis of the definitions and procedures developed and described in Kellermann, Broetzmann, Lim, and Kitao (1989). A general description of those procedures is provided here. Scenes were defined as a set of utterances dealing with a single topic and having a single overarching content objective. Continued talk on a given topic (e.g., a discussion of various family members) would, for example, be coded as one scene, that being family. Because any particular utterance or set of utterances may reflect numerous possible topics, these utterances were assigned to a scene on the basis of the primary focus of their content. Coders were provided a list of scenes in informal, initial interactions that had been generated from previous research (see Kellermann, Broetzmann, Lim, & Kitao, 1989). This list comprised scenes emerging at different stages of interactions and included those scenes that did not occur with high frequency. This list of scenes included all topic categories that people reported they used in conversation as well as any scenes identified in actual discourse that were not generated through these reports. Consequently, the list of scenes represents categories as interlocutors conceptualize them rather than in ways imposed by outside observers or researchers. Exemplary acts or scripts for each of the scenes were also provided to and discussed with coders. More complete definitions of each of these scenes and the actions composing the scenes are available in Kellermann, Broetzmann, Lim, & Kitao (1989).

Coders were unaware that the research was concerned with MOPs and did not have access to any information concerning which scenes were in the same subset or which scenes were in different subsets. The coders were asked to assign verbal utterances from the videotaped conversations to scenes; assignment of scenes to subsets was done in the computer programming written to analyze the data set. Coders were told, however, that the list of scenes they were provided was not exhaustive; indeed, coders were informed that they would probably encounter scenes that would not be on the supplied list. In the event they encountered such a scene, the coders were instructed to identify the primary content objective of the talk and to record that scene on the coding sheets. To investigate differences in timing of subset occurrence as a function of acquaintanceship goals and expectations, each conversation was segmented into ten 30-s intervals. Each scene in a conversation was assigned by coders to 1 of the 10 different time intervals, depending on where the scene was initiated. Scenes were recorded in the order in which they occurred within each time interval.

For purposes of reliability, three conversations were coded for their scenes by each coder. A total of 30 discrete scenes were identified by the coders, 29 of which were identically defined and sequentially ordered by all three coders. One coder included a scene the other two coders did not. In other words, three coders simultaneously agreed to the identification of the scenes, the ordering of those scenes, and the assignment of those scenes to time intervals 96.7% of the time. Spot checks indicated that this reliabilty was maintained throughout the coding period.

Adjustment for Low-Frequency Scenes

The discourse structure of the conversation MOP is based on commonly occurring scenes in discourse rather than on low-frequency scenes. However, analysis of the data for this research necessitates assignment of these low-frequency scenes to subsets. Although not a severe problem in that less than 5% of the 3,458 scenes produced in the 197 conversations could be termed a low-frequency scene, it is nevertheless necessary to determine what subset such scenes should be assigned to. Assignment of low-frequency scenes to subsets occurred in terms of where N–N dyads (representing "normal" conversations) produced or reported the production of those low-frequency scenes (Kellermann, Broetzmann, Lim, & Kitao, 1989). Figure 1 also includes information about the assignment of low-frequency scenes to subsets. When these low-frequency scenes were included, three new subsets emerged at the end of the MOP. Given the time limitations imposed on the conversations so that people did not terminate the interaction normally, such differences in conversational progression were not unexpected. In fact, some of these scenes have been found to be significant parts of the MOP in other research that permits a focus on conversational endings (Kellermann, Broetzmann, Lim, & Kitao, 1989; Kellermann, Reynolds, & Chen, 1989). As the number of scenes produced in each of these three extra subsets was relatively small and the number of dyads producing those scenes was also small, significant results for any of these extra three subsets must be regarded with great caution. While the results are reported, we believe the estimates for Subsets 7, 8, and 9 are sufficiently unstable that they prevent us from being able to place meaning on findings for those subsets. Consequently, we focus our interpretations on movement through the first six subsets.

Interaction Indices

Adjustment needs to occur for differential frequency of scenes produced in each conversation as well as for the number of scenes that could be produced for each subset in the MOP. Focusing on the proportion of scenes produced in each subset permits statistical control for these otherwise confounding conditions; that is, using the proportion of scenes produced in each subset adjusts for these frequency differences in subset and conversational scene composition. Furthermore, these proportions can be examined for systematic change at different points over the course of conversations without any assumptions being required about the quantity of time that has passed. Consequently, the proportion of scenes in each subset rather than the frequency of scenes in each subset became the critical focus of the dependent variables. Two sets of dependent variables were used: (a) the likelihood of subset occurrence in the conversation as a whole and (b) the likelihood of subset occurrence in each time interval of the conversation. Proportions of subset occurrence for the overall conversation were calculated by dividing the total number of scenes in each subset by the total number of scenes in the conversation. Proportions of subset occurrence for each time interval were computed by dividing the total number of scenes in each subset in a given time interval by the total number of scenes that occurred in that time interval. As some bridge scenes belong to more than one subset, they can be counted more than once in computing the indices; thus, the sum of the proportions of subset occurrence can exceed 100%. Consequently, by definition of the subsets of the MOP (i.e., bridge scenes included in more than one subset), statistical comparisons involving the subsets cannot be statistically independent. This restriction should be kept in mind through the presentation and discussion of the results that follow.

Results

Manipulation Checks

Each group of instructions was separately assessed to determine the extent to which people enacted their goals/expectations. For the instructions related to the expectation of future interaction, participants completed postinteraction protocols in which they reported the extent to which they anticipated future interaction with their partner on 7-point scales (ranging from *low* [1] to *high* [7]). Seventeen of the N–N dyads also completed this protocol. The instructions differentiated people in terms of their anticipation of future interaction with their partners, $F(2, 76) = 53.23$, $p < .001$. Participants reading the FI instructions ($M = 6.68$) expected future interaction with their partners more than normals ($M = 3.72$) or NFI participants ($M = 2.49$). People in the FI condition significantly increased their typical base-rate expectation of future interaction, $F(1, 31) = 181.97$, $p < .001$, though the typical base-rate expectation was identical across the three dyadic conditions (FI, N, NFI) prior to reading the instructions. All participants produced accurate verbal reports of their instruction set.

For the instructions related to the information-seeking goal (high, low), protocols and observer ratings were used as manipulation checks. Participants were asked to report their goal on the postinteraction protocols; all people retained for analysis in this study did so accurately. Two observers rated the extent to which each participant sought information from his or her partner. As these two observers produced highly reliable ratings ($r = .92$), the two ratings were averaged for each participant. A one-way analysis of variance of the five-point information-seeking index yielded a significant main effect for the participant's condition, $F(2, 93) = 31.24$, $p < .001$. Newman-Keuls tests revealed that high seekers ($M = 3.88$) were rated as seeking more information than normals ($M = 3.15$), who were rated as doing so more than low seekers ($M = 2.11$).

For the instructions related to the information-revealing goal (high, normal, low), protocols, self-reports, and observer ratings were used as manipulation checks. All participants included in the analyses and their high-seeking partners accurately identified their interaction goal in the postinteraction protocols. Furthermore, participants' self-reports on the extent to which they provided information about themselves to their partners on 7-point scales, ranging from *low* (1) to *high* (7), varied as a function of their instruction set, $F(2, 49) = 6.92$, $p < .001$. Newman-Keuls tests indicated that low revealers ($M = 2.94$) reported providing significantly less information about themselves than did normals ($M = 3.75$) or high revealers ($M = 4.33$). Judges also reliably rated on a 7-point scale, ranging from *low* (1) to *high* (7), participants on the extent to which they provided intimate information about themselves ($r = .79$). The intimacy of information varied as a function of the participant's condition, $F(2, 49) = 4.82$, $p < .001$. Newman-Keuls tests indicated that low revealers ($M = 2.06$) provided less intimate information than normals ($M = 2.81$) or high revealers ($M = 3.00$). On the basis of these various checks on the extent to which participants understood and enacted their instructions, the experimental inductions of anticipation of future interaction, information seeking, and information revealing can be considered a successful means of varying people's acquaintanceship desires. However, given the comparability of some instructional sets to produce behavior similar to normals (e.g., NFI), we would anticipate that dyads composed of people with those instructional goals would behave similarly to normals.

Subset Likelihood in Conversation as a Whole

It was predicted in Hypothesis 1 that the rate of scene deployment of the MOP would vary as a function of people's goals/expectations. Proportionally more scenes were expected to occur in early subsets for people with depressed information seeking, information revealing, and anticipation of future interaction goals/expectations, and proportionally more scenes were predicted to occur in later subsets for persons with elevated acquaintanceship desires. Table 1 lists the proportion of scenes occurring in each subset by each dyadic condition. A series of multivariate analyses of variance was conducted with the nine subset proportions as dependent variables and various combinations of the dyadic conditions (i.e., contrasts) as the independent variable. The first and most basic question addressed was whether the 10 dyadic conditions differed from each other in terms of the distribution of subset occurrence. The mean proportion of scenes in each subset is provided in Table 1. As inspection of Table 1 suggests, the 10 different pairings of acquaintanceship goals did produce differences in proportions of subset occurrence, Wilks's lambda = .45, approximate $F(81, 1166) = 5.36$, $p < .001$. Moreover, these differences were in the predicted direction: Conversations between people with elevated acquaintance desires (HS–HS, HS–HR, FI–FI) evidenced a significantly different distribution of subset occurrence, Wilks's lambda = .79, approximate $F(9, 82) = 2.42$, $p < .017$, than did conversations between people with depressed acquaintanceship desires (LS–LS, HS–LR, NFI–NFI). Subsets 1, 4, 5, and 9 yield different likelihoods of occurrence for persons with elevated versus depressed acquaintance goals. Specifically, conversations between people who are interested in becoming acquainted tend to result in proportionally fewer scenes in Subset 1, $F(1, 90) = 7.66$, $p < .007$, and Subset 9, $F(1, 90) = 5.03$, $p < .027$, and proportionally more scenes in Subset 4, $F(1, 90) = 12.51$, $p < .001$, and Subset 5, $F(1, 90) = 5.13$, $p < .026$. These results suggest that when people want to get to know each other, they tend to focus more on scenes in middle/later subsets than do people who are less interested in becoming acquainted.

Given that previous research suggests that the goal of initial interactions is to become acquainted, the distribution of subset occurrence for normals should most closely resemble that for people with elevated (versus depressed) acquaintance desires. As can be determined by examination of Table 1, this expectation of equivalence in the likelihood of subset occurrence for normals and people with elevated acquaintance desires was borne out. Normals did produce a distribution of subset likelihood similar to that of people with elevated acquaintance desires, Wilks's lambda = .93, approximate $F(9, 124) = 1.10$, $p < .366$, and different than that of people with depressed acquaintance desires, Wilks's lambda = .85, approximate $F(9, 124) = 2.36$, $p < .017$. In other words, when people want to become acquainted (by instruction or default), proportionally more focus is directed to topics that can psychologically individuate a person (middle/later subsets) rather than to those that concentrate on cultural or sociological information (early subsets).

Although these findings are supportive of the first hypothesis, the three different acquaintance goals/expectations examined in this research did not uniformly replicate the more general principle. People with elevated information-seeking, Wilks's lambda = .53, approximate $F(9, 25) = 2.49$, $p < .035$, and information-revealing, Wilks's lambda = .41, approximate $F(9, 39) = 2.83$, $p < .021$, goals did differ from those with depressed information-seeking and information-revealing goals in terms of the proportion of scenes in the subsets of the MOP. These differences cluster around the same subsets as previously reported. As can be determined from Table 1, HS–HS dyads generated proportionally more scenes than LS–LS dyads in Subset 4, $F(1, 33) = 13.80$, $p < .001$, and Subset 5, $F(1, 33) = 5.64$, $p < .023$; HS–HR dyads generated proportionally fewer scenes than HS–LR dyads in Subset 1, $F(1, 47) = 3.89$, $p < .05$, and Subset 9, $F(1, 47) = 4.73$, $p < .035$, and proportionally more scenes in Subset 5, $F(1, 47) = 6.49$, $p < .014$, and Subset 6, $F(1, 47) = 3.92$, $p < .05$. However, jointly expecting to see or not see others again (FI–FI, NFI–NFI) did not result in differences in the distribution of subset occurrence, Wilks's lambda = .86, approximate $F(9, 57) = 1.04$, $p < .417$. In fact, the dyadic pairings involving expectations of future interaction (FI–FI, FI–NFI, NFI–NFI) failed to differ from each other in general, Wilks's lambda = .78, approximate $F(18, 114) < 1$, *ns*. Although variations in anticipation of future interaction did not result in differential distributions of subset occurrence, it is important to realize that these dyads did act in ways consistent with the MOP. A contrast comparing the three dyadic FI expectation conditions with normals revealed no differences in the proportional production of scenes, Wilks's lambda = .90, approximate $F(9, 99) = 1.18$, $p < .315$. In other words, although elevating or depressing expectations of future interaction does not lead to proportionally more or fewer scenes in early versus later sub-

Table 1
Mean Proportions of Scenes in Each Subset for Each Dyadic Condition

Dyadic condition	Subset 1	2	3	4	5	6	7	8	9
N–N	.03	.11	.55	.46	.23	.30	.08	.08	.02
FI–FI	.01	.10	.60	.53	.20	.26	.08	.08	.02
FI–NFI	.03	.09	.56	.45	.21	.31	.11	.11	.01
NFI–NFI	.03	.08	.57	.44	.20	.30	.11	.12	.02
HS–HS	.01	.06	.55	.47	.27	.37	.11	.10	.02
HS–LS	.01	.11	.59	.43	.24	.31	.07	.09	.03
LS–LS	.03	.11	.49	.21	.14	.32	.19	.15	.07
HS–HR	.02	.06	.51	.48	.33	.43	.11	.10	.02
HS–N	.03	.09	.52	.54	.32	.39	.07	.06	.03
HS–LR	.04	.09	.50	.42	.24	.35	.12	.10	.05
Elevated	.02	.08	.56	.50	.26	.35	.10	.09	.02
Depressed	.04	.09	.52	.37	.20	.33	.14	.12	.05

Note. N = normal; FI = future interaction; NFI = no future interaction; HS = high seeker; LS = low seeker; HR = high revealer; LR = low revealer. Dyads with elevated acquaintance desires are FI–FI, HS–HS, and HS–HR. Dyads with depressed acquaintance desires are NFI–NFI, LS–LS, and HS–LR. The likelihood of each subset occurring is listed for each dyadic condition. Differences in the likelihood of any particular subset would require that this mean likelihood be different for dyads having varying acquaintance goals (i.e., elevated versus depressed or HS–HS versus LS–LS and so on).

sets, the distribution expected by the MOP (as exemplified in the conversations of normals) is found.

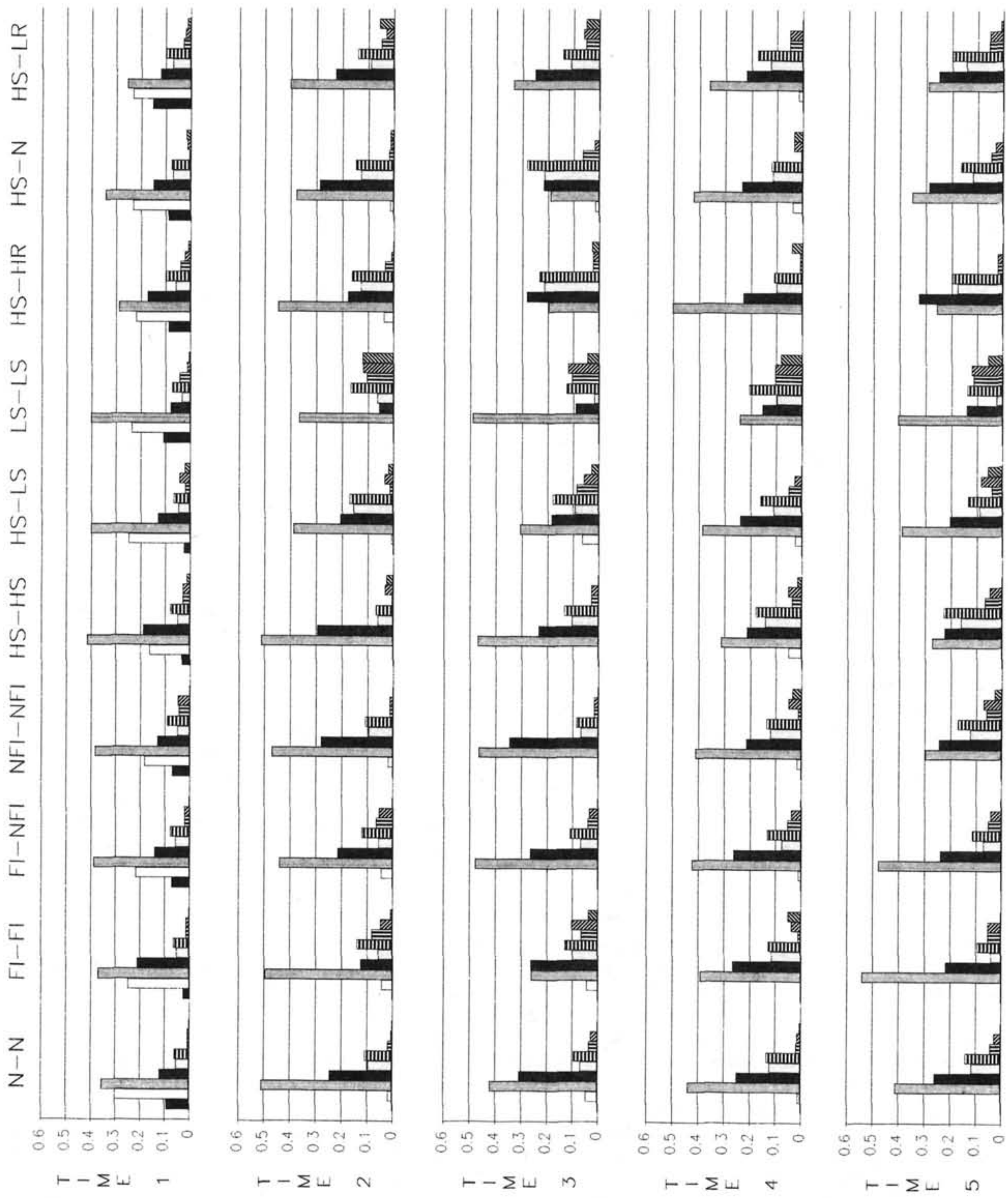
In general, these results are supportive of Hypothesis 1 for two of the three acquaintanceship goals examined in this research. People wanting to become acquainted generated proportionally more scenes in Subsets 4, 5, and 6 than did people not particularly interested in getting to know each other. Even in the instance that the hypothesis was not supported, the conversations generated a distribution of subset occurrence that mirrored that evidenced in the conversations of normals.

Subset Likelihood Over Time

Hypothesis 2 predicted that movement from early to later subsets would occur more rapidly for people with elevated acquaintance goals/expectations when compared with people with lesser desires to become acquainted. Analytically, a three-way interaction is defined with independent variables of dyadic condition (between-subjects factor), subset (within-subjects factor), and time interval (within-subjects factor) to explain the pattern of change in the distribution of subset likelihood over the course of conversations. As Subset 1 (greetings) never occurred after the first time interval, the within-subjects design analyzed was reduced to those subsets whose occurrence varied over the course of the conversation, yielding a 10 (time interval) × 8 (Subsets 2 through 9) within-subjects design crossed by a 10 (dyadic condition) between-subjects factor.

The differential movement through the subsets in the MOP predicted by Hypothesis 2 was found to occur over the course of conversation. We found significant three-way interactions regardless of whether the between-subjects variable was defined as the 10 dyadic conditions, average $F(567, 11781) = 1.95$, $p < .001$, or contrasts of people with elevated versus depressed acquaintanceship goals, average $F(63, 11781) = 1.73$, $p < .001$, jointly high- or low-information-seeking goals, average $F(63, 11781) = 1.90$, $p < .001$, jointly high- or low-information-revealing goals, average $F(63, 11781) = 2.94$, $p < .001$, or joint expectations to see or not see others again in the future, average $F(63, 11781) = 1.74$, $p < .001$.

Given differential movement, the question is then whether this movement is in the sequential direction anticipated by the MOP and whether the speed of this movement reflects acquaintanceship goals. First, the reasoning underlying the derivation of the second hypothesis presumes that movement will be from proportionally more emphasis on earlier subsets in the MOP to proportionally more emphasis on later subsets in the MOP as conversations continue over time for each dyadic condition considered separately. This requirement suggests examining the two-way interactions of Subset × Time Interval within each dyadic condition to assure that the predicted movement is occurring for each dyadic condition. A visual understanding of these interactions can be obtained from Figure 2, which graphically displays the distribution of the nine subsets as a function of the 10 dyadic conditions and 10 time intervals. For each dyadic condition, the distribution of subset likelihood in Time Interval 1 evidences a positive skew, indicating that the first 30 s of conversation are dominated by scenes from the early subsets of the MOP for each of the 10 dyadic conditions. To determine if two-way interactions of Subset × Time Interval are occurring (as a measure of sequential progression through subsets in the MOP over time), look down one column of the figure; the distribution of subset likelihood should exhibit movement toward being symmetrical or negatively skewed as you look down from Time Interval 1 to Time Interval 10 for each dyadic condition considered separately. For example, N–N dyads initially concentrate their focus in the first three subsets. However, by the second time interval, Subsets 3 and 4 have the



highest likelihood of occurrence (and Subsets 1 and 2 are now quite unlikely). As N–N dyads progress through the course of the conversation, they end in Time Interval 10, and Subsets 3, 4, 5, and 6 exhibit the highest likelihoods of occurrence. Consequently, N–N dyads progress from early subsets to later subsets as time goes by. This same pattern of movement from early to later subsets can be seen in Figure 2 for each of the dyadic conditions.

Figure 2. Distribution of subset likelihood as a function of dyadic condition and time interval. (Bars on graph represent subsets 1-9 in left-to-right order.) N = normal; FI = future interaction; NFI = no future interaction; HS = high seeker; LS = low seeker; HR = high revealer; LR = low revealer.

This movement from early to later subsets of scenes being likely as conversations progress suggests that each dyadic condition should evidence a significant Subset × Time Interval interaction in the distribution of subset likelihood, and such was the case. For all 10 dyadic conditions, a significant Subset × Time Interval interaction was found, average Fs(63, 11781) ranged from 1.87 to 7.56, all ps $< .001$, as it was for dyads with elevated, average $F(63, 6741) = 6.00$, $p < .001$, as well as depressed, average $F(63, 6741) = 4.34$, $p < .001$, acquaintanceship goals. To verify that these two-way decompositions reflect the type of forward progression envisioned by the MOP and (as a result) the second hypothesis, a series of contrasts were analyzed that made comparisons among the nine subsets for each time interval as well as comparisons across the 10 time intervals for each of the nine subsets; these contrasts were replicated for each dyadic condition. Because the details of these contrasts are quite extensive, only a summary of the findings is presented here.[4]

First, in every test related to the first six subsets, the likelihood of that subset occurring did change over time for each dyadic condition, *F*s(9, 1683) range from 1.52 to 52.55, *p*s range from .047 to .001. Second, the trajectory for each dyadic condition was movement from early to later subsets as time progressed in the conversation (as was already seen in Figure 2). These trajectories are summarized in Table 2, which lists the time interval(s) in which each subset was most likely to occur for each dyadic condition. A given subset is often likely to occur across a number of time intervals; that is, the contrasts that were conducted often indicated that the proportion of scenes from a subset in one time interval could not be differentiated from the proportion of scenes from that same subset in another time interval. The general finding of these contrasts (which can be determined from visual inspection of Table 2 or from Figure 2) is that subsets expected to come prior to other subsets are indeed proportionally more likely to occur early in the conversation, and subsets expected to occur after other subsets are proportionally more likely to occur toward the close of conversations. For example, Table 2 indicates that for N–N dyads, Subsets 1 and 2 were most likely to occur in the first time interval, Subset 3 was most likely to occur during the first half of conversations (Time Intervals 2 through 5), Subset 4 was likely to occur in Intervals 2 through 8, and Subsets 5 and 6 were not likely to occur until the last time interval (Time Interval 10). This finding of movement from early to later subsets as time progressed was particularly stark for HS–HS and HS–HR dyads (two of the three dyadic conditions with elevated acquaintance goals), as if they were moving faster than other dyadic pairings to the later subsets. FI–FI dyads, however, converged on the middle subsets and remained there for considerable time, as is evidenced by Subsets 3 and 4 being likely into the very late time intervals of the conversations. LS–LS dyads exhibited bimodal movement; that is, early subsets and late subsets seemed to be the most likely to occur in the later time intervals, but middle subsets were less likely. This bimodal movement can also be seen in Figure 2 by looking down the LS–LS column from Time Interval 1 to Time Interval 10. Taken together, the results indicate that sequential progression occurred within each dyadic condition (and within dyads with elevated as well as depressed acquaintance desires) across the subsets of the MOP.[5] The one exception located with the contrasts to this sequential progression is found in the LS–LS conversations, in which a bimodal distribution of subset occurrence forms over time.

Because support was found for forward progression from early to later subsets in the MOP over time for each dyadic condition, the question of differential rate of movement through subsets of the MOP (which is at the heart of Hypothesis 2) can be considered. Hypothesis 2 suggests that certain dyadic conditions should move more rapidly than others from early to later subsets in the MOP. This focus on differential speed of movement suggests examining the two-way interactions of Subset × Dyadic Condition within each time interval. In terms of Figure 2, this differential rate of movement should be noticeable by comparing the change in the distribution of subset likelihood in one dyadic condition over the 10 time intervals (say HS–HS) with the change in this distribution for another dyadic condition (say N–N). If one dyadic condition moves through the early subsets more rapidly than another (as is the case for HS–HS dyads compared with N–N dyads), then the distribution of subset likelihood should change toward being symmetrical or negatively skewed faster for this more rapidly moving group.

The differential movement that was uncovered did not occur in the first time interval; conversations were initiated in a similar manner in terms of the likelihood of subset occurrence. Neither elevated nor depressed acquaintance desires, average $F(8, 1496) = .95$, *ns*, or any other combination of the 10 dyadic conditions, average $F(72, 1496) = .99$, *ns*, affected the distribution of subset occurrence in the first time interval. This similarity in conversational initiation can be seen in Figure 2 by looking across the first row at the distributions of subset likelihood in the first time interval. After the first time interval, people's desire to become acquainted begins to influence the distribution of subset occurrence as reflected by dissimilarity in these distributions across the dyadic pairings within each time interval. In all time intervals after the first except for Interval 7, average $F(7, 1309) = 1.20$, $p < .297$, significant Subset × Acquaintance Level (elevated, depressed) interactions emerged, average *F*s(7, 1309) range from 1.98 to 4.57, *p*s from .047 to .001. These results were replicated when all 10 dyadic conditions were compared with each other, average *F*s(63, 1309) range from 2.00 to 4.32, all *p*s < .002, with no time interval exceptions. As the dyadic pairings each move from early to later subsets of scenes as time goes by, these differences in the distribution of subset occurrence within time intervals reflect differential speed of movement from the early to later subsets.

Analyses of two of the three operationalizations of acquaintance desire (information seeking, information revealing) also yielded the finding of differential rates of movement through the subsets of scenes over the course of the conversations. The distribution of subset likelihood was found to vary across contrasts of jointly high- versus low-information-seeking goals,

[4] A complete listing of these results can be obtained from Kathy Kellermann.

[5] Other analyses were also undertaken to provide additional checks on the sequential progression of dyads through the MOP over time. One set of analyses examined the mean time interval of each subset for each of the 10 dyadic conditions. A repeated measures analysis of variance was conducted with the mean time interval of occurrence of Subsets 1 through 9 used as the within-subjects factor. For each dyadic condition, a significant main effect for subsets resulted, *F*s (8, 1683) ranged from 24.53 to 198.79, $p < .001$. The basic finding in these results is that the mean time interval of occurrence of the subsets is in accord with how the subsets were ordered in the MOP. The first six subsets were temporally ordered in accord with the MOP for each dyadic condition taken separately as well as when examined ignoring dyadic condition.

Table 2
Most Likely Time Intervals of Occurrence for Each Subset

Dyadic condition	Subset 1	2	3	4	5	6	7	8	9
N–N	1	1	2–5	2–8	10	10	9	9	8–10
FI–FI	1	1–3	4–7	7–8	8	8–10	—	—	—
FI–NFI	1	1	1–5	2–7	6–9	7–10	7–8	7	7
NFI–NFI	1	1	1–4	2–3	4–10	7–10	7–8	—	—
HS–HS	1	1	1–3	2	3–5	5–10	5–10	—	—
HS–LS	1	1	1–5	6–10	7–10	6–10	—	—	—
LS–LS	1	1, 8	1–3, 5	4–5, 8–9	4, 7–10	10	6, 9–10	2–6, 9	2–4, 7
HS–HR	1	1	2–4	3–5	3–7	3–7	6–10	6–10	—
HS–N	1	1	1–5	2–7	3–10	3–10	—	—	—
HS–LR	1	1	2–7	2–9	4–10	4–10	8–10	8–10	8–10
Average *F*s									
From	7.16	4.56	1.52	2.14	1.98	2.11	2.02	1.21	.94
p	.001	.001	.047	.023	.036	.026	.034	.284	.486
To	33.5	52.6	3.55	8.30	5.97	6.58	4.06	5.85	5.38
p	.001	.001	.001	.001	.001	.001	.001	.001	.001

Note. N = normal; FI = future interaction; NFI = no future interaction; HS = high seeker; LS = low seeker; HR = high revealer; LR = low revealer. Numbers in the table reference the time interval(s) in which each subset is most likely to occur. *F* tests have 9 and 1683 degrees of freedom and indicate whether the proportion of scenes in each subset is equivalent across the 10 time intervals. Ten *F* tests were calculated for each subset, one for each dyadic condition. Significant *F*s indicate that the likelihood of the subset in question varies across the 10 time intervals. The upper and lower *F* values for the 10 tests (one for each dyadic condition) are listed for each subset.

*F*s(14, 231) ranged from 1.76 to 6.78, *p*s range from .041 to .001, and jointly high- versus low-information-revealing goals, *F*s(14, 329) ranged from 1.00 to 3.40, *p*s ranged from .454 to .001; Time Intervals 4 and 7 evidenced no differences. While jointly anticipating versus not anticipating future interaction did lead to a different distribution of subset occurrence in certain time intervals (Intervals 7 and 8), *F*s(14, 455) = 2.31 and 7.16, *p*s < .001 and .004, respectively, the vast majority of time these dyads progressed through the MOP at the same rate of speed, average *F*s(126, 11781) ranged from <1 to 1.21, *ns.* Moreover, this rate of speed did not differ significantly from the rate of speed evidenced by normals, average *F*s(63, 11781) all around 1, *ns.*

Exactly how these dyads progressed differentially over time is summarized in Table 3. Dyads having elevated acquaintance goals focused on middle/later subsets in the MOP earlier than dyads having depressed goals. For example, as examination of Table 3 reveals, dyads with elevated acquaintance goals were often ahead of those not interested in becoming acquainted in terms of the occurrence of Subsets 4, 5, and 6. Indeed, the results suggest that dyads with depressed acquaintance goals tended never to focus on these middle/later subsets to the same degree as dyads with elevated acquaintance goals during the 5 min of conversation this research examined. The bimodal movement of the LS–LS dyads can be seen in their consistent lagging behind other dyads in terms of focus on Subsets 4 and 5, coupled with their elevated focus on Subset 6 in the later time intervals. These results indicate that people with goals that elevate acquaintance desires tend to deploy middle subsets of the MOP earlier in conversations but that people with depressed acquaintance desires tend to delay deployment of these middle subsets until later intervals. Consequently, Hypothesis 2 is supported not only directly by findings related to differential movement as a function of acquaintance goals but also by the reasoning underlying the derivation of the hypothesis.

Discussion

This research was motivated by an interest in how conversational behavior can be routine yet simultaneously flexible and adaptive to changing circumstances, partners, and goals. Using the perspective of the conversation MOP, we posited that routine behavior occurred because conversations followed a normative sequential progression through groups of topics but that flexibility and adaptation occurred through variations in the timing of those topics (scenes) over the course of conversations.

First, it was predicted that people wanting to get to know each other would spend proportionally more of their conversational effort on scenes in middle to later subsets of the MOP but that people not interested in becoming acquainted would spend proportionally more of their conversational effort on scenes in subsets in the early part of the MOP. This expectation was supported for people with elevated information-seeking and information-provision desires. However, regardless of whether people anticipated future interaction with their conversational partner or not, no differences in the topical focus of the conversations occurred. On the other hand, the likelihood of a subset of scenes occurring for people conversing under any variation of future interaction instructions was equivalent to typical conversations as represented by the dyads conversing under the normal instruction set. Given the equivalence of depressed future interaction expectations (NFI) with normal expectations, the failure for FI–NFI or NFI–NFI dyads to exhibit differential subset occurrence was not surprising. However, people with an elevated expectation of future interaction should desire to become acquainted more so than normal. As anticipation of future interaction with others increases, our attention to and recall of information about them increases (Berscheid, Graziano, Monson, & Dermer, 1976; Harvey, Yarkin, Lightner, & Town, 1980). Furthermore, we are more attracted to and

Table 3
Influence of Acquaintance Goals on the Distribution of Subset Occurrence Within Each Time Interval

F	Summary of contents
Time Interval 1	
Subset 1	
7.03***	Unacquainted > acquainted
2.10**	HS–LR > all others
Subset 4	
8.71***	Unacquainted < acquainted
Subset 5	
4.84*	LS–LS < HS–HS
Time Interval 2	
Subset 4	
27.25***	LS–LS < HS–HS
4.22***	LS–LS < all others
Subset 7	
4.38*	LS–LS < HS–HS
2.61***	LS–LS < N–N, HS–N, NFI–NFI, HS–HS
Subset 9	
7.38***	Unacquainted > acquainted
4.43*	LS–LS > HS–HS
4.54*	HS–LR > HS–HR
5.86***	LS–LS, HS–LR > all others
Time Interval 3	
Subset 3	
7.52***	Acquainted < unacquainted
6.34**	FI–FI < NFI–NFI
4.36*	HS–HR < HS–LR
4.88***	HS–HR, HS–N < all others
Subset 4	
5.96**	LS–LS < HS–HS
4.01***	LS–LS < all others
Subset 5	
9.49***	Acquainted > unacquainted
4.52*	HS–HR > HS–LR
5.74***	HS–HR, HS–N > all others LS–LS < all others
Subset 6	
4.16*	Acquainted > unacquainted
4.46*	HS–HR > HS–LR
5.15***	HS–HR, HS–N > all others
Subset 8	
5.20**	LS–LS > HS–HS
3.43***	LS–LS, HS–LS, HS–LR > all others
Time Interval 4	
Subset 7	
5.63*	Unacquainted > acquainted
3.45*	LS–LS > HS–HS
3.62***	LS–LS > all others
Time Interval 5	
Subset 5	
7.62***	HS–HS > LS–LS
2.91***	HS–HS, HS–HR > LS–LS
Time Interval 6	
Subset 2	
6.60**	LS–LS > HS–HS
Subset 4	
3.52*	LS–LS < HS–HS
3.75***	LS–LS < all others
Subset 7	
4.81*	LS–LS > HS–HS
7.08***	LS–LS > all others
Subset 8	
7.35***	HS–LR > HS–HR
4.71***	HS–LR, LS–LS > all others
Time Interval 7	
Subset 4	
6.45**	FI–FI > NFI–NFI
2.65***	FI–FI > NFI–NFI, LS–LS, HS–LR
Time Interval 8	
Subset 2	
11.04***	Unacquainted > acquainted
10.15***	NFI–NFI > FI–FI
4.23***	NFI–NFI, LS–LS > all others
Subset 3	
6.97**	HS–LR > HS–HR
Subset 4	
3.56*	HS–HS > LS–LS
4.20***	FI–FI, HS–HS > LS–LS, HS–LR, FI–NFI, NFI–NFI
Subset 5	
4.53*	Acquainted > unacquainted
32.48***	FI–FI > NFI–NFI
Time Interval 9	
Subset 5	
10.05***	Acquainted > unacquainted
6.96**	HS–HR > HS–LR
10.22***	HS–HS > LS–LS
4.02***	HS–HS, HS–N, HS–HR > LS–LS, HS–LR, NFI–NFI
Subset 6	
2.07**	HS–HS, LS–LS, HS–HR > all others
Time Interval 10	
Subset 3	
2.89***	LS–LS, HS–LS > all others HS–HR, HS–HS < all others
Subset 4	
10.08***	LS–LS < HS–HS
8.99***	LS–LS < all others
Subset 5	
3.45*	HS–HS > LS–LS
2.27*	HS–HS, N–N > LS–LS
Subset 6	
5.29*	HS–HR, HS–HS, LS–LS > all others

Note. HS = high seeker; LR = low revealer; LS = low seeker; N = normal; NFI = no future interaction; FI = future interaction; HR = high revealer. Tests and summaries of the follow-up contrasts are reported for various groupings of acquaintance goals/expectations: (a) acquainted (HS–HS, HS–HR, FI–FI) versus unacquainted (HS–LS, HS–LR, NFI–NFI), (b) high seekers (HS–HS) versus low seekers (LS–LS), (c) high revealers (HS–HR) versus low revealers (HS–LR), (d) anticipation (FI–FI) versus no anticipation of future interaction, and (e) the 10 dyadic conditions compared with each other. Degrees of freedom for the various contrasts of acquaintance goals are 1, 132; 1, 33; 1, 47; 1, 65; and 9, 187, respectively.
* $p < .05$. ** $p < .01$. *** $p < .001$.

more willing to make inferences about people we expect to meet again (Kiesler, Kiesler, & Pallak, 1967; Knight & Vallacher, 1981; D. T. Miller, Norman, & Wright, 1978; Tyler & Sears, 1977). Perhaps the key to maintenance of normality in conversations where people anticipate future interaction is the desire of such people to restrict negative behavior (Kiesler, 1969). Anticipation of future interaction increases the attractiveness of people who follow social norms (Kiesler et al., 1967). Thus, although people may desire to become more acquainted with others, the production of behavior may be regulated to follow the normal timing of the conversation MOP. Variations in expectation of future interaction, in particular, have been suggested to be vulnerable to this differentiation between what people might want to do versus what they actually do (Kellermann, 1986). In general, then, topical focus (as evidenced by subset occurrence) does vary as a function of people's acquaintanceship goals though with the caveat that desire to become acquainted may not always manifest itself in behavior.

The second hypothesis predicted that people wanting to become acquainted would progress through the conversation MOP more rapidly (in terms of topical focus) than people not wanting to become acquainted. People with elevated acquaintance desires did progress more rapidly to the middle/late subsets of the MOP than people with depressed desires to become acquainted. In many ways, this result can be considered surprising in that these elevated acquaintance desires could as easily encourage people to just jump to the more personal information in the later subsets rather than initiating the conversation and progressing it up to those later points. For example, people instructed to seek information about the partner or reveal information about oneself to a partner most efficiently achieve those goals by immediately initiating topics that focus on psychological (i.e., individuating) rather than sociological or cultural information, information embodied in topics found in the later subsets. However, people who wanted to find out about another or reveal themselves to others simply did not do this; rather, they initiated their conversations in ways structurally similar to others and continued to follow the normative sequencing expected by the MOP (albeit more quickly) until they reached the information they would find more useful for goal achievement. The following of the normative sequencing by these dyads was not found to be unusual for the context (initial informal interactions) and subjects (college students) used in this research. In fact, for all dyadic pairings of acquaintance goals but one, there was steady movement across the subsets over time. In the one case, in which both people had depressed desires to seek information (LS–LS dyads), a bimodal distribution of movement appeared, almost as if half of the conversations had progressed through the subsets but the other half had remained in the early subsets. Previous research (Berger & Kellermann, 1983) demonstrated that people with low information-seeking desires do take one of two approaches to regulating their conversational behavior: (a) They engage a low desire to reveal information under a perceived norm of reciprocity (i.e., "If I can't seek, then I can't reveal") or (b) they engage a high desire to reveal information under a perceived norm of control (i.e., "If I can't seek information from you, then I'll talk incessantly about myself"). Such diametrically opposed behaviors could produce this bimodal distribution of movement; people having a low-revealing approach to their depressed information-seeking desires could create the early subset peak, and people having a high-revealing approach to their depressed information-seeking desires could create the late subset peak. Support for this reasoning can be found by examining the sequential progression of conversations in which the desire to reveal information was varied. In such cases, people with elevated desires to reveal information (HS–HR dyads) moved to the middle subsets more quickly than did people with depressed desires to reveal information (HS–LR dyads). Thus, sequential progression occurred for 9 of 10 dyadic conditions as expected and the 1 exception, when "disentangled," most likely operates in a similar manner.

Finding support for these implications of the perspective of the conversation MOP suggests a number of intriguing possibilities that could be pursued. The perspective suggests that timing is an important element in competent conversational behavior, which corresponds well to recent approaches to interpersonal interaction (see, for review, Werner & Haggard, 1985). However, the conversation MOP perspective also suggests how mistimings might occur. Given sufficient support for other aspects of the perspective over time, it might eventually be possible to pinpoint pathologically poor conversation skills as well as to offer suggestions for their correction. For people who lack knowledge of what topics should be talked about (the scenes), how to talk about these topics (the universal scene), how to organize their talk across topics (the MOP), or how to understand how timing can adapt their talk to pursue their own interpersonal goals, the conversation MOP perspective might offer a potentially useful tool.

Certainly such outcomes are speculative at the present time, as considerably more research over more diverse samples and testing a wider range of assumptions and implications of the perspective would be needed. At present, the findings of normative sequencing and timing differences are limited to informal initial interactions between American college students. Variations in culture and context might alter which scenes are included in the MOP or how those scenes are organized into subsets. Indeed, cultural and contextual differences might usefully be explored by means of hypotheses about how the scene or subset composition of the MOP depends on such differences. For example, relational development might be contrasted with initial interaction through the decline in use of certain scenes in the informal, initial interaction MOP (hometowns, where live, etc.), the rise in use of other scenes (people known in common, social relations, family) and the inclusion of still other scenes (religion, politics, etc.). The tracking of these variations might provide a means of understanding such cultural and contextual differences, presuming that the principles of use of the MOP (e.g., normative sequencing, timing variations for adaptation of routines) are maintained. At present, it is unknown whether normative sequencing and timing variations for adaptation would be observed in other populations, in other contexts, pursuing different goals, and so on. Nonetheless, the possibilities are intriguing. Supportive of such possibilities is research by Turner and Cullingford (1989a, 1989b) that relies on the perspective of the conversation MOP for developing and permitting the successful implementation of an advice-giving system called JUDIS on a computer. Propelling these researchers' interest in the conversation MOP as a basis for their work is their desire to handle conversational flexibility. The conversation MOP offers a means of understanding routine but flexible and adaptable interaction behavior and, perhaps, is its most attractive feature.

Despite the attractiveness of the MOP perspective at present for accounting for simultaneously routine and flexible behavior, the research reported here sought only to test an implication of the perspective rather than seeking to rule out alternative explanations that might also be able to account for the results. However, across a series of studies (for review, see Kellermann, in press-a), evidence has been provided for the existence of the conversation MOP as a cognitive structure, for the MOP guiding the production of conversational behavior, and for certain implications of the perspective (normative sequencing, timing, etc.) occurring as predicted. While none of these studies, taken alone, can permit the elimination of alternative explanations with any confidence, the body of findings taken as a group makes alternative explanations more difficult to generate. Nonetheless, this body of findings is not able, at present, to favor the MOP explanation over all other possibilities.

Despite these limitations, this research does open the door for a representation of conversation as a relatively simple structure composed of a limited number of scenes, organized into a limited number of subsets, progressed through in a normative manner, and timed to adapt to changing goals, circumstances, and partners. This research also suggests one means by which conversational behavior can be both routinized and adaptive simultaneously: normative sequencing provides routinization while timing provides adaptation. Other ways in which the use of a conversation MOP might yield coincident fixed and flexible behavior are now being considered, with particular emphasis on the role of the universal scene for developing talk on a topic and the role of the present situation scene for adapting the informal, initial interaction MOP to conversations occurring in different physical settings. The MOP perspective offers promise as a means of accounting for simultaneously routine and adaptive conversational behavior.

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