

14. “Me First!” Structure and Dynamics of a Four-way Family Conflict

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Abstract. This study reports an intensive, exploratory study of a single, protracted conflictual interaction involving all four members of a family. Within the larger interaction, there were four subinteractions. Because of space limitations, only the central conflictual subinteraction will be described. This interaction involved three of the four family members: the father and two daughters. The two children were 14-months and 5.5-years old. Speech and body motion were transcribed to the accuracy of a single video frame. THEME analyses were used to detect sequential patterns in the transcribed data. These patterns were used, in turn, to generate hypotheses concerning the rule-governed structure of the interaction. Results are discussed in terms of the structure of conflictual interactions, the implications of the hypothesized structures for the conflict process in the interaction studied, and the description of multiway influence in interaction.

Keywords: Conflict; family; conflictual interaction structure; convention-based interaction; speech; body motion.

Contents		
14.1	Introduction.....	210
14.2	The conflict.....	210
14.3	Convention-based interaction.....	211
14.4	Conflict.....	212
14.5	Method.....	213
14.6	Results.....	214
14.7	Discussion.....	217
14.8	Conclusion.....	220
14.9	Acknowledgements.....	221
14.10	References.....	221

14.1 Introduction

This study proceeds from several presuppositions involving interaction in general and early parent-child interaction in particular. (a) Interaction is defined in terms of participants' mutually contingent action sequences. (b) These sequences involve bidirectional influence between participants. That is, each participant is, to some empirically definable extent, influencing the actions of the partner. (c) Much of adult interaction is convention based or rule governed. There are rules for conducting various types of interactions, just as there are rules governing participants' actions in games such as chess or basketball. However, the rules for games are explicit while the rules for interaction (as well as for language) are largely unknown by participants and must be hypothesized based on empirical, exploratory research. In this discussion, a *structure* is an empirically based hypothesis concerning the rules operating in a set of observed interactions. (d) The extent to which a child is capable of convention-based interaction is similarly an empirical issue, as are the nature and extent of these convention-based interactions when they eventually emerge as a component of socialization. A special form of interaction, probably inevitable in any extended relationship, is conflict. There appears to be broad agreement that, while conflict may often be a strong experience for participants, its developmental implications may be either positive or negative [1, 2]. There is cumulating evidence that the way in which conflict contributes to socialization is deeply affected by factors such as the nature of the interaction process through which conflict is pursued, the actions involved, the duration of the conflict, and the way it is concluded [2, 3]. While the child's early conflicts may be important socialization experiences, they need not be prolonged. Two reviewers of conflict between peers [2, 3], using partially overlapping evidence, reported that, depending on the methods used, the duration of these interactions was typically brief, averaging 12 to 31 s. The brevity of many early peer conflicts is strongly supported by our observations of videotapes made in the homes of families (described in the Method section). Conflicts observed on these tapes, though relatively frequent, were typically quite brief.

14.2 The conflict

The conflict reported in this paper was chosen because of its several distinctive properties. (a) The conflict interaction as a whole was by far the longest one that we have found on our tapes of early parent-child interaction in the home, spanning a period of 14 min 37 s. The interaction included four subinteractions, one of which is described in this paper. This permitted our studying the dynamics of a single protracted conflict, as opposed to aggregating a number of briefer conflicts possibly exhibiting different interaction characteristics. (b) The duration of the interaction permitted a more detailed scrutiny of the mechanisms and characteristics of bidirectional or multidirectional processes operating within it. (c) Although the larger interaction included all four members of the family, the conflict described here involved three: the father, child, and big sister. Thus, it was possible to examine the characteristics of triadic interactions. (e) The main antagonist and clear winner was a 14 months-old child who succeeded in fully exploiting her relative immaturity, lack of productive language, and the fact that other family members appeared to underestimate her receptive ability and grasp of the situation. Thus, the conflict provided the opportunity to consider issues of analysis and interpretation of longer, more complex, multiparty interactions in which a relatively young child was involved.

The interaction as a whole may be described as comprised of four main phases. After the father returns home from work, he sits on the couch with the mother and two girls. Each girl promptly perches herself on one of father's legs. The conflict to be described

begins at this point. The child immediately hits the big sister, beginning a number of physical attacks involving hitting, pushing, shoving, and kicking, accompanied by continual fussing, crying, and screaming. These attacks and the father's and big sister's responses to them form the most salient aspects of the conflict. The child clearly wants to be with the father without the big sister's co-presence. In contrast, the big sister appears willing (or obliged) to settle for peaceful coexistence. The attacks and general fussing continue throughout this subinteraction with the exception of a relatively brief interlude during which the child, big sister, and father have several episodes of playing. However, in each case the child abruptly terminates the play and renews the attacks. This subinteraction lasts 6 min 45 s.

There is a second conflictual subinteraction in which the big sister returns to the father's side, and the child resumes her attacks and fussing. The phase ends when the father requests the big sister to get a carrot from the kitchen for the child. The big sister's departure ends the conflict and the broader interaction. This final phase lasts 1 min 7 s. Taken as a whole, and considering the parents' definition of the problem, the child's strategy of remaining implacable and continually attacking the big sister when both are on the father's lap is both effective and ultimately successful. At the end, the big sister capitulated by joining the mother in the kitchen. This left the child alone with the father and showing every sign of being entirely satisfied with this new arrangement.

14.3 Convention-based interaction

The notion of convention-based interaction is widely discussed in the literature [4-12]. The use of conventions by participants introduces strong regularities of a specifiable sort in the sequences of actions comprising the interaction. Exploratory analyses aimed at detecting these sequential regularities may lead to the hypothesis of conventions underlying them. As mentioned earlier, a hypothesis concerning one or more conventions used in an observed interaction will be termed a *structure*.

14.3.1 Describing interaction structure

Describing interaction structure is considered at length in [7, 8]. Interaction structure is described in terms of two main components: elements and rules connecting them. Each *element* is composed of one or more actions by one or more participants. In most structures, when two or more actions comprise an element, the element is considered to occur when any one or more of its constituent actions occur. That is, the actions are considered to be *interchangeable* [6] within the element. Grouping different actions within a single structural element is an empirical issue, based on evidence that the actions have the same effect on the course of the interaction. Thus, the groupings were based on sequential analysis, as opposed to intuition or theory. *Rules* define appropriate sequences of elements within the structure. A distinction is made between obligatory rules and optional rules. An *obligatory rule* states that, at a specified point in the stream of interaction, an element must or must not occur. An *optional rule* states that, at a specified point in the stream of interaction, the partner may legitimately choose from a set of two or more alternative actions. In some cases these alternative actions will involve contrasts, such as saying "yes" or saying "no". In other cases, the alternatives will involve a participant's performing or not performing an action, such as hitting or not hitting the big sister. In any event, each available option must have a different effect on the ensuing interaction. That is, the interaction must take a different course, depending on how the option is exercised.

14.3.2 Flowcharts

Hypothesized structures are represented as flowcharts. Four flowchart shapes are used in this paper. The beginning of a structure is indicated by a large arrow shape, and the ending by an oblong shape. Obligatory elements are represented by rectangular shapes. Optional elements are represented by diamond shapes. Indicated within these shapes are one or more actions and the participant(s) responsible for them. The lines leading out of diamonds indicate the course the interaction takes as a result of the way the option was exercised.

14.3.3 Development of hypothesized structures

Analysis of action sequences in the transcribed data permits the development of empirically based hypotheses concerning interaction structures. For example, patterns involving the child's hits, pulls, pushes, and shoves were carefully scrutinized in order to develop a hypothesized structure involving actions by the child, big sister, and father that systematically preceded or followed these actions. Potential structures were then evaluated in terms of their effectiveness in fitting the transcribed data.

14.4 Conflict

When structures are hypothesized for interactions, it becomes possible to identify each participant's actions within the structure as ratifying, not ratifying, or neither with regard to the partner's preceding action [4, 5]. *Ratification* is used in its usual sense of a participant's explicitly or implicitly agreeing to, permitting, or going along with, something. In the context of this discussion the "something" is the partner's preceding action within the structure. In interaction structures, ratifying or non-ratifying actions can be identified on the basis of low-level judgments concerning whether or not each participant is acting in concert with the preceding actions of the partner. Ratification in face-to-face interaction was considered by [10]. It was further elaborated in a conceptual framework for rule-governed interaction [7, 8]. Ratification was a key element in treatments of convention-based conflict [4, 5].

Two types of conflict were identified: conflict concerning convention, and conflict within convention. In *conflict concerning convention*, participants do not agree on the use of a particular convention in an interaction, a change in a currently active convention, or the ending of a currently active convention. This study focuses on conflict within convention. In this form of conflict participants agree on a convention to be used in an interaction, and conform to the rules of the convention, but disagree on the course the interaction should take within the convention. Such disagreement becomes possible when the convention permits participants to perform the convention in more than one way—that is, when the interaction structure provides one or more options. When a participant exercises an option, the partner may not agree with that choice. Thus, conflict or the possibility of conflict is part of the convention itself. A simple example would be competitive games, such as chess or football, in which participants agree to engage in conflict within the bounds of explicit rules that include both cooperation and conflict.

In [5] *conflict within convention* was defined as being created when there are two successive failures to ratify, one by each participant. Conflict within convention is concluded when either participant ratifies the partner's action. Definitions of conflict concerning and within convention require (a) a hypothesized structure for the interaction, and (b) the evaluation of elements in the structure as ratifying, non-ratifying, or neither.

14.5 Method

14.5.1 Subjects

The subjects of this study were members of a family of four: a 14 months–old child (the focus of our taping), her 5.5 years–old big sister, and their father and mother. Videotaping of this family began when the child was 6 months old and ended when she was 18 months old. The family was taped all day, two consecutive days each month. Taping focused on the child’s interactions with other family members.

14.5.2 Transcription

14.5.2.1 Interaction transcribed and analyzed

All of the interaction (14 min 37 s) was transcribed and analyzed. The interaction included four distinct phases, of which two were conflictual. However, space constraints permit description of the analysis of only the first conflictual phase. More extended description of the entire interaction is available from the second author.

14.5.2.2 Actions

Because this was an exploratory study designed to generate hypotheses concerning rules within the interaction, a number of actions were transcribed for each of the four participants: 17 for the child, 17 for the big sister, 19 for the father and 5 for the mother. Transcription included the beginning and ending times for each action to the accuracy of a single video frame. Each type of action was defined as concretely as possible. From the larger set of transcribed actions, the following appear in the results: (a) child: hit, pull, push, and shove big sister; (b) big sister: shield self from the child’s attacks, reposition herself on the father’s knee; (c) father: physically intervene in child’s action.

14.5.2.3 Speech

Transcribing speech and locating syllables with respect to actions was facilitated by the Sequel - Analysis Module (SAM-259) [13]. SAM-259 produces a distinctive visual representation of phonemes. This representation can be written to videotape so that the transcription of speech can be carried out at any tape speed, including stop frame.

14.5.2.4 Reliability

Interjudge reliability was evaluated for the beginning and ending of each action appearing in the hypothesized structures reported in the Results section. The reliability judge had no prior experience with this sort of research and was not acquainted with the hypotheses described in the Results section. Reliability was assessed for 12.7% of the transcribed actions using *kappa* [14]. Overall agreement was 91%, yielding a *kappa* of .90.

14.5.3 Data analysis

Exploratory analyses of interaction sequences based on THEME [15, 16] were designed to develop hypotheses of interaction structure. As reported in the results section, evaluation and revision of emerging hypotheses were based entirely on the extent to which they fit the transcribed data.

In the pattern search the following parameters were set for THEME: (a) the minimum significance level for pairs of pattern constituents was $p < .005$, and (b) the minimum number of action sequences required to form a pattern was four.

For this study THEME was used for two crucial purposes: hypothesizing the structure of this interaction, and identifying bouts of attacks by the child. THEME patterns were used to develop hypotheses concerning the organization of the interaction. This required examining and combining a number of THEME patterns in order to hypothesize both the constituents of each element, and the optional or obligatory rules connecting these elements. Thus, the patterns detected by THEME were not, in themselves, the final results, but they made possible the development of the structure. However, there was one particular in which information from THEME patterns was directly incorporated in the results. As described in the Results section, hypotheses regarding the structure of the child's attacking the big sister include the notion of an *attack series*: sequences of conflictual actions, beginning with the child's attacking, in which the child's initial attack is not regarded as being directly responsive to a preceding action, and subsequent actions by the father and big sister are regarded as directly responsive to the child's attack. Definition of these sequences of related actions was based on THEME patterns indicating that the actions occurred within a temporal interval (the critical interval) more frequently than expected at the specified level of significance. Action sequences falling outside such an interval were not regarded as elements of an attack series though they were part of the larger conflictual interaction.

Thus, while the actions actually comprising an attack series were based on a more general exploratory analysis, temporal intervals within THEME patterns were used to define those actions that were linked in a series and those that were not. Critical intervals for relevant actions and associated levels of significance are presented in Table 14.2.

14.6 Results

The most salient action of the conflict is the child's repeated hitting, pushing, pulling, and shoving the big sister. On average there was one of these actions about every 17 s. Although this seems a high rate of Attack, we regard 17 s as a fairly extended period of time because of the considerable rapidity of some aspects of the interaction. All these actions were brief. The longest was 9.25 s long. The mean was 1.8 s; the standard deviation was 1.8 s. Because sequential analyses indicated that the child's actions had essentially the same effect on the course of the interaction, they were grouped as interchangeable actions [6] into a single structural element: *Attack*. Results indicated these actions were not evenly distributed across the interaction. Three actions were systematically related to these Attacks: one action by the father: *Physically Intervening* in the child's Attacks, and two actions by the big sister: *Shielding* herself from the Attack, and *Repositioning* herself on the father's leg. Because these actions, singly or in combination, had the same effect on the interaction, they also were treated as interchangeable within a single structural element: *Respond*.

Figure 14.1 presents the structure hypothesized for the interaction related to Attacks. The structure represents an Attack series, defined as one transit of the structure from beginning to end. An Attack series involves at least one Attack by the child, and may include one or more Responses by the father and big sister. Given the nature of the structure, the interaction may, but need not, loop within the structure one or more times before reaching the end. After the end of an Attack series, the next series is initiated by the child's next Attack. An Attack series may include a single Attack that is not Responded to by the father or big sister, or a string of tightly spaced Attacks and Responses. The length of an Attack series is determined by the rules of the structure and by the choices made by participants at the option points in the structure. The structure applies to all Attacks by the child and to all Responses occurring during an Attack series. To aid discussion, each

element in Figure 14.1 is labelled with (a) a letter (A, B, C, D), (b) the participant(s) involved (the child (Ch) and the father or big sister (FS)), and (c) a brief indication of the action constituting the element (Attack or Respond). In addition, each line is labelled with respect to ratification (+ or -), indicating whether or not the preceding element was considered to be ratifying.

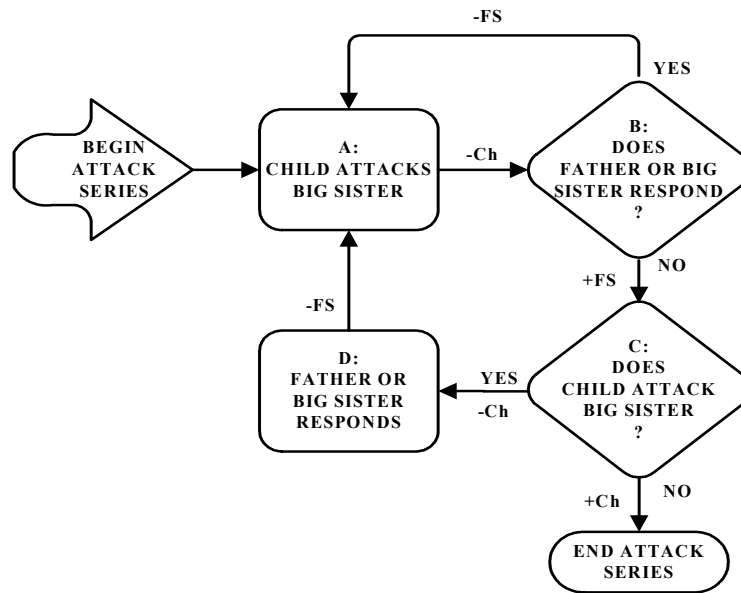


Figure 14.1 Hypothesized structure of attack interaction

14.6.1 Composition of elements

The following definitions, rules, and dynamics characterize the structure. (a) There are only two elements in this structure: Attack by the child (elements A and C), and Response by big sister or father (elements B and D). However, each element appears twice in the structure, once as obligatory (elements A and D), and once as optional (elements B and C). (b) The four actions constituting an Attack by the child (hit, push, shove, pull) are interchangeable [6]. That is, the occurrence of any one or more of these actions constitutes an Attack, and all, singly or in combination, are equivalent in their effect. That is, the conjoint occurrence of two, three, or four Attack actions has no effect on the structure beyond that of a single Attack. (c) The three actions by the father or big sister, defined as a Response (big sister's shielding or repositioning, and father's physical intervention), are similarly interchangeable. The conjoint occurrence of two or three Response actions has no effect on the structure beyond that of a single action.

14.6.2 Rules

(1) The father and big sister have the option of Responding or not to any single Attack (B: \pm FS). (2) However, if the child makes two consecutive Attacks without an intervening Response (A: $-$ Ch \rightarrow B: $+$ FS \rightarrow C: $-$ Ch), a Response is obligatory after the second Attack (D: $-$ FS). (3) If there is a Response (B: $-$ FS or D: $-$ FS), a subsequent Attack by the child is obligatory (A: $-$ Ch). (4) If there is no Response to an Attack (B: $+$ FS), the child has the option of making or not making a second Attack (C: \pm Ch). These rules apply to the first Attack and all subsequent Attacks in a series.

14.6.3 Attack results

Table 14.1 presents action sequences observed during the conflict. The eight Attack series are shown as rows separated by lines.

Attack Series	Preceding action(s)			Child's Attack	Following action(s)		
	Father's Physical Intervention	Big Sister's Reposition	Big Sister's Shield		Father's Physical Intervention	Big Sister's Reposition	Big Sister's Shield
1				1	Attack		
2				2	ATTACK		
				3	ATTACK		
			Shield	4	Attack		Shield
3				5	Attack	Physical	Reposition
	Physical	Reposition		6	ATTACK	Physical	
		Reposition		7	ATTACK		
		Reposition		8	ATTACK		Shield
			Shield	9	Attack		
4				10	Attack		
5				11	Attack		Shield
			Shield	12	Attack		
6				13	ATTACK		
				14	ATTACK	Physical	
	Physical			15	ATTACK	Physical	
	Physical			16	Attack	Physical	Reposition
		Reposition		17	Attack		
7				18	ATTACK		
		Reposition		19	ATTACK	Physical	Reposition
	Physical	Reposition		20	Attack	Physical	Shield
	Physical		Shield	21	Attack	Physical	Reposition
	Physical	Reposition	Shield	22	ATTACK		
		Reposition		23	ATTACK		Reposition
		Reposition		24	Attack	Physical	
	Physical	Reposition		25	ATTACK	Physical	Reposition
	Physical	Reposition		26	ATTACK	Physical	
				27	Attack*	Physical	Reposition
8				28	Attack	Physical	
	Physical			29	Attack		

Table 14.1 Child's attacks and responses by father and big sister

The structure includes all 29 Attacks, all five Shields, and all 13 Physical Interventions. There are occurrences of the big sister's Repositioning outside the context of an Attack series, for example, during other interaction phases. These are not included in the Attack structure. The structure fits 28 of the 29 Attacks (96.5%). The one failure occurs in connection with the starred Reposition at the bottom of series 7. This Attack fits the structure, but the structure requires a further obligatory Attack following the Response (Repositioning and Physical Intervention). This second Attack does not occur. There are eight Attack series in the interaction studied, and thus eight series-initial Attacks and seven series-ending Attacks (due to the faulty ending of series 7). The Attack series include (a) two isolated Attacks (1 & 4); (b) two series containing two Attacks (5 & 8); (c) one series containing three Attacks (2); (d) two series containing five Attacks (3 & 6); and (e) one series containing 10 Attacks (7). Table 14.2 presents results from THEME patterns

relevant to the structure. These data are presented to provide information on the time scale of the action sequences in the hypothesized structures. The table shows for two-action patterns (a) the outside limit of the critical interval for selected patterned actions, that is, the maximum time (in seconds) separating actions considered to be patterned, and (b) the significance of the relationship between the actions. In general, the maximum interval between paired actions in patterns was less than 3s. The significance levels were well beyond the $p < .005$ criterion specified in the analysis.

Action Pair	Maximum Interval (s)	p
End Child's Attack - Begin Attack	2.5	.0028
Begin Child's Attack - Begin Father's Physical Intervention	2.3	.0021
Begin Child's Attack - Begin Big Sister's Shield	0.5	0
End Big Sister's Reposition - Begin Child's Attack	1.7	.0009
End Big Sister's Shield - Begin Child's Attack	7.5	.0006

Table 14.2 Maximum critical intervals and significance of action pairs

14.7 Discussion

We agree with [17] that “it is both crucially important and practically possible to study young children, with their families, in situations of real emotional significance to them.” [18, p. 217] adds that “we gain immeasurably by studying children in their own world; indeed, if we do not do so we run a grave risk of misrepresenting the nature of their social intelligence, and stand little chance of clarifying what may be important in the development of that understanding” (p. 321). Thus, careful examination of these parent-child interactions having “real emotional significance” may be particularly fruitful in contributing to our understanding of the child’s social and cognitive development.

We chose to study this particular conflict because (a) it was the most extended conflict we have found on our videotapes of family interaction, and (b) it included triadic interactions, permitting a move beyond analysis of dyads. For these reasons, it presented an interesting interaction to analyze and model.

14.7.1 Interaction structure

We approached the description of the conflict from the perspective of convention-based or rule-governed interaction. In attempting to move inside this conflict as much as possible, our primary goals were (a) to examine the characteristics of the structures hypothesized for this interaction, (b) to consider the implications of a structural approach to interaction in general and conflict in particular, and (c) to consider the relation between the dynamics of interaction structures and the processes of bidirectional or multidirectional influence in interactions. Taken as a whole, we regard several characteristics of this complex, extended conflict as especially notable.

The interaction sequences described in the Results section involve a remarkable degree of consistency and coordination in the interaction of family members. We have interpreted these regularities as reflecting in part the operation of convention within the conflict [5, 8], just as these conventions operate in other familiar family interactions, such as games, meals, or discipline [6, 9, 18, and 20]. We regard the issue of whether or not a particular family interaction is structured as strictly empirical. In this case, the strength of the sequential regularities in the interaction reported appears to justify the hypothesized

structure. Although our data do not provide information on the extent to which this conflict reflects the properties of other, preceding conflicts in this family, these hypothesized structures appeared firmly in place from the beginning of the respective interactions. The results do not suggest, nor did we detect, an initial period during which the structures were forming. The structure facilitates the coordination of action by participants, even within conflicts, through common expectations of appropriate action within the structure [12, 23]. The importance of such shared expectations in interaction has been frequently noted [4, 7 and 21-23]. Continuing study of interaction structures has the potential for extending our understanding of the child's capacity for developing expectations of their own and others' actions in natural situations, and thus of the child's developing social capabilities and social cognition. Structures containing optional rules have been termed *variable-sequence* structures [6]. Although only certain actions and action sequences are appropriate within a structure, an interaction may take different courses, based on the participants' respective, sequential choices of available options. Each instance of the rule-governed interaction – in this case, an attack series – is jointly constructed by the participants based on the choices each participant makes at each choice point.

Table 14.1 suggests, but does not exhaust, the variety of interaction sequences that can be generated from the variable-sequence structures shown in Figure 14.1. The structure clearly illustrates the way in which each participant's action defines the subsequent action(s) available to the partner, including whether that subsequent action is obligatory or involves options. Responding appropriately to the partner, including choosing between available options, is an important component of the child's social competence. Interaction structures define appropriate responses in specific types of interactions. By the same token, the structure makes strategies interpretable to partners (and to investigators). That is, choosing a particular action when options are available (as in elements B and C in Figure 14.1) becomes interpretable because both the alternative actions and the partner's appropriate response to each of these alternatives are known. Thus, each participant knows not only what actions are appropriate at each point in the interaction, but also the possible consequences of those actions [23].

14.7.2 Hypothesized attack structure

The hypothesized structure for the child's Attacks (Figure 14.1) has a number of contrasts and symmetries that are quite striking when compared to structures we have developed for other parent-child interactions [6, 8]. There are only two elements in the structure: the child's Attacks, and Responses by father or big sister. Each of these two elements appears twice in the structure, once as obligatory and once as optional. This characteristic of the structure is unique in our experience. Whether an element is obligatory or optional thus depends upon its placement in the stream of interaction.

In the Attack structure, all occurrences of Attacks and Responses play a role in the structure, but the nature of that role depends on the interactional context of the element. The notion of obligatory/optional alternation for an element complicates the notion of interpersonal influence in interaction. It is not only that the participants are influencing each other bidirectionally through the medium of the structure, but also that the effect of a participant's action may vary, depending on where in the stream of interaction the action occurs. This fits with intuition; it seems reasonable to expect that the effect of an action may not be entirely constant but may vary according to the immediate context of its occurrence. Both this context and the specific effect of actions within the context are clearly defined by the structure.

14.7.3 Dynamics within the structure: Beginning, continuing, and ending an Attack series

Figure 14.1 can be described as a single conflictual loop. The circular shape of the structure suggests that the structure facilitates continuing an Attack series once it begins. It is clearly easier to begin an Attack series than to end one. This impression can be verified by tracing the various possible paths within the structure.

Beginning an Attack series requires a single action: the child Attacks the big sister (A: –Ch). The big sister initiates no Attacks. While the father often physically intervenes in an Attack, he never takes an action that effectively prevents the child from repeating an Attack. In this he appears to be guided in part by his stated notion that the big sister should be instrumental in concluding the conflict. Notice that both obligatory elements have the same effect: propelling the conflict forward, and locking all participants into continued conflict. Although the structure favours continuing an Attack series once it begins, the structure does provide a definite, though somewhat complex, way to end a series, based on sequences of optional actions. The structure provides that an Attack series can be ended only by the conjoint action of all three participants: all must have the option to desist and choose to do so. As described in the Results section, once begun, an Attack series can be ended only by a single path within the structure: (A: –Ch → B: +FS → C: +Ch). That is, the child attacks, the father and big sister refrain from responding, and the child chooses not to attack again. This ending process obtains regardless of which one of the three possible ways element (A) is reached. Thus, while an Attack series is always begun unilaterally by the child, it can only be ended through the coordinated, abstemious self-regulation of all three participants across a stretch of interaction. Notice that, paradoxically, the structure requires that the conflict be ended only by the father's and big sister's implicitly ratifying the child's immediately preceding attack by failing to respond to it. The structure provides for an Attack series being ended after a single Attack. After the initial attack the father and big sister ratify the Attack, and the child chooses not to attack again (B: +FS → C: +Ch). This occurs in series 1 and 4. In this case, there is an attack but no conflict. This possibility of aggression without conflict is noted by [2].

When the interaction reaches element (C), if the child chooses to attack (C: –Ch), the father or big sister is obliged to respond (D: –FS), and the child is obliged to attack again (A: –Ch). This perpetuates the Attack series but also sets once again up at least the possibility of ending the attack series. Characteristics of the Attack structure exemplify the observation by [2] that “examining conflict as a temporally extended phenomenon permits a more complete account of its determinants, since those factors that regulate the beginning of a conflict may or may not affect the way in which it ends” [2]. When there is a structure hypothesized for a conflict or other interaction, the way the interaction begins, continues, and ends can be described in a highly differentiated manner. The contrast between the ease of starting an Attack series and the complexity of ending it may be an important property of a certain class of conflicts. However, conflict structures may be exited in much simpler ways [9].

14.7.4 Multiparticipant Interaction Structures

The Attack structure involves a three-person interaction. This structure, although nested within a broader interaction, provides an empirical example of the multidirectional family interaction emphasized by [22].

14.7.5 Conflict strategy

Figure 14.1 and Table 14.1 illustrate the manner in which interaction may be examined in a way that extends beyond “isolated acts of aggression,” in this case, a set of Attack series involving patterned sequential regularities. These Attacks occur within the context of an interaction structure in which three participants’ actions are systematically interrelated. The behavioural regularities underlying the hypothesis of the Attack structure indicate the degree to which “one child’s acts were contingent on the other’s, and different types of actions were used at different points within the conflicts” [2, p. 16]. The structure represents a hypothesis regarding the nature of the relationship between successive actions, and the way this relationship depends upon where an action is located in the stream of interaction.

Because of the deep interconnectedness of participants’ actions in interaction, it may be counterproductive to attempt describing one participant’s strategy independently of those of other participants [8]. What one participant does is appropriately influenced by the partner’s preceding actions, the availability of options, and the partner’s anticipated responses to the participant’s action. Thus, all participants are bidirectionally influencing each other. For this reason, it becomes necessary to describe each participant’s action in the context of the respective actions of all other participants. This is accomplished in the structure (Figure 14.1). Bidirectionality is not a particularly easy phenomenon to model. Once a structure is hypothesized, it becomes possible to examine the extent to which preceding actions by both participant and partner influence a participant’s choice of alternative actions at each option point [9]. This line of inquiry is beyond the scope of this discussion.

14.8 Conclusion

The results may be interpreted as lending cumulative support to the following conclusions, presented roughly in order of increasing generality. (a) Substantial sequential regularities suggest the operation of convention in face-to-face interaction. (b) This and other studies [6] provide evidence that children at least 14-months old are capable of participating fully in at least some interaction structures. (c) Conflictual interactions may exhibit structure in the same manner as nonconflictual ones. (d) Some structures may be concerned exclusively with conflict (Figure 14.1) or make no provision for conflict. (e) Other structures provide for both conflictual and nonconflictual interactions [9]. In this case whether or not an interaction based on such a structure becomes conflictual depends on the respective choices of action by the participants. (f) It becomes apparent that, within the context of interaction structure, there are several ways in which interactions can be compared and contrasted, including the interaction structure itself, the specific actions comprising the elements in the structure, the participants in the structure, and the way in which options may be exercised within the structure. This provides the possibility of a highly differentiated description of interaction process. (g) Descriptions of these phenomena in observed interactions permit detailed scrutiny of the child’s interactions with others. (h) Continued investigation of these phenomena has the potential for yielding useful information both on the child’s social and cognitive development, including social cognition, and on the contribution of the child’s interaction with others to the child’s socialization. (i) Interactions both within and between families, including the identification of subtle differences between apparently comparable interactions, may be examined. (j) Interaction structures not only exemplify the notion of bidirectional influence in parent-child interaction, but also permit detailed specification of the nature of that influence in

observed interactions. (k) If face-to-face interaction is a rule-governed or structured process, then research designed to discover structure, strategy, and related phenomena becomes the approach of choice in studying family interaction.

Longitudinal studies are currently underway on the early development and evolution of structures for a wide variety of conflictual and nonconflictual parent-child interactions.

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14.10 References

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