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FIG. 4.1 MOTHER-CHILD SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY CHILDREN AND MOTHERS.

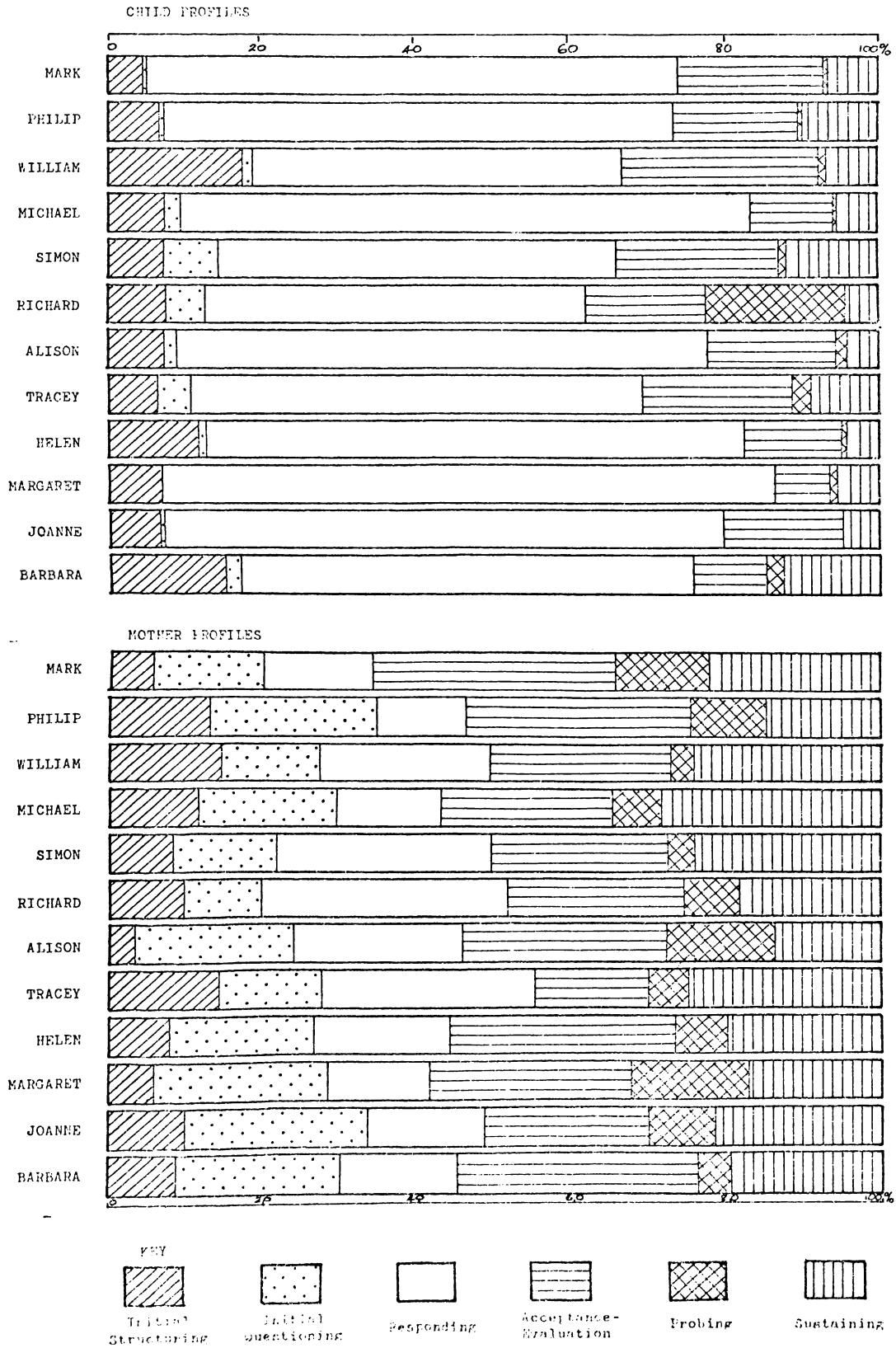


TABLE 4.1 PROPORTION OF INITIAL STRUCTURING MOVES MADE BY CHILD (C) AND MOTHER (M) RESPECTIVELY

	MARK		PHILIP		WILLIAM		MICHAEL		SIMON		RICHARD		ALISON		TRACEY		HELEN		MARGARET		JOANNE		BARBARA	
	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M
Substantive	42.8	53.6	41.4	51.7	29.8	64.2	27.9	55.9	37.1	48.6	34.4	62.5	65.0	30.0	27.1	66.7	45.0	43.3	50.0	46.4	31.9	55.1	44.4	37.5
Procedural	-	3.5	-	6.9	1.5	4.5	1.5	14.7	2.9	11.4	-	3.1	-	5.0	-	6.2	5.0	6.7	-	3.6	-	13.0	12.5	5.6
	42.8	57.2	41.4	58.6	31.3	68.7	29.4	70.6	40.0	60.0	34.4	65.6	65.0	35.0	27.1	72.9	50.0	50.0	50.0	50.0	31.9	68.1	56.9	43.1

TABLE 4.2 PROPORTION OF INITIAL QUESTIONS ASKED BY CHILD (C) AND MOTHER (M) RESPECTIVELY

	MARK		PHILIP		WILLIAM		MICHAEL		SIMON		RICHARD		ALISON		TRACEY		HELEN		MARGARET		JOANNE		BARBARA	
	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M
Memory	-	62.3	-	50.0	4.1	32.7	1.2	45.6	22.8	37.5	23.3	46.7	4.2	66.0	11.9	23.8	1.4	55.3	-	57.2	-	46.1	2.5	40.5
Opine	2.2	29.9	-	47.2	4.1	55.1	3.7	42.0	4.2	25.0	3.3	26.7	2.1	21.3	4.8	54.7	-	33.7	-	32.1	1.7	44.3	5.1	49.4
Comprehension	-	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	1.8	-	0.9	-	-
Procedural	-	2.2	1.4	-	-	-	2.5	2.5	2.1	4.2	-	-	-	-	4.8	-	2.7	2.7	-	8.9	-	0.9	-	2.5
Rhetorical	-	-	-	-	-	2.0	-	2.5	-	2.1	-	-	-	-	-	-	-	1.4	-	-	-	0.9	-	-
Affective	-	-	-	1.4	-	2.0	-	-	-	2.1	-	-	-	6.4	-	-	-	1.4	-	-	-	4.3	-	-
Evaluation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	-	-
	2.2	97.8	1.4	98.6	8.2	91.8	7.4	92.6	29.1	70.9	26.6	73.4	6.3	93.7	21.5	78.5	4.1	95.9	-	100.0	1.7	98.3	7.6	92.4

TABLE 4.3 PROPORTION OF INITIAL STRUCTURING MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC HOME SITUATIONS.

MEDIAN (Range in Brackets) %

	CHILD/MOTHER			CHILD/FATHER			CHILD/PARENTS				CHILD/OTHER ADULT			CHILD/OTHER CHILD		
	C	M	Dyad	C	F	Dyad	C	M	F	Triad	C	OA	Dyad	C	OC	Dyad
Substantive	39 (27-65)	53 (30-67)	94 (82-97)	41 (19-55)	52 (39-57)	93 (74-98)	32 (19-72)	33 (9-44)	21 (10-31)	93 (66-97)	35 (21-53)	48 (31-68)	88 (68-92)	47 (29-68)	48 (11-65)	93 (58-100)
Procedural	*	6 (3-14)	7 (3-18)	*	7 (0-23)	7 (2-26)	*	5 (2-14)	4 (1-15)	7 (4-34)	*	12 (3-19)	13 (3-32)	*	*	8 (2- 42)
Total - Initial Structuring	41 (27-65	59 (35-73)		41 (21-55)	59 (45-79)		33 (19-72)	43 (9-48)	25 (14-35)		37 (24-53)	63 (47-76)		48 (31-85)	52 (15-69)	

* Move made by less than half the participants: results not shown on this table.

TABLE 4.4 PROPORTION OF INITIAL QUESTIONS ASKED BY PARTICIPANTS IN DYADIC/TRIADIC HOME SITUATIONS.

MEDIAN (Range in brackets) %

	CHILD/MOTHER			CHILD/FATHER			CHILD/PARENTS				CHILD/OTHER ADULT			CHILD/OTHER CHILD		
	C	M	Dyad	C	F	Dyad	C	M	F	Triad	C	OA	Dyad	C	OC	Dyad
Memory	2 (0-23)	47 (24-66)	53 (36-70)	6 (0-30)	51 (22-81)	50 (37-81)	2 (0-10)	25 (16-40)	23 (12-34)	53 (48-69)	*	61 (41-69)	61 (46-69)	17 (2-48)	41 (3-63)	60 (39-67)
Opine	3 (0- 5)	38 (21-55)	40 (23-60)	1 (0- 7)	33 (15-53)	34 (15-54)	0 (0- 4)	19 (12-29)	19 (7-22)	37 (21-50)	*	35 (15-43)	35 (16-43)	11 (0-29)	12 (3-23)	29 (14-45)
Comprehension	**	*	0 (0- 4)	**	2 (0- 7)	2 (0- 7)	**	*	*	0 (0- 9)	*	*	2 (0-15)	*	**	0 (0- 4)
Procedural	*	2 (0- 9)	3 (0- 9)	*	1 (0- 8)	1 (0-10)	3 (0- 7)	1 (0-10)	1 (0- 4)	4 (1-19)	*	1 (0- 4)	2 (0-11)	3 (0-11)	3 (0-21)	8 (2-22)
Rhetorical	**	*	0 (0- 3)	**	*	0 (0- 2)	*	*	**	0 (0- 5)	**	*	0 (0- 3)	*	*	0 (0-10)
Affective	**	0.5 (0- 6)	0.5 (0- 6)	**	2 (0- 9)	2 (0- 9)	*	*	*	0 (0- 4)	**	*	0 (0- 6)	*	*	0 (0-14)
Evaluation	**	*	0 (0- 1)	**	**		**	*	*	0 (0- 1)	**	*	0 (0- 3)	**	**	
Exhortatory	**	**		**	*	0 (0- 2)	**	**	*	0 (0- 1)	**	**		**	**	
Total	7 (0-29)	93 (71-100)		7 (0-39)	93 (61-100)		8 (2-22)	50 (36-77)	42 (21-56)		2 (0-22)	98 (78-100)		34 (5-94)	66 (6-95)	

* Move used by less than half the participants: results not shown on this table.

** Move not used by any participants.

TABLE 4.5 PROPORTION OF RESPONSE MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC HOME SITUATIONS

MEDIAN (Range in brackets) %

		CHILD/MOTHER			CHILD/FATHER			CHILD/PARENTS				CHILD/OTHER ADULT			CHILD/OTHER CHILD		
		C	M	Dyad	C	F	Dyad	C	M	F	Triad	C	OA	Dyad	C	OC	Dyad
Answer	One Idea	7 (3-11)	1 (0- 3)	8 (4-13)	9 (5-22)	*	11 (6-22)	7 (5-20)	1 (0- 3)	1 (0- 2)	8 (5-22)	10 (5-19)	1 (0- 3)	11 (6-19)	5 (2-17)	2 (1-15)	7 (5-20)
	Short	15 (8-19)	1 (0-13)	17 (9-22)	17 (9-30)	2 (0- 7)	20 (11-31)	11 (5-23)	1 (0- 5)	1 (0- 2)	13 (9-25)	19 (13-33)	1 (0- 2)	20 (15-34)	8 (1-22)	6 (1-12)	14 (5-25)
	Extended	3 (1- 7)	1 (0- 5)	4 (1- 7)	4 (1-10)	0 (0- 2)	4 (1-10)	1 (0- 8)	*	*	1 (1- 8)	4 (1- 8)	*	5 (2- 9)	2 (0- 3)	1 (0- 5)	3 (1- 7)
	Lengthy	*	*	0 (0- 1)	0.4 (0- 1)	**	0.5 (0- 1)	*	**	*	0 (0-0.4)	*	**	0 (0- 1)	*	*	0.5 (0- 1)
Answer-Initiation	One Idea	2 (1- 4)	*	2 (1- 5)	2 (0- 8)	*	2 (0- 8)	1 (0- 2)	*	*	1 (0- 2)	1 (0- 6)	*	2 (1- 6)	1 (0- 3)	1 (0- 2)	2 (0- 5)
	Short	4 (1- 6)	*	5 (1- 8)	4 (2- 6)	*	4 (2- 6)	2 (1- 4)	0 (0- 1)	*	3 (1- 5)	5 (1-11)	*	6 (2-11)	2 (0- 4)	1 (0- 5)	3 (0- 6)
	Extended	1 (0- 2)	*	1 (0- 2)	1 (0- 1)	*	1 (0- 3)	0 (0- 2)	*	*	0 (0- 2)	0.4 (0- 4)	**	1 (0- 4)	1 (0- 2)	*	1 (0- 4)
	Lengthy	*	**	0 (0- 1)	*	**	0 (0- 1)	*	**	**	0 (0- 1)	*	**	0 (0- 1)	**	**	
Reaction	One Idea	5 (2-12)	7 (4-10)	12 (8-21)	5 (2- 8)	6 (4-13)	11 (9-18)	6 (2-11)	6 (3-10)	4 (0- 9)	15 (7-28)	4 (1- 8)	7 (2-11)	4 (11-19)	8 (3-15)	10 (7-17)	19 (12-32)
	Short	8 (5-12)	13 (8-21)	22 (13-30)	6 (4-11)	12 (1-17)	18 (9-26)	7 (3-12)	12 (1-19)	8 (3-12)	25 (9-43)	5 (2-11)	9 (5-17)	14 (8-28)	14 (7-19)	18 (4-25)	32 (15-44)
	Extended	1 (0- 2)	1 (0- 4)	2 (1- 5)	1 (0- 2)	1 (0- 4)	2 (0- 6)	1 (0- 2)	1 (0- 2)	1 (0- 2)	2 (0- 5)	0.5 (0- 2)	0.5 (0- 1)	1 (0- 2)	1 (0- 3)	2 (0- 4)	3 (0- 5)
	Lengthy	*	**	0 (0- 1)	**	*	0 (0- 1)	**	**	**		**	**		**	**	
Yes/No		29 (11-38)	2 (1- 5)	31 (13-39)	24 (12-38)	1 (0- 5)	26 (14-39)	22 (5-29)	1 (0- 3)	1 (0- 5)	24 (6-36)	29 (15-36)	1 (0- 4)	30 (16-38)	8 (3-12)	8 (3-15)	16 (10-20)
Total		75 (51-83)	25 (17-49)		73 (62-94)	27 (6-38)		61 (42-83)	24 (4-35)	18 (7 -23)		81 (65-91)	19 (9-35)		48 (32-72)	52 (28-60)	

* Move used by less than half the participants - results not shown on this table.

** Move not used by any participants.

TABLE 4.6 PROPORTION OF ACCEPTANCE-EVALUATION MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC HOME SITUATIONS.

MEDIAN (Range in brackets) %

	CHILD/MOTHER			CHILD/FATHER			CHILD/PARENTS				CHILD/OTHER ADULT			CHILD/OTHER CHILD		
	C	M	Dyad	C	F	Dyad	C	M	F	Triad	C	OA	Dyad	C	OC	Dyad
Simple Accept	26 (12-48)	50 (32-75)	77 (67-92)	28 (15-49)	49 (39-71)	77 (56-95)	24 (11-49)	25 (14-60)	20 (6-44)	80 (66-89)	19 (8-41)	55 (38-65)	76 (58-92)	41 (12-66)	43 (27-72)	83 (70-94)
Accept Repeat	2 (0- 5)	9 (4-20)	11 (5-20)	2 (0- 5)	12 (2-28)	12 (5-28)	2 (0- 6)	6 (1-19)	4 (1-14)	12 (5-26)	*	13 (4-32)	14 (4-32)	4 (0-10)	4 (0- 8)	8 (0-15)
Accept Paraphrase	*	*	0 (0- 1)	**	*	0 (0- 2)	**	*	*	0 (0- 1)	**	1 (0- 8)	1 (0- 8)	**	**	
Praise	*	3 (0- 8)	4 (0- 9)	**	1 (0-16)	1 (0-16)	**	2 (0- 4)	*	3 (0- 7)	**	5 (0-13)	5 (0-13)	*	2 (0- 4)	2 (0- 4)
Aversive	**	**		**	*	0 (0- 1)	**	**	**		**	**		**	**	
Aversive with Reasons	**	*	0 (0- 1)	**	**		**	*	*	0 (0- 1)	**	**		**	**	
Correction	2 (0- 4)	2 (0- 7)	4 (0- 9)	1 (0- 4)	1 (0- 8)	2 (1- 9)	1 (0- 5)	1 (0- 5)	1 (0- 3)	4 (0-10)	0.5 (0- 5)	1 (0-3)	2 (0- 5)	3 (0-16)	*	4 (0-16)
Correction with Reasons	*	*	1 (0- 4)	*	*	0 (0- 1)	*	*	*	1 (0- 3)	*	*	0 (0- 4)	*	*	0 (0- 4)
Total	32 (19-53)	68 (47-81)		30 (16-49)	70 (51-84)		29 (15-51)	34 (22-66)	30 (12-49)		20 (8-42)	80 (58-92)		52 (21-70)	48 (30-79)	

* Move used by less than half the participants: results not shown on this table.

** Move not used by any participants.

TABLE 4.7 PROPORTION OF PROBING MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC HOME SITUATIONS.

MEDIAN (Range in brackets) %

	CHILD/MOTHER			CHILD/FATHER			CHILD/PARENTS				CHILD/OTHER ADULT			CHILD/OTHER CHILD		
	C	M	Dyad	C	F	Dyad	C	M	F	Triad	C	OA	Dyad	C	OC	Dyad
Prompt	**	3 (0-23)	3 (0-23)	**	4 (0-22)	4 (0-22)	**	*	3 (0-11)	6 (0-15)	**	10 (0-22)	10 (0-22)	**	*	0 (0-10)
Clarification	4 (0-43)	73 (48-90)	81 (70-100)	6 (0-22)	70 (62-80)	80 (68-100)	11 (0-24)	35 (13-62)	33 (15-53)	82 (72-100)	8 (0-15)	75 (61-93)	85 (70-100)	33 (0-100)	50 (0-100)	91 (70-100)
Critical Awareness	*	7 (0-28)	9 (0-28)	*	7 (0-23)	7 (0-24)	*	*	*	6 (0-24)	*	4 (0-19)	4 (0-19)	*	7 (0-20)	10 (0-20)
Refocus	**	**		*	*	0 (0- 7)	**	**	**		**	*	0 (0-11)	**	**	
Total	9 (0-64)	91 (36-100)		7 (0-22)	93 (78-100)		13 (0-35)	35 (18-73)	48 (18-69)		8 (0-19)	92 (81-100)		38 (0-100)	62 (0-100)	

* Move used by less than half the participants: results not shown in this table.

** Move not used by any participants.

TABLE 4.8 PROPORTION OF SUSTAINING MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC HOME SITUATIONS.

MEDIAN (Range in brackets) %

	CHILD/MOTHER			CHILD/FATHER			CHILD/PARENTS				CHILD/OTHER ADULT			CHILD/OTHER CHILD		
	C	M	Dyad	C	F	Dyad	C	M	F	Triad	C	OA	Dyad	C	OC	Dyad
Substantive	16 (5-29)	20 (5-48)	33 (10-58)	17 (4-42)	22 (0-39)	39 (4-70)	12 (8-30)	16 (0-33)	8 (5-18)	38 (28-57)	11 (2-57)	14 (2-27)	29 (5-70)	30 (9-53)	25 (2-48)	50 (41-77)
Procedural	1 (0- 6)	2 (0-11)	5 (0-14)	*	2 (0-23)	2 (0-23)	*	2 (0-14)	1 (0-12)	4 (0-40)	*	3 (0-19)	3 (0-19)	3 (0-24)	3 (0-18)	7 (0-30)
Comment	*	4 (2- 9)	4 (2- 9)	*	4 (0- 7)	4 (2- 7)	*	2 (0- 6)	1 (0- 2)	3 (0- 6)	*	7 (0-14)	7 (0-16)	*	1 (0- 9)	3 (0- 9)
Procedural Question	*	0.5 (0- 1)	1 (0- 4)	1 (0- 3)	1 (0- 4)	3 (0- 6)	*	*	*	2 (0- 8)	*	*	0.5 (0- 4)	3 (0- 5)	1 (0- 5)	4 (0-10)
Opine Question	3 (0-11)	39 (16-69)	44 (22-70)	2 (0- 4)	37 (14-81)	39 (14-83)	1 (0- 5)	22 (3-41)	12 (2-35)	40 (12-56)	0.5 (0- 7)	36 (15-59)	38 (22-59)	8 (0-28)	11 (4-25)	18 (10-44)
Rhetorical Question	*	8 (0-17)	8 (1-17)	*	7 (1-13)	7 (1-13)	**	5 (0-11)	1 (0- 9)	6 (1-16)	**	13 (2-30)	13 (2-30)	*	2 (0- 9)	3 (0- 9)
Exhortatory Question	**	*	0 (0- 1)	**	*	0 (0- 7)	**	**	**		**	**		**	**	
Statement Using Respondent Ideas	**	*	0 (0- 1)	**	*	0 (0- 2)	**	**	*	0 (0- 1)	**	*	0 (0- 1)	**	**	
Question Using Respondent Ideas	**	**		**	*	0 (0- 2)	**	**	**		**	**		**	**	
Answer Own Question	*	2 (0- 5)	2 (0- 5)	*	*	2 (0- 8)	*	*	*	2 (0- 5)	*	2 (0- 7)	2 (0- 7)	*	2 (0- 8)	3 (0- 9)
Total	20 (11-36)	80 (64-89)		18 (5-45)	82 (55-95)		23 (11-33)	51 (34-69)	33 (8-50)		12 (3-69)	88 (31-97)		48 (24-86)	52 (14-76)	

* Move used by less than half the participants: results not shown in this table.

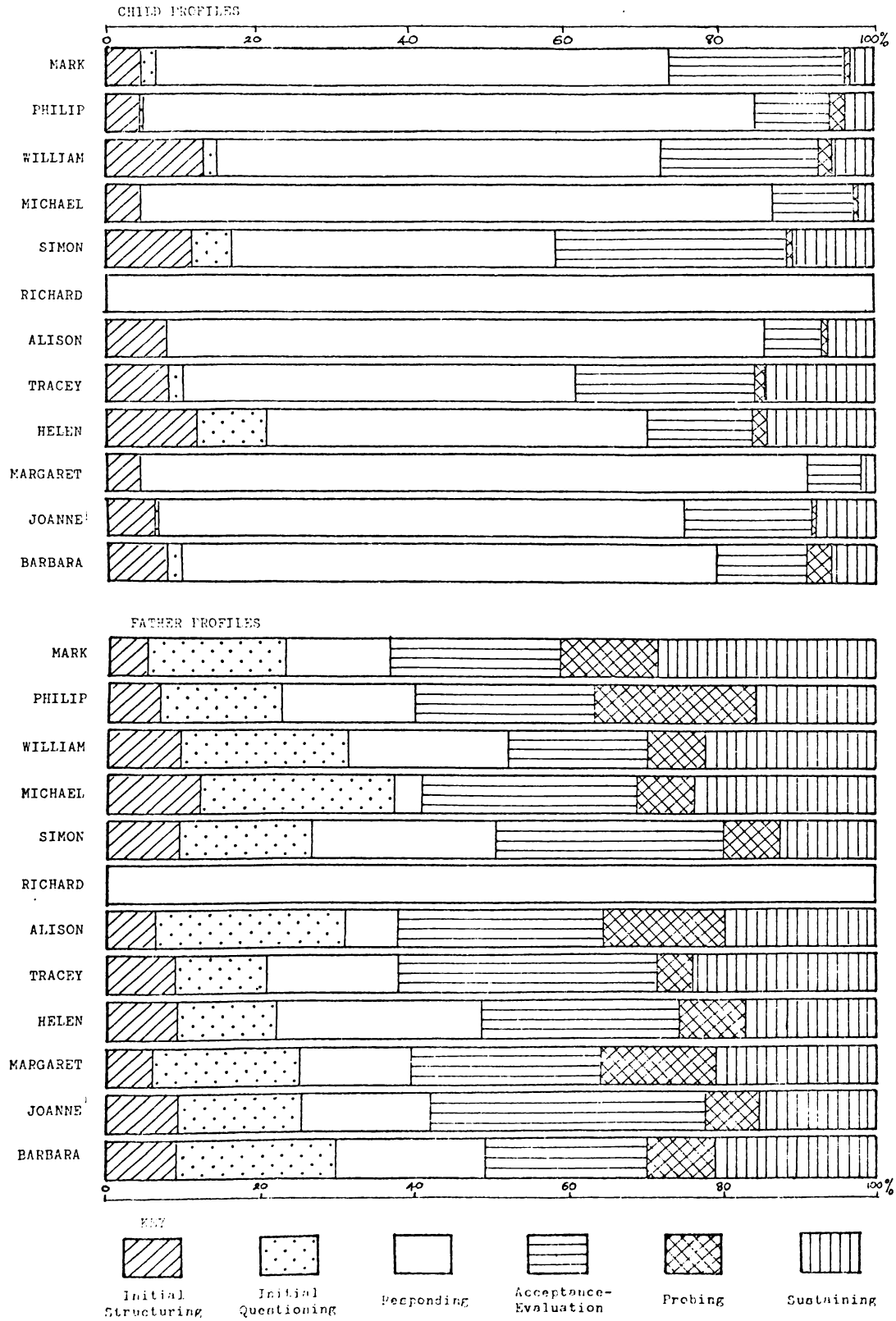
** Move not used by any participants.

TABLE 4.9 NUMBER OF MOVES PER MINUTE AND PER EPISODE IN HOME SITUATIONS.

MEDIAN (Range in brackets) %

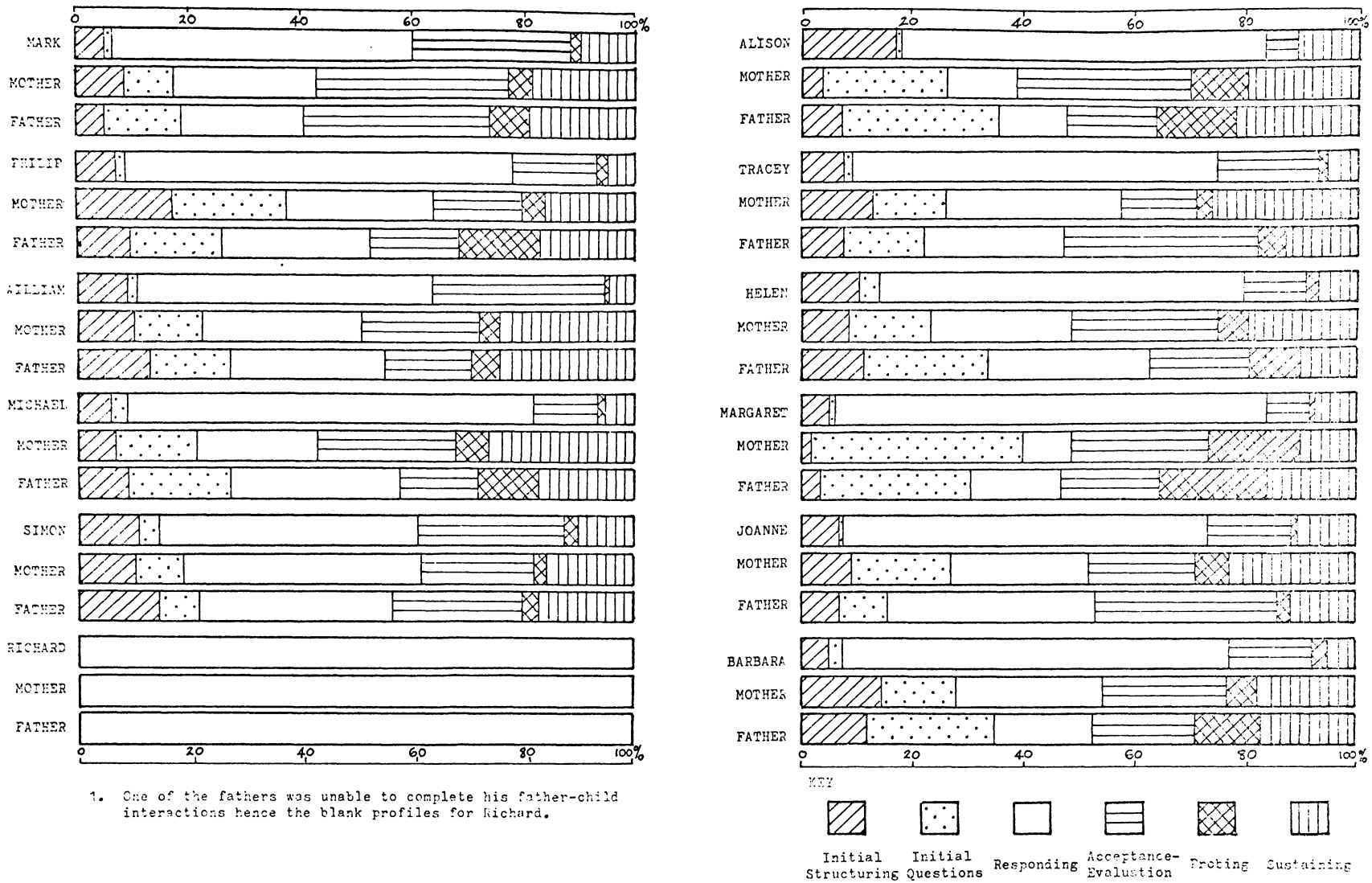
	MOTHER-CHILD	FATHER-CHILD	PARENTS-CHILD	OTHER ADULT-CHILD	CHILD-CHILD
Moves per Minute	20.0 (15.1 - 27.4)	20.6 (14.4 - 26.3)	23.9 (10.9 - 29.2)	20.8 (15.6 - 28.7)	14.1 (11.3 - 15.9)
Moves per Episode	6.1 (4.9 - 8.5)	6.2 (5.0 - 8.6)	6.1 (5.1 - 8.2)	5.5 (4.2 - 6.4)	5.2 (4.4 - 6.6)

FIG. 4.2 FATHER-CHILD SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY CHILDREN AND FATHERS.[1]



1. One of the fathers was unable to complete his father-child interactions hence the blank profiles for Richard.

FIG. 4.3 PARENTS-CHILD SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY CHILDREN, MOTHERS, AND FATHERS.[1]



1. One of the fathers was unable to complete his father-child interactions hence the blank profiles for Richard.

FIG. 4.4 OTHER ADULT-CHILD SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY CHILDREN AND OTHER ADULTS.

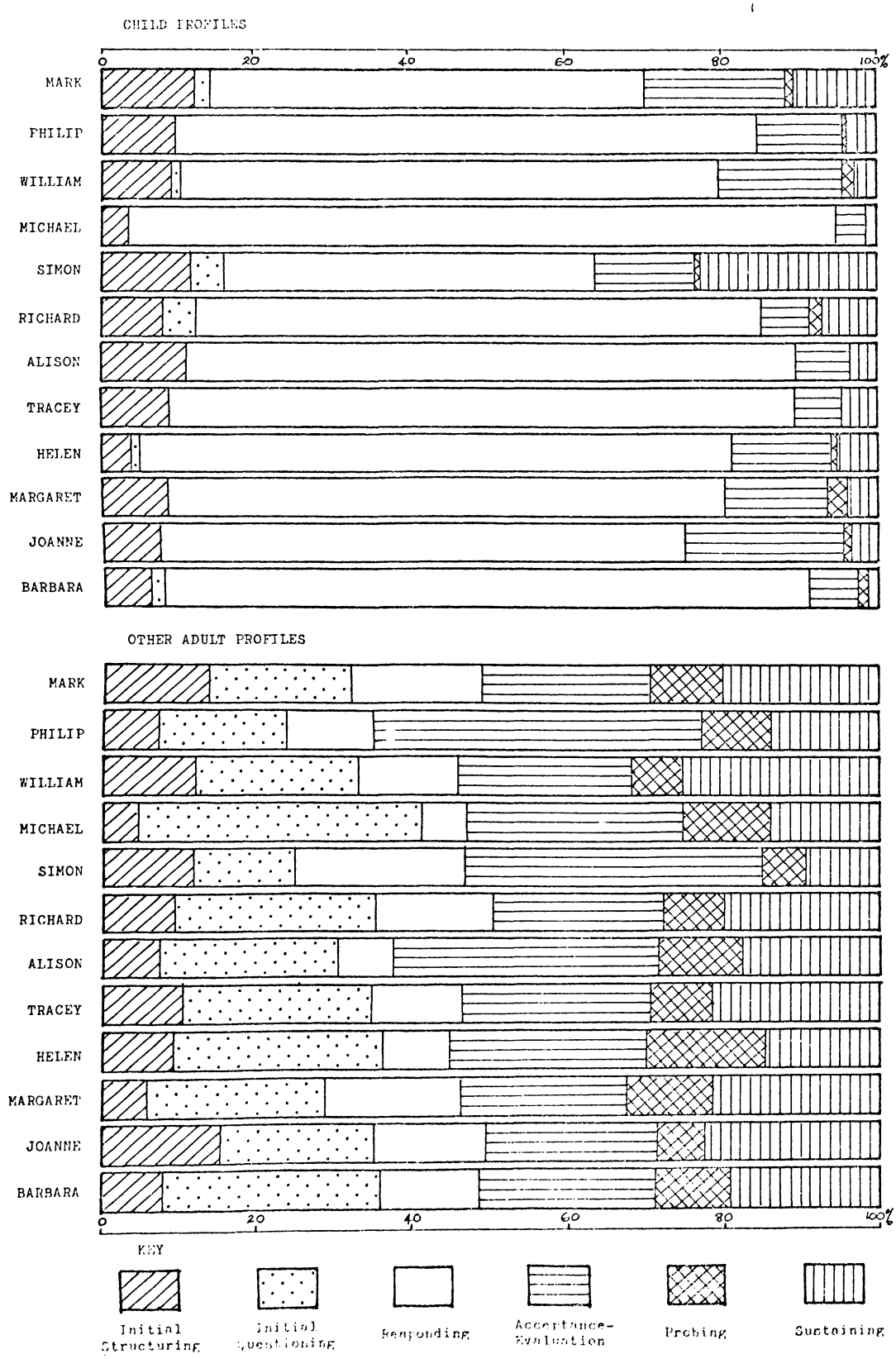


FIG. 4.5 CHILD-CHILD SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY SUBJECTS AND OTHER CHILDREN.

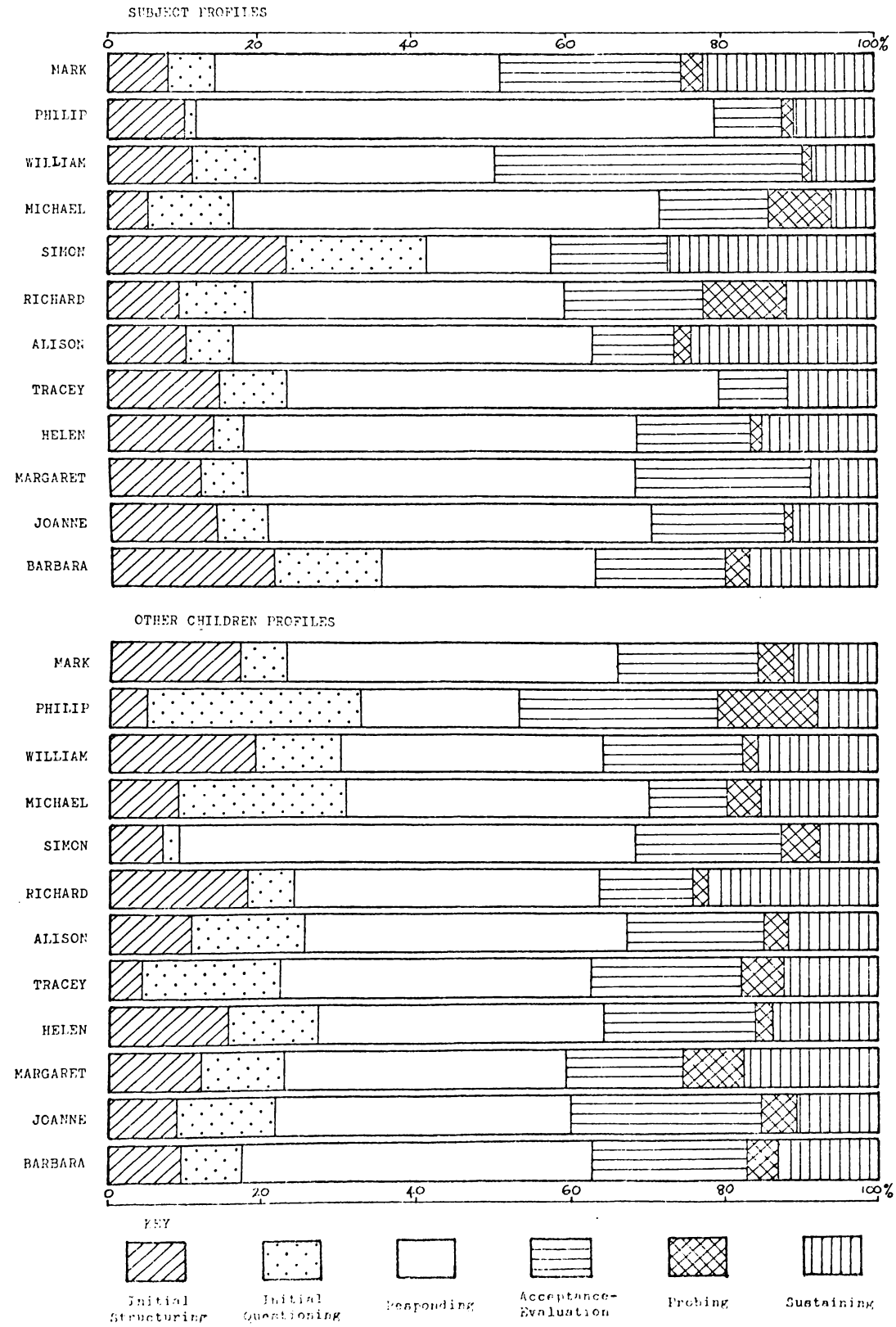


FIG. 5.1 TEACHER-CHILD SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY CHILDREN AND TEACHERS.

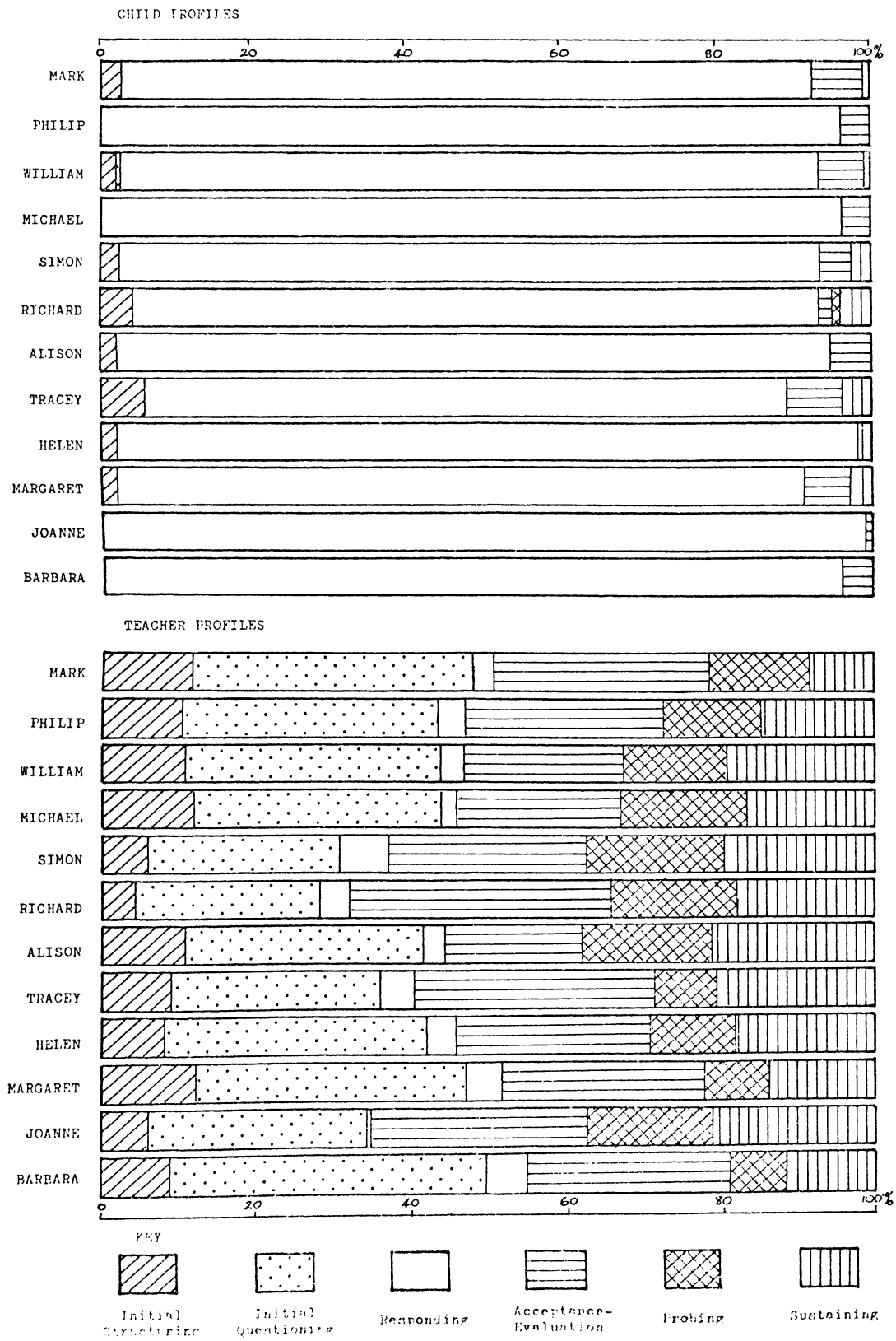


TABLE 5.1 PROPORTION OF INITIAL STRUCTURING MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC/TETRADIC SCHOOL SITUATIONS.

MEDIAN (Range in brackets) %

	SUBJECT/TEACHER			SUBJECTS/OTHER CHILD/TEACHER[1]				SUBJECTS/OTHER CHILD[2]		
	S	T	Dyad	S	OC	T	Tetrad	S	OC	Triad
Substantive	11 (0-38)	76 (45-92)	85 (77-92)	13 (4-28)	14 (8-24)	40 (19-53)	80 (70-95)	23 (12-40)	21 (7-33)	71 (56-79)
Procedural	**	15 (8-23)	15 (8-23)	*	*	17 (5-27)	24 (14-30)	11 (2-20)	9 (4-18)	30 (21-44)
Total	11 (0-38)	89 (62-100)		13 (9-35)	14 (9-24)	50 (33-68)		36 (21-54)	33 (11-42)	

1. This grouping comprised teacher, 2 subjects, and 1 other child.
2. This grouping comprised the same groups of children for the Teacher-Children Situation.

* Move used by less than half the participants: results not shown on this table.

** Move not used by any participants.

TABLE 5.2 PROPORTION OF INITIAL QUESTIONS ASKED BY PARTICIPANTS IN DYADIC/TRIADIC/TETRADIC SCHOOL SITUATIONS

MEDIAN (Range in brackets) %

	SUBJECT/TEACHER			SUBJECTS/OTHER CHILD/TEACHER[1]				SUBJECTS/OTHER CHILD[2]		
	S	T	Dyad	S	OC	T	Tetrad	S	OC	Triad
Memory	**	52 (41-76)	52 (41-76)	*	**	47 (38-58)	48 (38-59)	13 (0-38)	15 (11-21)	41 (17-63)
Comprehension	**	15 (2-26)	15 (2-26)	**	**	14 (9-24)	14 (9-24)	*	**	0 (0- 2)
Opine	*	25 (13-39)	25 (13-40)	*	*	20 (16-28)	22 (19-28)	7 (0-24)	7 (6-33)	26 (7-50)
Procedural	**	3 (0- 8)	3 (0- 8)	*	**	7 (4-14)	7 (4-15)	11 (0-21)	5 (0-21)	25 (13-50)
Rhetorical	**	*	0 (0- 3)	*	**	*	0 (0- 3)	**	**	
Application	**	*	0 (0- 1)	**	**	**		**	**	
Synthesis	**	*	0 (0- 3)	**	**	**		**	**	
Evaluation	**	*	0 (0- 2)	**	*	*	0 (0- 3)	**	**	
Affective	**	2 (0-10)	2 (0-10)	**	*	3 (1- 5)	3 (1- 6)	*	*	1 (0-17)
Exhortatory	**	**		**	**	*	0 (0- 2)	**	**	
Total	0 (0- 1)	100 (99-100)		1 (0- 4)	0 (0- 8)	96 (89-100)		31 (7-69)	34 (19-50)	

1. This grouping comprised teacher, 2 subjects, and 1 other child.
2. This grouping comprised the same groups of children for the Teacher-Children situation.

* Move used by less than half the participants; results not shown on this table.
** Move not used by any participants.

TABLE 5.3 PROPORTION OF RESPONSE MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC/TETRADIC SCHOOL SITUATIONS

MEDIAN (Range in brackets) %

		SUBJECT/TEACHER			SUBJECTS/OTHER CHILD/TEACHER[1]				SUBJECTS/OTHER CHILD[2]		
		S	T	Dyad	S	OC	T	Tetrad	S	OC	Triad
Answer	One Idea	15 (7-20)	••	15 (7-20)	2 (1- 4)	3 (1- 8)	•	7 (7-16)	2 (0- 4)	2 (1- 3)	6 (3- 9)
	Short	33 (21-39)	•	33 (21-39)	5 (3- 8)	5 (3- 8)	•	16 (12-17)	3 (1- 5)	1 (1- 4)	6 (3- 9)
	Extended	8 (4-18)	••	8 (4-18)	2 (0- 3)	1 (0- 3)	••	5 (2- 7)	•	•	0 (0- 1)
	Lengthy	1 (0- 3)	••	1 (0- 3)	•	0 (0- 1)	••	0 (0- 2)	••	••	
Answer-Initiation	One Idea	2 (0- 5)	••	2 (0- 5)	2 (1- 4)	2 (1- 3)	••	6 (5- 8)	0 (0- 2)	0.5 (0- 1)	1 (0- 4)
	Short	3 (1- 5)	••	3 (1- 5)	3 (2- 5)	2 (1- 4)	••	8 (5-12)	0 (0- 1)	0 (0- 1)	1 (0- 1)
	Extended	1 (0- 4)	••	1 (0- 4)	1 (0- 2)	0 (0- 2)	••	2 (0- 3)	•	••	0 (0- 1)
	Lengthy	•	••	0 (0- 1)	•	•	••	0 (0- 1)	••	••	
Reaction	One Idea	1 (0- 4)	2 (0- 5)	3 (0- 7)	4 (2- 6)	3 (1- 5)	3 (0- 7)	14 (10-17)	10 (7-16)	12 (6-14)	29 (26-37)
	Short	2 (0- 6)	4 (1- 7)	7 (1- 9)	5 (1- 6)	4 (4- 5)	4 (0- 8)	18 (15-21)	14 (11-20)	12 (10-17)	41 (34-51)
	Extended	•	•	0 (0- 2)	1 (0- 2)	1 (0- 1)	•	2 (1- 4)	2 (1- 3)	1 (0.3-4)	4 (3- 9)
	Lengthy	••	••		•	0.1 (0-0.5)	••	0.3 (0- 1)	•	••	0 (0-0.4)
Yes/No		29 (22-38)	•	30 (22-39)	6 (3-10)	10 (7-11)	0.1 (0- 1)	21 (17-28)	3 (0- 6)	2 (0.4-9)	8 (2-18)
Total		94 (91-99)	6 (1- 9)		29 (23-39)	34 (27-35)	8 (1-16)		35 (21-40)	31 (27-45)	

1. This grouping comprised teacher, 2 subjects, and 1 other child.
2. This grouping comprised the same groups of children for the Teacher-Children situation.

• Move used by less than half the participants: results not shown on this table.
•• Move not used by any participants.

TABLE 5.4 PROPORTION OF ACCEPTANCE-EVALUATION MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC/TETRADIC SCHOOL SITUATIONS

MEDIAN (Range in brackets) %

	SUBJECT/TEACHER			SUBJECTS/OTHER CHILD/TEACHER[1]				SUBJECTS/OTHER CHILD[2]		
	S	T	Dyad	S	OC	T	Tetrad	S	OC	Triad
Simple Accept	10 (0-17)	75 (60-79)	81 (0-90)	10 (5-21)	11 (7-19)	43 (27-62)	79 (71-82)	29 (17-46)	23 (12-30)	82 (77-87)
Accept Repeat	*	6 (0-15)	7 (0-15)	2 (0- 5)	3 (0- 4)	4 (2-13)	12 (3-22)	3 (0- 6)	4 (1- 5)	5 (2-14)
Accept Paraphrase	**	1 (0- 4)	1 (0- 4)	*	*	*	1 (0- 1)	**	**	
Aversive	**	**		**	**	**		*	*	0 (0- 1)
Aversive with Reasons	**	**		**	**	*	0 (0- 1)	**	**	
Correction	**	*	0 (0- 3)	1 (0- 3)	1 (0- 2)	*	3 (1- 6)	3 (1- 5)	3 (2- 7)	8 (5-13)
Correction with Reasons	*	*	0 (0- 3)	*	0.5 (0- 1)	**	2 (0- 3)	1 (0- 2)	*	2 (0- 5)
Praise	**	11 (3-22)	11 (3-22)	*	**	5 (1-12)	5 (1-12)	*	**	0 (0- 1)
Total	10 (0-17)	90 (83-100)		15 (6-26)	16 (7-22)	53 (32-77)		35 (21-52)	30 (16-36)	

1. This grouping comprised teacher, 2 subjects, and 1 other child.
2. This grouping comprised the same groups of children for the Teacher-Children situation.

* Move used by less than half the participants: results not shown on this table.

** Move not used by any participants.

TABLE 5.5 PROPORTION OF PROBING MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC/TETRADIC SCHOOL SITUATIONS

MEDIAN (Range in brackets) %

	SUBJECT/TEACHER			SUBJECTS/OTHER CHILD/TEACHER[1]				SUBJECTS/OTHER CHILD[2]		
	S	T	Dyad	S	OC	T	Tetrad	S	CC	Triad
Prompt	**	13 (6-23)	13 (6-23)	**	*	4 (0-10)	4 (0-10)	**	**	
Clarification	*	62 (45-72)	62 (45-72)	*	*	46 (37-71)	48 (39-71)	22 (0-55)	44 (18-57)	89 (75-100)
Critical Awareness	**	23 (9-37)	23 (9-37)	*	**	30 (14-33)	31 (14-33)	*	**	0 (0-25)
Refocus	**	*	0 (0- 5)	**	**	*	0 (0- 3)	**	**	
Probe Redirect[3]				**	*	5 (0- 7)	6 (0- 7)	**	**	
Redirect[3]				*	1 (0-11)	10 (7-20)	11 (8-31)	**	**	
Total	0 (0- 2)	100 (98-100)		0 (0- 3)	2 (0-14)	95 (86-100)		29 (14-63)	44 (18-57)	

1. This grouping comprised teacher. 2 subjects, and 1 other child.
2. This grouping comprised the same groups of children for the Teacher-Children situation.
3. This move appropriate only in situations involving more than two persons.
* Move used by less than half the participants: results not shown on this table.
** Move not used by any participants.

TABLE 5.6 PROPORTION OF SUSTAINING MOVES MADE BY PARTICIPANTS IN DYADIC/TRIADIC/TETRADIC SCHOOL SITUATIONS

MEDIAN (Range in brackets) %

	SUBJECT/TEACHER			SUBJECTS/OTHER CHILD/TEACHER[1]				SUBJECTS/OTHER CHILD[2]		
	S	T	Dyad	S	OC	T	Tetrad	S	OC	Triad
Substantive	4 (0-12)	14 (4-25)	17 (7-36)	5 (0-10)	6 (0-11)	10 (3-18)	26 (14-34)	17 (7-28)	12 (7-25)	48 (25-58)
Procedural	**	*	0 (0-14)	*	*	3 (0- 5)	4 (0- 9)	11 (4-20)	7 (2-14)	29 (23-37)
Comment	**	17 (7-37)	17 (7-37)	*	**	12 (7-20)	13 (7-20)	*	*	1 (0- 5)
Procedural Question	*	*	0 (0- 6)	*	*	2 (0- 6)	5 (0- 7)	2 (0- 8)	1 (0- 3)	8 (0-14)
Opine Question	*	40 (31-74)	40 (31-74)	*	0.5 (0- 5)	41 (34-46)	44 (36-46)	2 (0-12)	4 (0- 6)	11 (0-17)
Rhetorical Question	**	11 (0-23)	11 (0-23)	*	**	8 (2-14)	8 (2-14)	*	*	1 (0- 8)
Exhortatory Question	**	**		**	**	**		**	**	
Statement Using Respondent Ideas	**	*	0 (0- 6)	**	**	2 (1- 5)	2 (1- 5)	**	**	
Question Using Respondent Ideas	**	*	0 (0 - 2)	**	**	*	0 (0 - 2)	**	**	
Answer Own Question	**	3 (0-16)	3 (0-16)	**	**	1 (0- 6)	1 (0- 6)	1 (0- 5)	2 (0- 3)	5 (0- 6)
Total	9 (1-12)	91 (88-99)		7 (0-10)	6 (0-14)	82 (67-88)		35 (20-56)	28 (14-43)	

1. This grouping comprised teacher, 2 subjects, and 1 other child.
2. This grouping comprised the same groups of children for the Teacher-Children situation.

* Move used by less than half the participants: results not shown on this table.

** Move not used by any participants.

TABLE 5.7 NUMBER OF MOVES PER MINUTE AND PER EPISODE IN SCHOOL SITUATIONS

MEDIAN (Range in brackets) %

	TEACHER-CHILD	TEACHER-CHILDREN	CHILDREN
Moves per Minute	14.8 (11.9 - 22.4)	19.0 (17.6 - 28.0)	19.6 (16.0 - 22.3)
Moves per Episode	4.8 (3.9 - 7.0)	7.8 (6.5 - 9.3)	5.6 (4.8 - 6.8)

FIG. 5.2 TEACHER-CHILDREN SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY SUBJECTS, OTHER CHILDREN, AND TEACHERS.

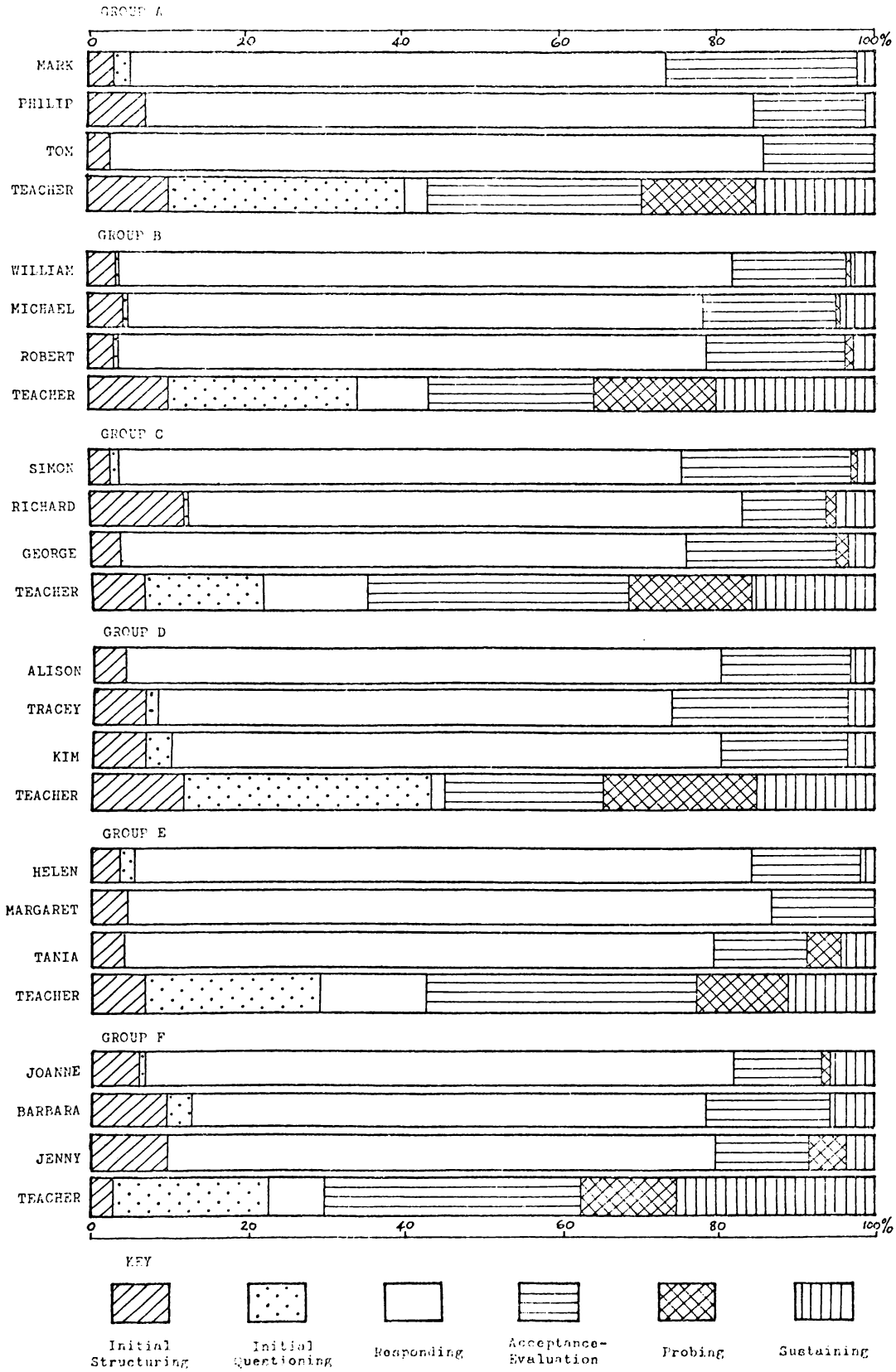


FIG. 5.3 CHILDREN SITUATION: PROFILES OF VERBAL INTERACTION PATTERNS BY SUBJECTS AND OTHER CHILDREN

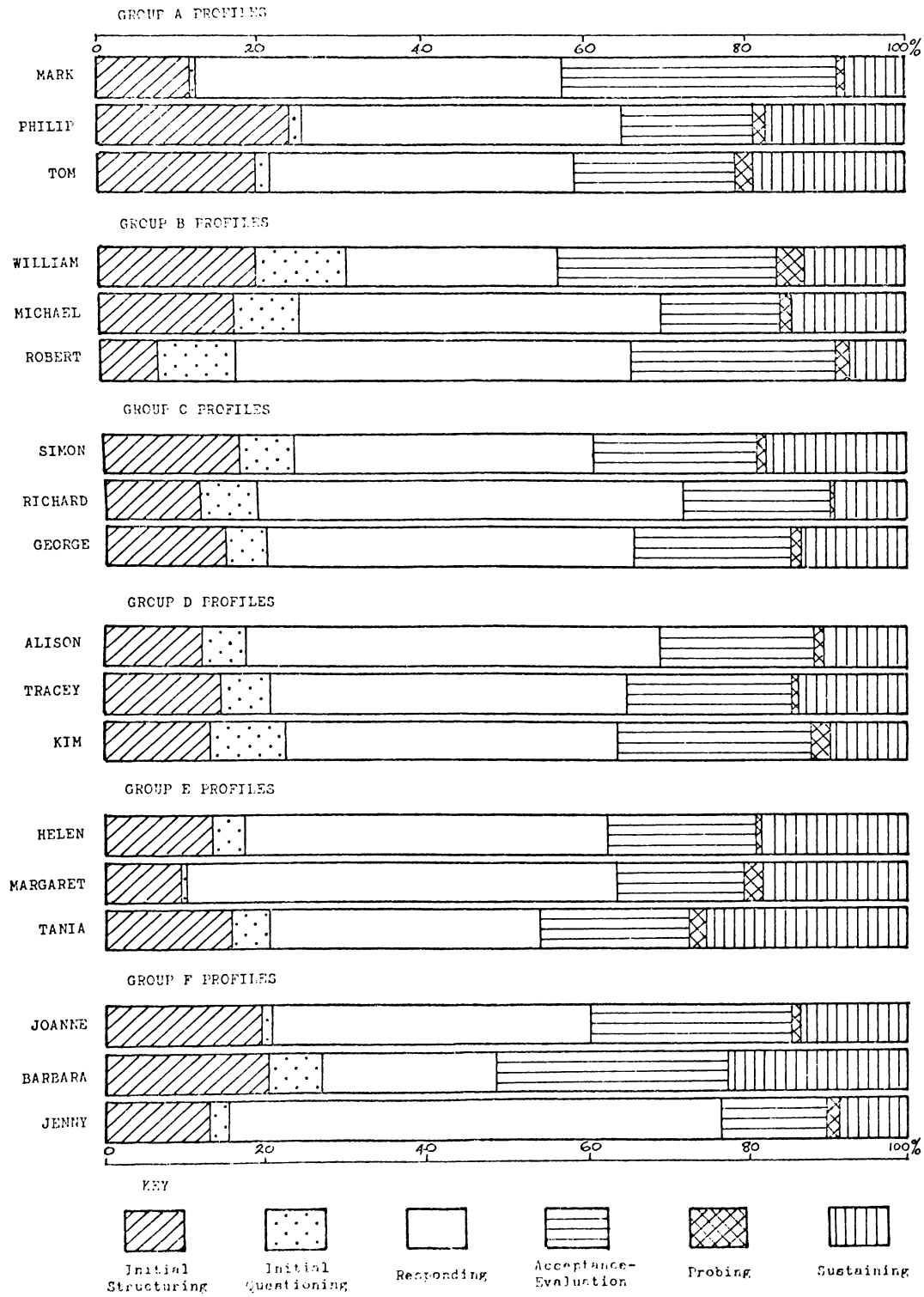


FIG. 6.1 PROPORTION OF VERBAL MOVES IN EACH MAJOR CATEGORY FOR ALL SITUATIONS COMBINED

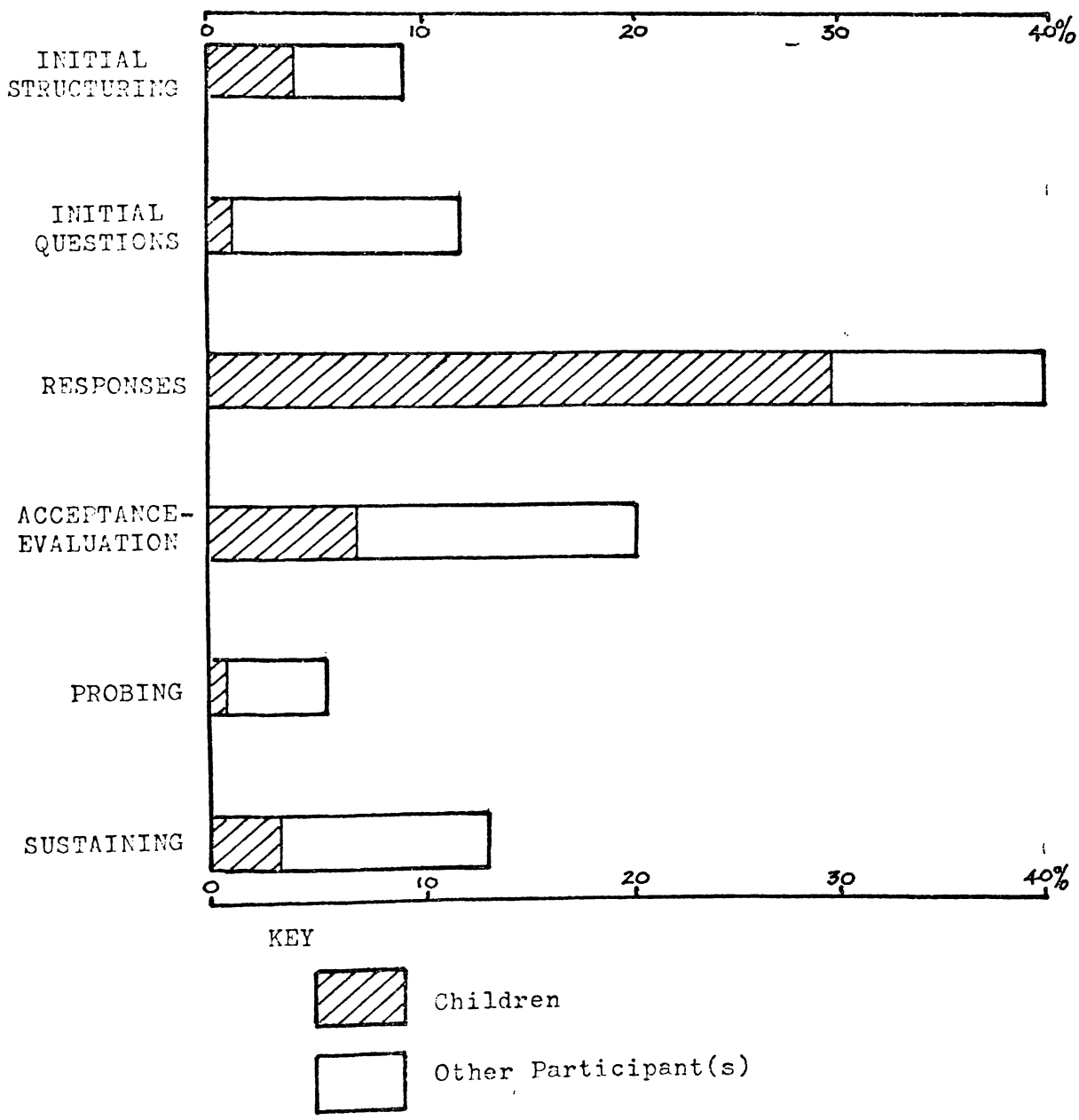
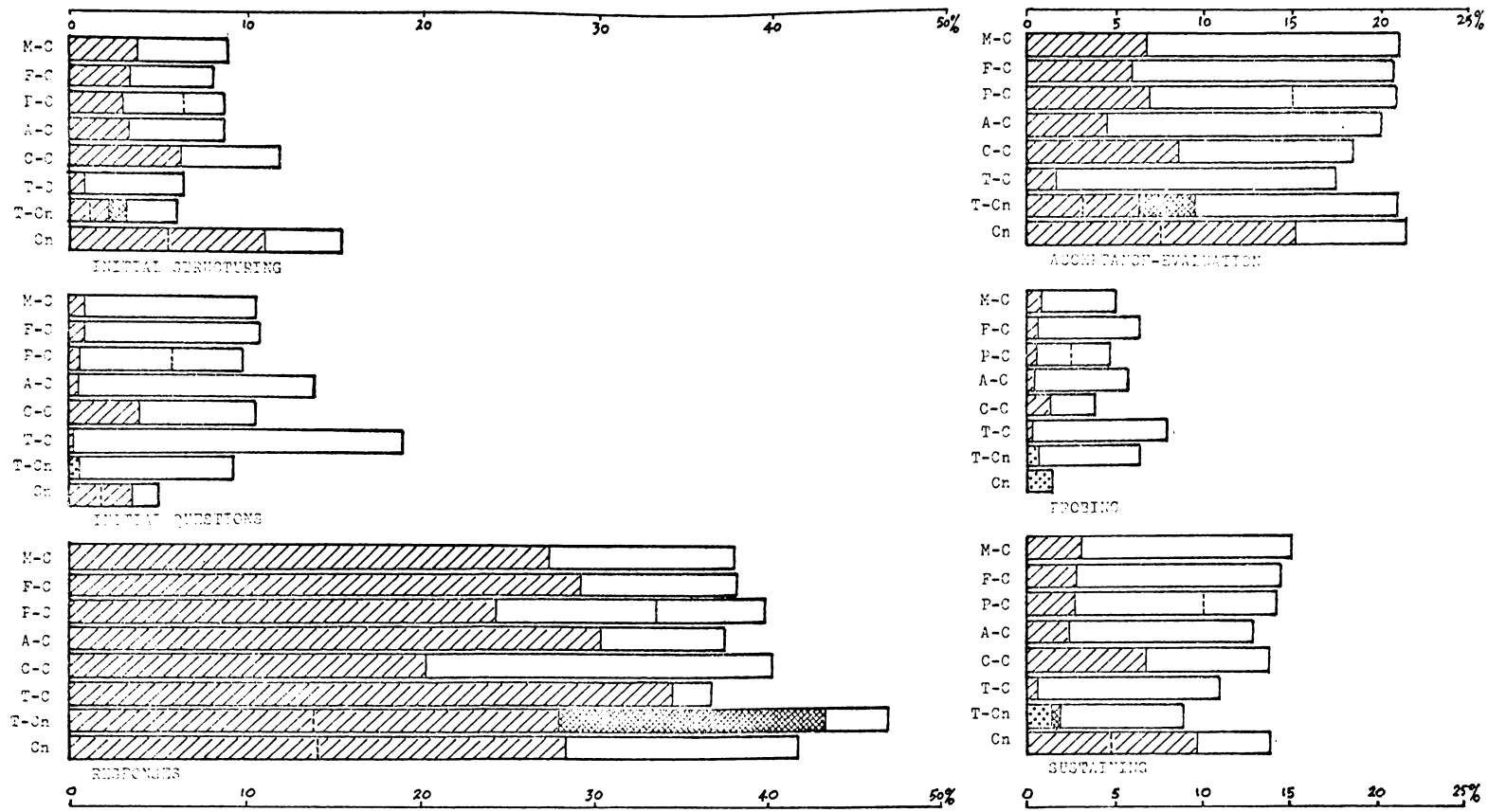


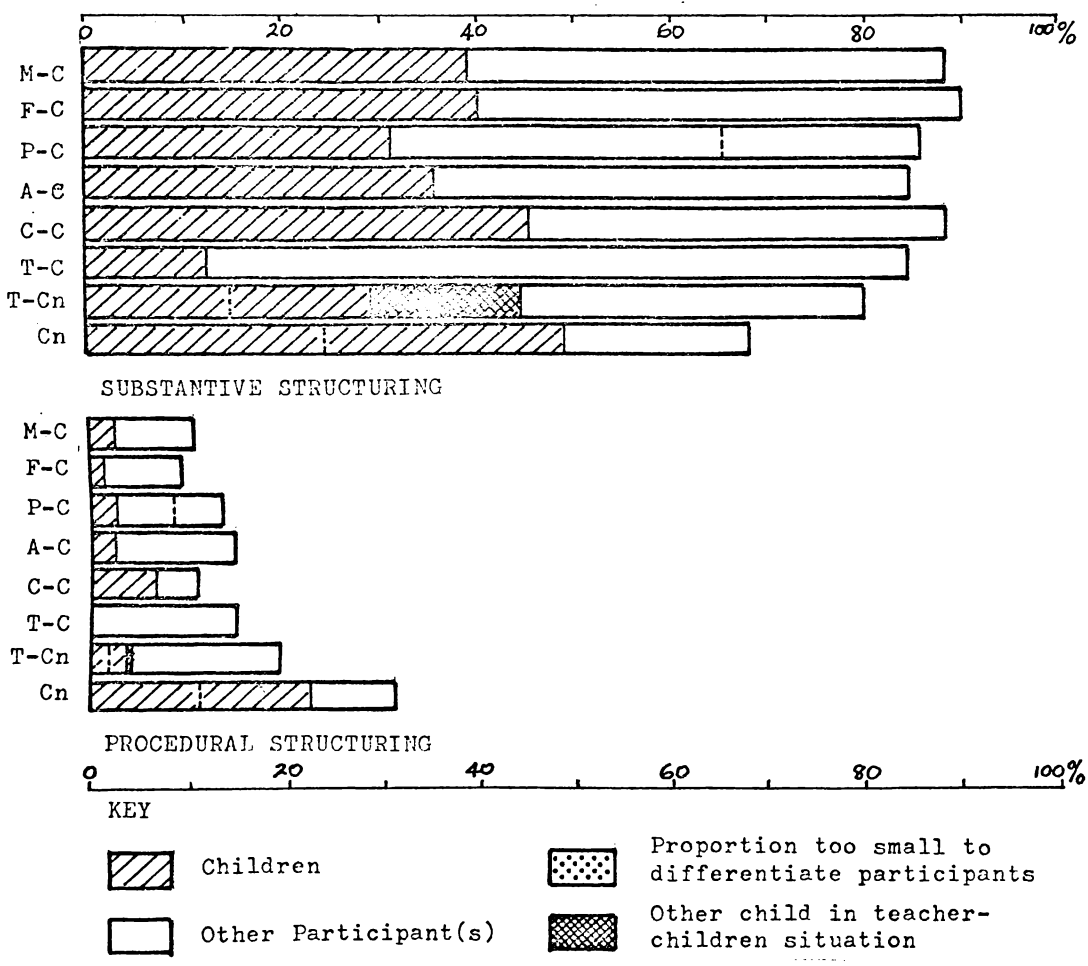
FIG. 6.2 PROPORTION OF VERBAL MOVES IN EACH MAJOR CATEGORY FOR EACH TYPE OF SITUATION



Note

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.

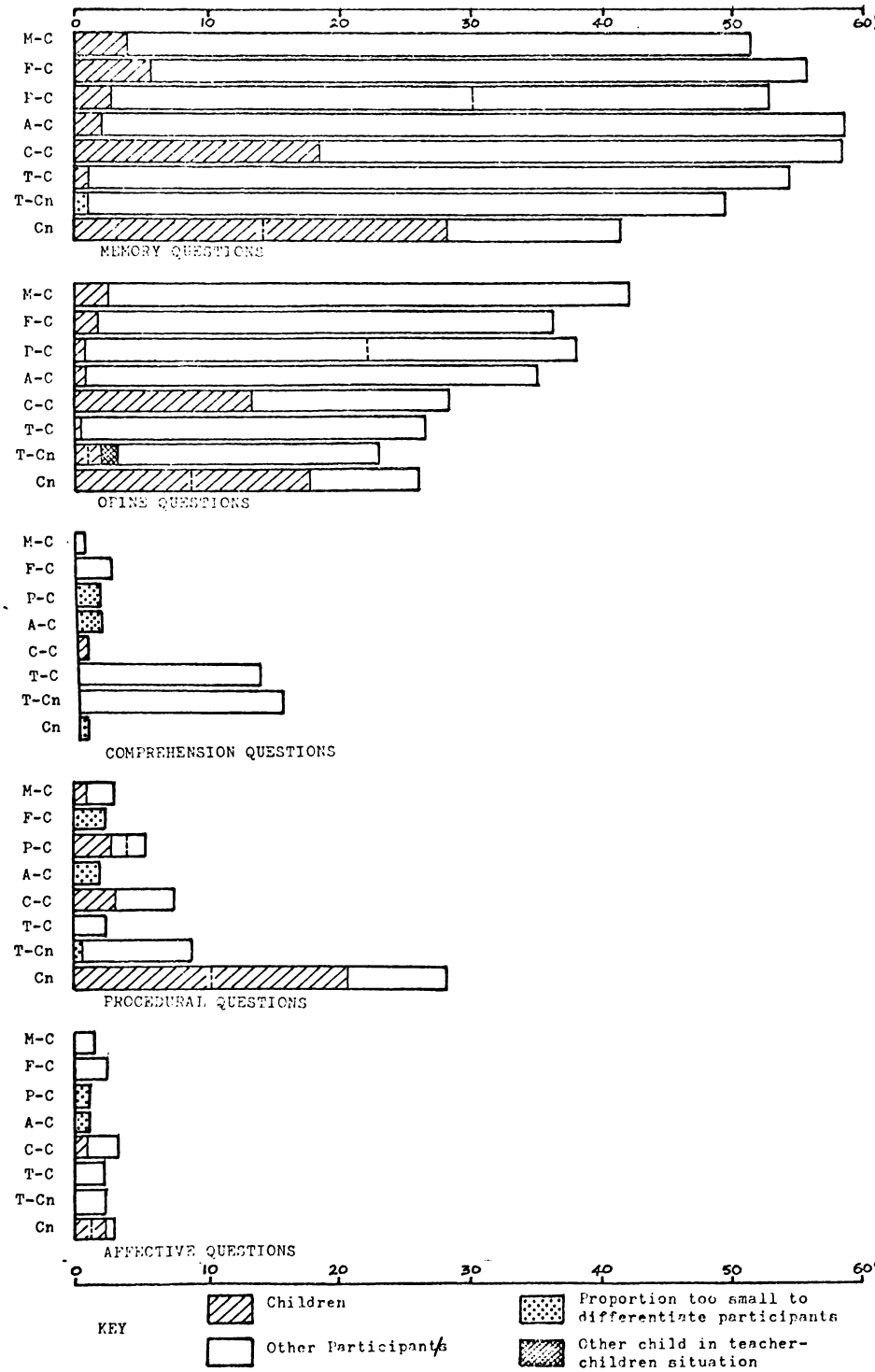
FIG. 6.3 PROPORTION OF DIFFERENT KINDS OF STRUCTURING MOVES FOR EACH TYPE OF SITUATION



Note

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.

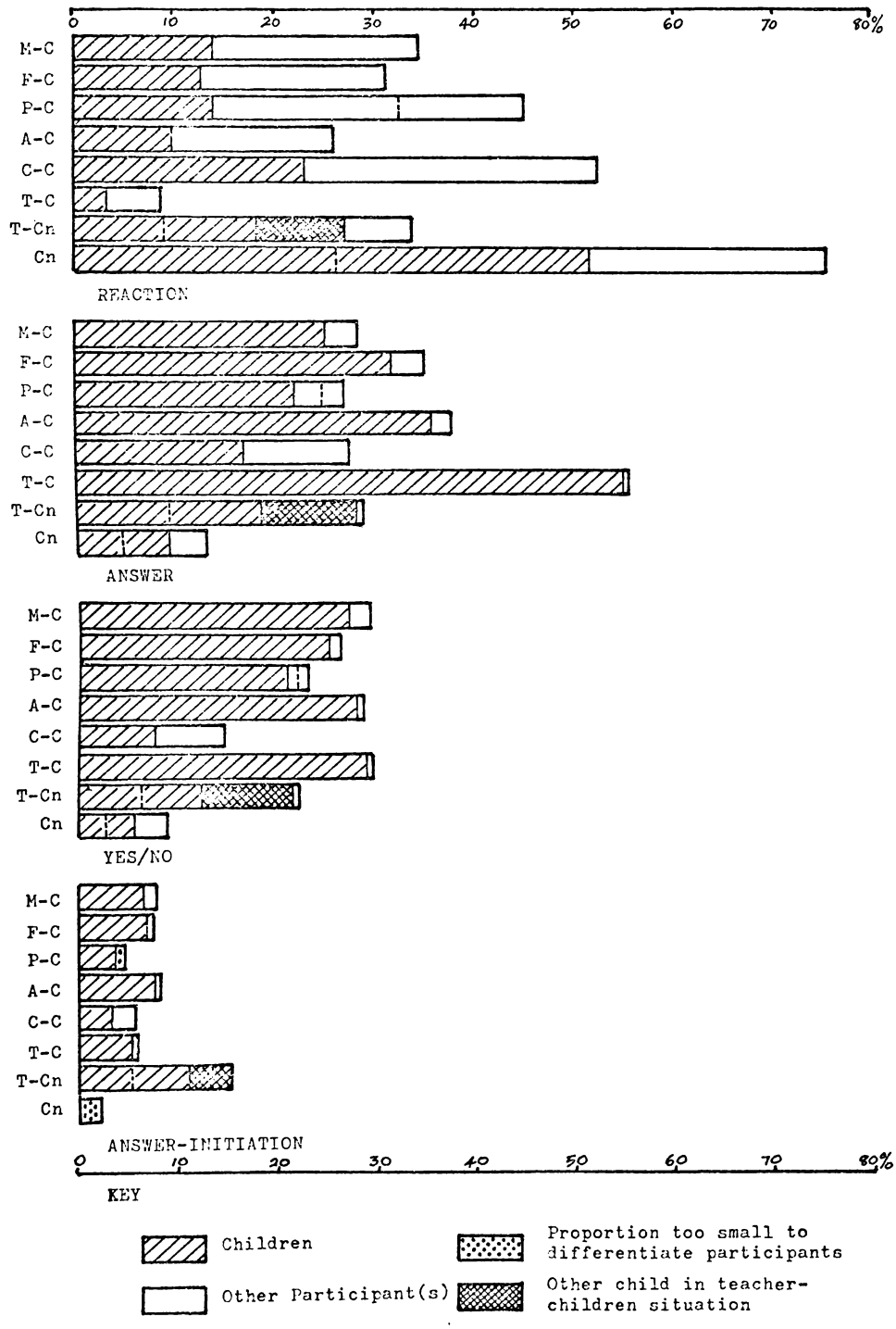
FIG. 6.4 PROPORTION OF DIFFERENT KINDS OF INITIAL QUESTIONS FOR EACH TYPE OF SITUATION.



Notes

1. Dotted line in triadic and tetradic situations represents division between other participants or children as the case may be.
2. Evaluation, exhortatory, analysis, and synthesis questions are not included in this figure since they were asked in very few situations.
3. Rhetorical questions accounted for less than 2% of all initial questions asked in any situation and also are not included in this figure.

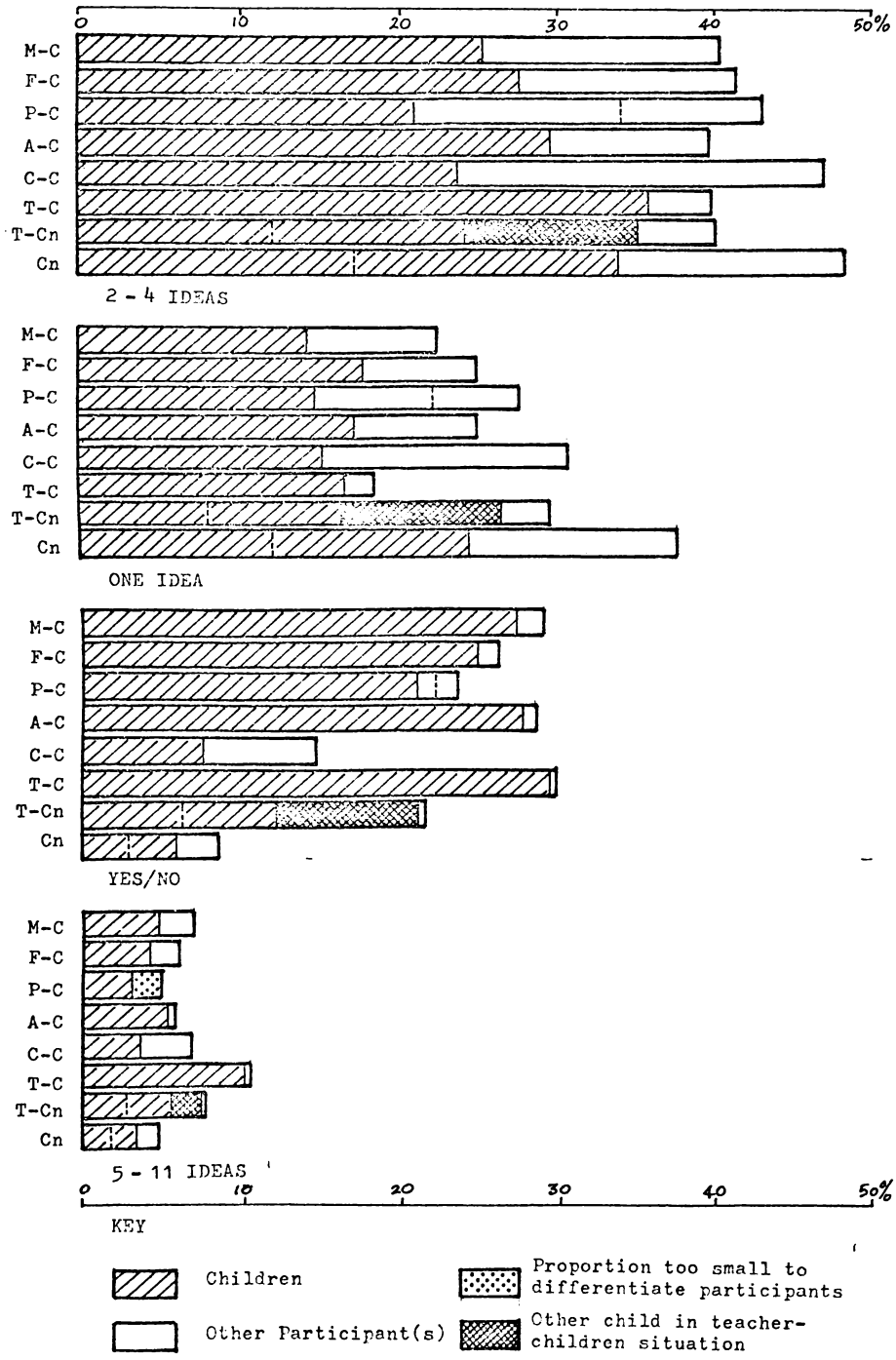
FIG. 6.5 PROPORTION OF DIFFERENT KINDS OF RESPONSE MOVES FOR EACH TYPE OF SITUATION



Note

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.

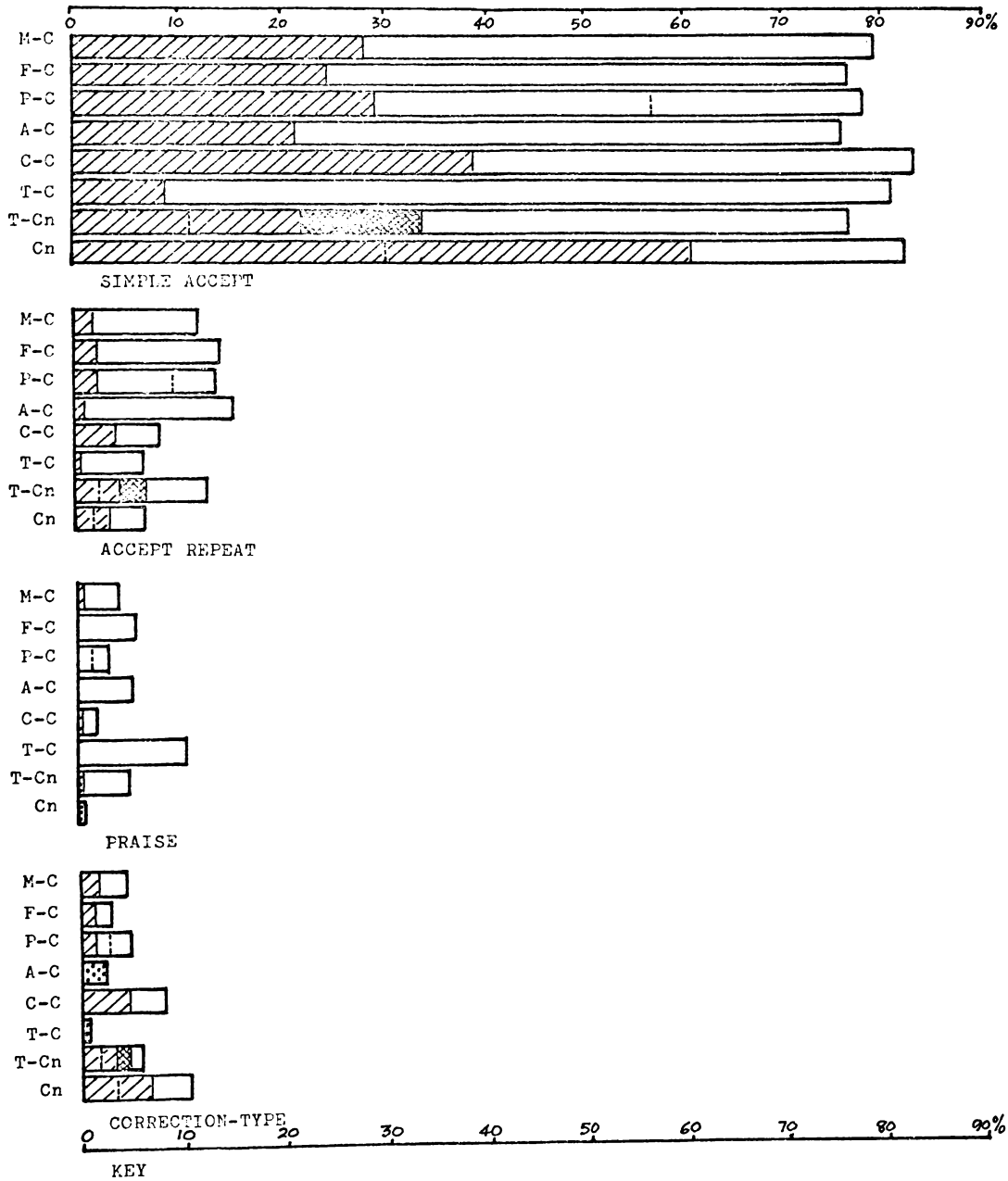
FIG. 6.6 PROPORTION OF DIFFERENT NUMBER OF IDEAS IN RESPONSE MOVES FOR EACH TYPE OF SITUATION



Notes

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.
2. Although lengthy answers (12+ ideas) occurred in all situations, they accounted for less than 1% of all responses in each situation.

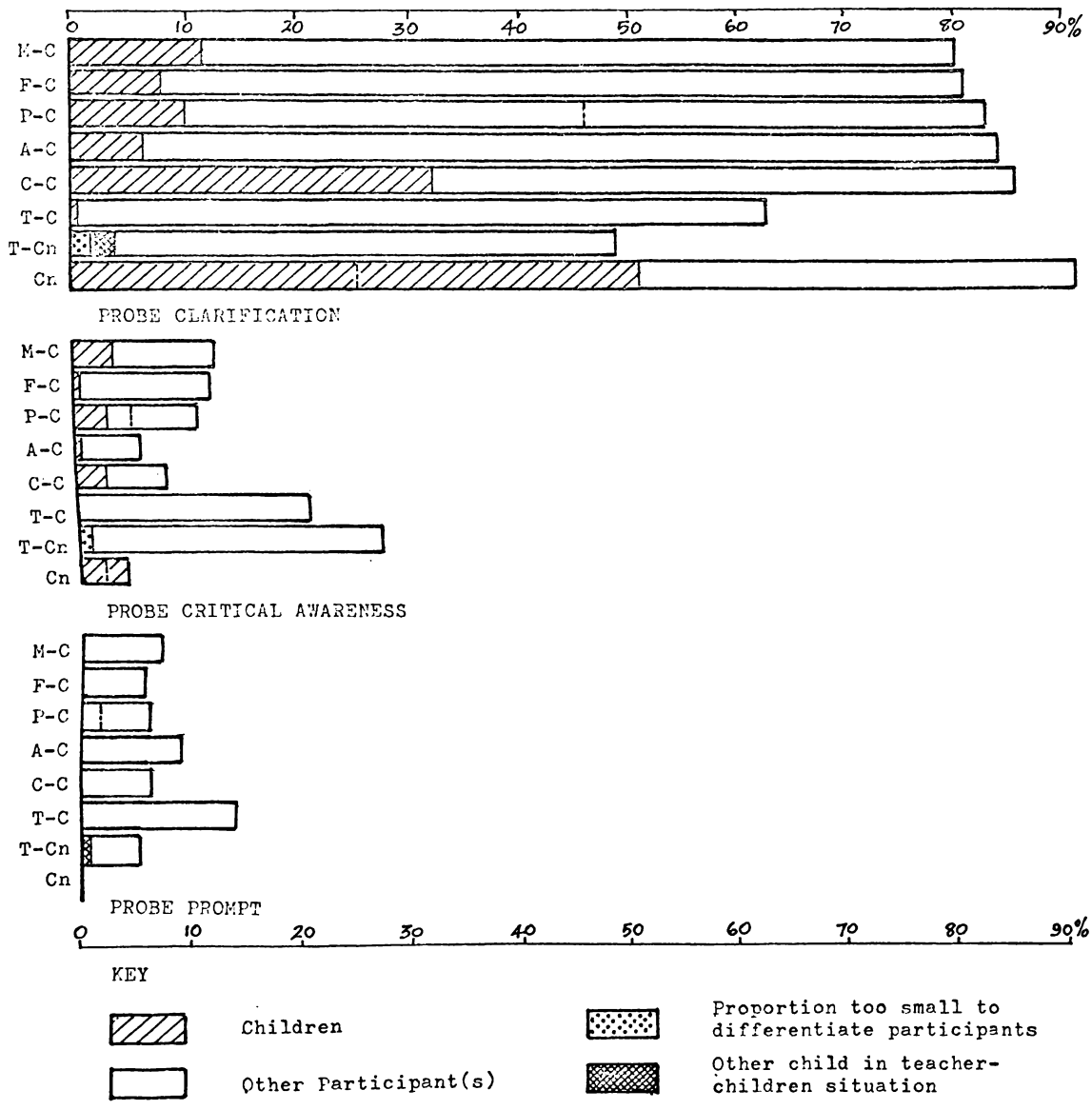
FIG. 6.7 PROPORTION OF DIFFERENT KINDS OF ACCEPTANCE-EVALUATION MOVES FOR EACH TYPE OF SITUATION



Notes

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.
2. Although other acceptance-evaluation moves occurred, they accounted, in most cases, for less than 1% of all acceptance-evaluation moves in any one situation.
3. Correction and correction with reasons moves have been combined in this figure. There were no praise with reasons moves.

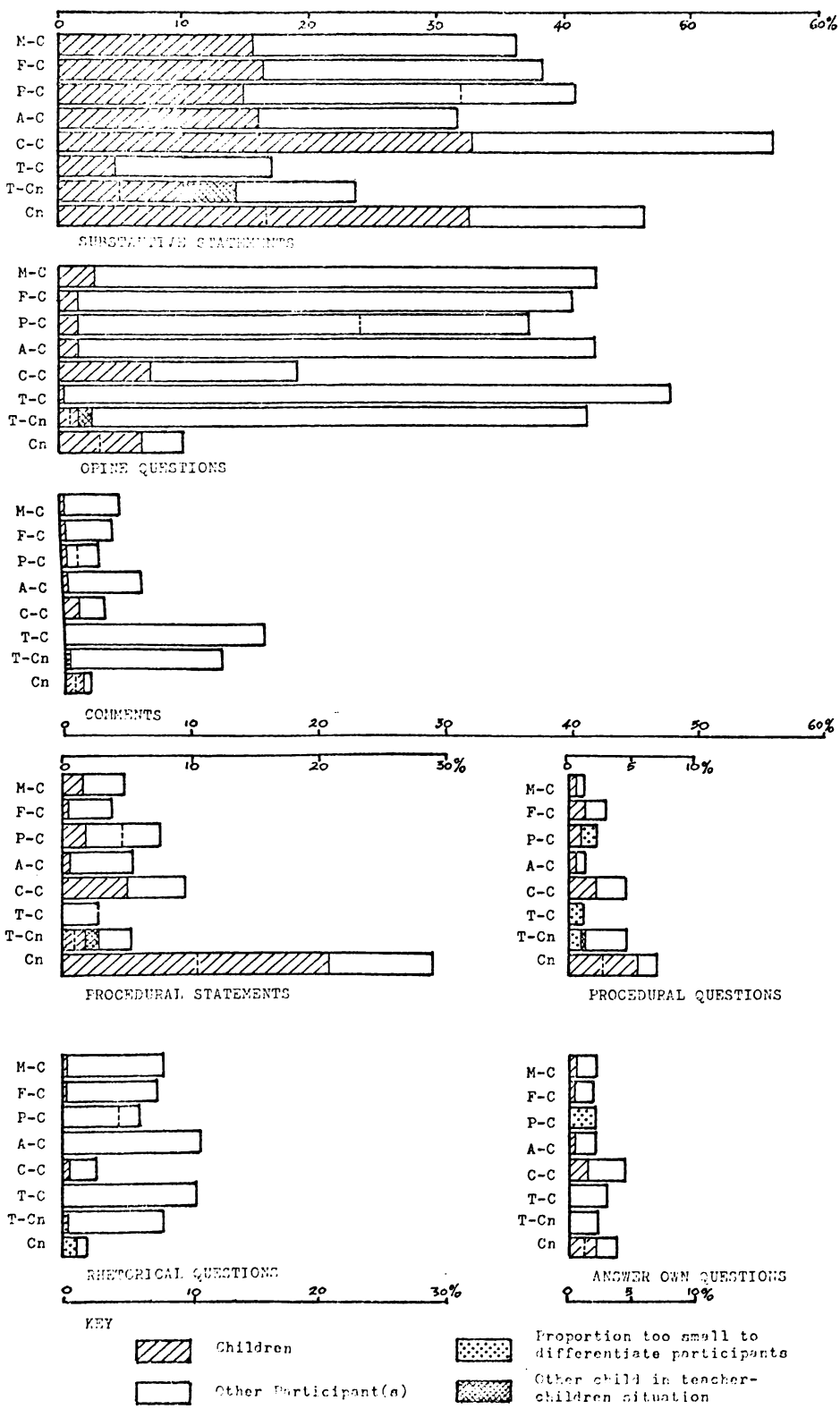
FIG. 6.8 PROPORTION OF DIFFERENT KINDS OF PROBING MOVES FOR EACH TYPE OF SITUATION



Notes

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.
2. Probe refocus was not used in all situations, and where it did occur accounted for less than 2% of all probes.
3. Redirect and probe redirect appropriate only in triadic and tetradic situations. Redirect accounted for 13% of all probes in Teacher-Children situation.

FIG. 6.9 PROPORTION OF DIFFERENT KINDS OF SUSTAINING MOVES FOR EACH TYPE OF SITUATION



Notes

1. Dotted line in triadic and tetradic situations represents division between other participants or children, as the case may be.
2. The other sustaining moves were either used in only some situations or not at all, and most accounted for less than 0.5% of sustaining moves.

TABLE 6.1 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY: MOTHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	MOTHER	CHILD	T	p
Initial Structuring	59	41	6.5	.05
Initial Questioning	93	7	0	.01
Responding	25	75	0	.01
Acceptance-Evaluation	68	32	2	.01
Probing	91	9	1	.01
Sustaining	80	20	0	.01

TABLE 6.2 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY: TEACHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	TEACHER	CHILD	T	p
Initial Structuring	89	11	0	.01
Initial Questioning	100	0	0	.01
Responding	6	94	0	.01
Acceptance-Evaluation	90	10	0	.01
Probing	100	0	0	.01
Sustaining	91	9	0	.01

TABLE 6.3 COMPARISON OF PROPORTION OF MCVES WITHIN EACH MAJOR VERBAL CATEGORY: MOTHER-CHILD AND TEACHER-CHILD SITUATIONS. (WILCOXON SIGNED-RANK TEST, N = 12)

	CHILD			
MAJOR VERBAL CATEGORY	MOTHER-CHILD	TEACHER-CHILD	T	p
Initial Structuring	41	11	3	.01
Initial Questioning	7	0	0	.01
Responding	75	94	0	.01
Acceptance-Evaluation	32	10	0	.01
Probing	9	0	0	.01
Sustaining	20	9	0	.01

	ADULT			
MAJOR VERBAL CATEGORY	MOTHER-CHILD	TEACHER-CHILD	T	p
Initial Structuring	59	89	3	.01
Initial Questioning	93	100	0	.01
Responding	25	6	0	.01
Acceptance-Evaluation	68	90	0	.01
Probing	91	100	0	.01
Sustaining	80	91	0	.01

TABLE 6.4 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: MOTHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	MOTHER	CHILD	T	p
Initial Structuring	57	43	17	NS
Initial Questioning	97	3	0	.01
Responding	21	79	0	.01
Acceptance-Evaluation	68	32	0	.01
Probing	100	0	0	.01
Sustaining	84	16	0	.01

TABLE 6.5 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: TEACHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	TEACHER	CHILD	T	p
Initial Structuring	93	7	0	.01
Initial Questioning	100	0	0	.01
Responding	6	94	0	.01
Acceptance-Evaluation	90	10	0	.01
Probing	100	0	0	.01
Sustaining	100	0	0	.01

TABLE 6.6 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: MOTHER-CHILD AND TEACHER-CHILD SITUATIONS. (WILCOXON SIGNED-RANK TEST, N = 12)

	CHILD			
MAJOR VERBAL CATEGORY	MOTHER-CHILD	TEACHER-CHILD	T	p
Initial Structuring	43	7	0	.01
Initial Questioning	3	0	0	.01
Responding	79	94	0	.01
Acceptance-Evaluation	32	10	0	.01
Probing	0	0	0	.01
Sustaining	16	0	8	.05

	ADULT			
MAJOR VERBAL CATEGORY	MOTHER-CHILD	TEACHER-CHILD	T	p
Initial Structuring	57	93	0	.01
Initial Questioning	97	100	0	.01
Responding	21	6	0	.01
Acceptance-Evaluation	68	90	0	.01
Probing	100	100	0	.01
Sustaining	84	100	8	.05

TABLE 6.7 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: MOTHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	MOTHER	CHILD	T	p
Initial Structuring	53	47	12.5	NS
Initial Questioning	93	7	1	.01
Responding	30	70	0	.01
Acceptance-Evaluation	74	26	4.5	.01
Probing	91	9	0	.01
Sustaining	76	24	0	.01

TABLE 6.8 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: TEACHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	TEACHER	CHILD	T	p
Initial Structuring	89	11	0	.01
Initial Questioning	100	0	0	.01
Responding	7	93	0	.01
Acceptance-Evaluation	89	11	0	.01
Probing	100	0	0	.01
Sustaining	92	8	0	.01

TABLE 6.9 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: MOTHER-CHILD AND TEACHER-CHILD SITUATIONS. (WILCOXON SIGNED-RANK TEST, N = 12)

	CHILD			
MAJOR VERBAL CATEGORY	MOTHER-CHILD	TEACHER-CHILD	T	p
Initial Structuring	47	11	3	.01
Initial Questioning	7	0	0	.01
Responding	70	93	0	.01
Acceptance-Evaluation	26	11	0	.01
Probing	9	0	0	.01
Sustaining	24	8	1	.01

	ADULT			
MAJOR VERBAL CATEGORY	MOTHER-CHILD	TEACHER-CHILD	T	p
Initial Structuring	53	89	3	.01
Initial Questioning	93	100	0	.01
Responding	30	7	0	.01
Acceptance-Evaluation	74	89	0	.01
Probing	91	100	0	.01
Sustaining	76	92	1	.01

TABLE 6.10 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: CHILD IN MOTHER-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	43	47	25	NS
Initial Questioning	3	7	4.5	.05
Responding	79	70	0	.01
Acceptance-Evaluation	32	26	14.5	NS
Probing	0	9	10.5	NS
Sustaining	16	24	10	NS

TABLE 6.11 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: MOTHER IN MOTHER-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	57	53	25	NS
Initial Questioning	97	93	4.5	.05
Responding	21	30	0	.01
Acceptance-Evaluation	68	74	14.5	NS
Probing	100	91	10.5	NS
Sustaining	84	76	10	NS

TABLE 6.12 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: CHILD IN TEACHER-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	7	11	1	.05
Initial Questioning	0	0	*	
Responding	94	93	15	NS
Acceptance-Evaluation	10	11	25.5	NS
Probing	0	0	*	
Sustaining	0	8	12	NS

* No probing questions were asked by children and only one child asked any initial questions.

TABLE 6.13 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: TEACHER IN TEACHER-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	93	89	1	.05
Initial Questioning	100	100	*	
Responding	6	7	15	NS
Acceptance-Evaluation	90	89	25.5	NS
Probing	100	100	*	
Sustaining	100	92	12	NS

* No probing questions were asked by children and only one child asked any initial questions.

TABLE 6.14 COMPARISON OF OVERALL PROPORTION OF CHILD'S VERBAL MOVES IN EACH MAJOR VERBAL CATEGORY: MOTHER-CHILD, PARENTS-CHILD, AND TEACHER-CHILDREN SITUATIONS.
(FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE, N = 11)

MAJOR VERBAL CATEGORY	MOTHER-CHILD	PARENTS-CHILD	TEACHER-CHILDREN	χ_r^2	p
Initial Structuring	7	7	4	4.14	NS
Initial Questioning	1	2	1	7.82	.02
Responding	68	65	78	7.95	.02
Acceptance-Evaluation	16	15	13	1.27	NS
Probing	1	2	0	8.91	.02
Sustaining	7	8	2	7.77	.05

TABLE 6.15 COMPARISON OF OVERALL PROPORTION OF CHILD'S VERBAL MOVES IN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: MOTHER-CHILD, PARENTS-CHILD, AND TEACHER-CHILDREN SITUATIONS.
(FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE, N = 11)

MAJOR VERBAL CATEGORY	MOTHER-CHILD	PARENTS-CHILD	TEACHER-CHILDREN	χ^2_r	p
Initial Structuring	7	6	4	3.05	NS
Initial Questioning	1	2	0	3.05	NS
Responding	66	72	75	6.05	.05
Acceptance-Evaluation	17	11	15	0.6	NS
Probing	0	1	0	9.6	.02
Sustaining	5	7	3	2.36	NS

TABLE 6.16 COMPARISON OF OVERALL PROPORTION OF CHILD'S VERBAL MOVES IN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: MOTHER-CHILD, PARENTS-CHILD, AND TEACHER-CHILDREN SITUATIONS.
(FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE, N = 11)

MAJOR VERBAL CATEGORY	MOTHER-CHILD	PARENTS-CHILD	TEACHER-CHILDREN	χ_r^2	p
Initial Structuring	8	8	4	2.23	NS
Initial Questioning	1	2	0	4.95	.05
Responding	65	62	77	9.14	.02
Acceptance-Evaluation	15	18	13	0.73	NS
Probing	1	2	0	6.05	.05
Sustaining	8	7	3	9.45	.01

TABLE 6.17 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: CHILD IN PARENTS-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 11)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	33	38	23.5	NS
Initial Questioning	5	8	24.5	NS
Responding	69	57	6	.02
Acceptance-Evaluation	26	29	25	NS
Probing	7	14	19.5	NS
Sustaining	18	23	21.5	NS

TABLE 6.18 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: CHILD IN TEACHER-CHILDREN SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	13	14	16.5	NS
Initial Questioning	0	0	6.5	NS
Responding	32	27	22.5	NS
Acceptance-Evaluation	17	14	30	NS
Probing	0	0	.0	.01
Sustaining	9	6	25	NS

TABLE 6.19 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY: FATHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 11)

MAJOR VERBAL CATEGORY	FATHER	CHILD	T	p
Initial Structuring	59	41	7.5	.05
Initial Questioning	93	7	0	.01
Responding	27	73	0	.01
Acceptance-Evaluation	70	30	0	.01
Probing	93	7	0	.01
Sustaining	82	18	0	.01

TABLE 6.20 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY: OTHER ADULT/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	OTHER ADULT	CHILD	T	p
Initial Structuring	63	37	4.5	.01
Initial Questioning	98	2	0	.01
Responding	19	81	0	.01
Acceptance-Evaluation	80	20	0	.01
Probing	92	8	0	.01
Sustaining	88	12	2	.01

TABLE 6.21 COMPARISON OF OVERALL PROPORTION OF CHILD'S VERBAL MOVES AND ADULT'S VERBAL MOVES IN EACH MAJOR VERBAL CATEGORY: FATHER-CHILD, OTHER ADULT-CHILD, AND TEACHER-CHILD SITUATIONS. (FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE, N = 11)

	CHILD				
MAJOR VERBAL CATEGORY	FATHER-CHILD	ADULT-CHILD	TEACHER-CHILD	χ_r^2	p
Initial Structuring	41	37	11	16.5	.001
Initial Questioning	7	2	0	7.7	.05
Responding	73	81	94	16.9	.001
Acceptance-Evaluation	30	20	10	11.6	.01
Probing	7	8	0	12.2	.01
Sustaining	18	12	9	13.7	.01

	ADULT				
MAJOR VERBAL CATEGORY	FATHER-CHILD	ADULT-CHILD	TEACHER-CHILD	χ_r^2	p
Initial Structuring	59	63	89	16.5	.001
Initial Questioning	93	98	100	7.7	.05
Responding	27	19	6	16.9	.001
Acceptance-Evaluation	70	80	90	11.6	.01
Probing	93	92	100	12.2	.01
Sustaining	82	88	91	13.7	.01

TABLE 6.22 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: FATHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 11)

MAJOR VERBAL CATEGORY	FATHER	CHILD	T	p
Initial Structuring	54	46	17	NS
Initial Questioning	96	4	0	.01
Responding	19	81	0	.01
Acceptance-Evaluation	73	27	0	.01
Probing	95	5	0	.01
Sustaining	86	14	0	.01

TABLE 6.23 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: OTHER ADULT/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	OTHER ADULT	CHILD	T	p
Initial Structuring	63	37	2	.01
Initial Questioning	100	0	0	.01
Responding	16	84	0	.01
Acceptance-Evaluation	78	22	0	.01
Probing	100	0	0	.01
Sustaining	90	10	1	.01

TABLE 6.24 COMPARISON OF OVERALL PROPORTION OF CHILD'S VERBAL MOVES AND ADULT'S VERBAL MOVES IN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES OF INTERACTION: FATHER-CHILD, OTHER ADULT-CHILD, AND TEACHER-CHILD SITUATIONS. (FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE, N = 11)

	CHILD				
MAJOR VERBAL CATEGORY	FATHER-CHILD	ADULT-CHILD	TEACHER-CHILD	χ_r^2	p
Initial Structuring	38	37	7	16.5	.001
Initial Questioning	4	0	0	7.1	.05
Responding	81	84	94	16.7	.001
Acceptance-Evaluation	27	22	10	7.1	.05
Probing	5	0	0	3.3	NS
Sustaining	14	10	0	7.7	.05

	ADULT				
MAJOR VERBAL CATEGORY	FATHER-CHILD	ADULT-CHILD	TEACHER-CHILD	χ_r^2	p
Initial Structuring	54	61	93	16.5	.001
Initial Questioning	94	100	100	7.1	.05
Responding	19	16	6	16.7	.001
Acceptance-Evaluation	73	78	90	7.1	.05
Probing	95	100	100	3.3	NS
Sustaining	86	90	100	7.7	.02

TABLE 6.25 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: FATHER/CHILD. (WILCOXON SIGNED-RANK TEST, N = 11)

MAJOR VERBAL CATEGORY	FATHER	CHILD	T	p
Initial Structuring	59	41	9	NS
Initial Questioning	94	6	0	.01
Responding	29	71	0	.01
Acceptance-Evaluation	66	34	3.5	.01
Probing	88	12	0	.01
Sustaining	76	24	0	.01

TABLE 6.26 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: OTHER ADULT/CHILD. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	OTHER ADULT	CHILD	T	p
Initial Structuring	62	38	11.5	NS
Initial Questioning	100	0	0	.01
Responding	20	80	0	.01
Acceptance-Evaluation	75	25	0	.01
Probing	95	5	0	.01
Sustaining	85	15	3	.01

TABLE 6.27 COMPARISON OF OVERALL PROPORTION OF CHILD'S VERBAL MOVES AND ADULT'S VERBAL MOVES IN EACH MAJOR VERBAL CATEGORY FOR OTHER THAN FIRST THREE MINUTES OF INTERACTION: FATHER-CHILD, OTHER ADULT-CHILD, AND TEACHER-CHILD SITUATIONS. (FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE, N = 11)

	CHILD				
MAJOR VERBAL CATEGORY	FATHER-CHILD	ADULT-CHILD	TEACHER-CHILD	χ_r^2	p
Initial Structuring	41	38	11	8.0	.02
Initial Questioning	6	0	0	6.0	.05
Responding	71	80	93	16.5	.001
Acceptance-Evaluation	34	25	11	14.7	.001
Probing	12	5	0	9.0	.02
Sustaining	24	15	8	7.8	.02

	ADULT				
MAJOR VERBAL CATEGORY	FATHER-CHILD	ADULT-CHILD	TEACHER-CHILD	χ_r^2	p
Initial Structuring	59	62	89	8.0	.02
Initial Questioning	94	100	100	6.0	.05
Responding	29	20	7	16.5	.001
Acceptance-Evaluation	66	75	89	14.7	.001
Probing	88	95	100	9.0	.02
Sustaining	76	85	92	7.8	.02

TABLE 6.28 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: CHILD IN FATHER-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 11)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	46	41	26.5	NS
Initial Questioning	4	6	10.5	NS
Responding	81	71	6	.02
Acceptance-Evaluation	27	34	9	.05
Probing	5	12	7	NS
Sustaining	14	24	29	NS

TABLE 6.29 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: FATHER IN FATHER-CHILD SITUATION.
(WILCOXON SIGNED-RANK TEST, N = 11)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	54	59	26.5	NS
Initial Questioning	96	94	10.5	NS
Responding	19	29	6	.02
Acceptance-Evaluation	73	66	9	.05
Probing	95	88	7	NS
Sustaining	86	76	29	NS

TABLE 6.30 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: CHILD IN OTHER ADULT-CHILD SITUATION. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	37	38	14.5	NS
Initial Questioning	0	0	*	
Responding	84	80	8	.05
Acceptance-Evaluation	22	25	37.5	NS
Probing	0	5	14	NS
Sustaining	10	15	14	NS

* Because of the number of instances where there was no difference between the scores, there were insufficient pairs to use the Test which requires a minimum of six.

TABLE 6.31 COMPARISON OF PROPORTION OF MOVES WITHIN EACH MAJOR VERBAL CATEGORY FOR FIRST THREE MINUTES WITH REST OF INTERACTION: ADULT IN OTHER ADULT-CHILD SITUATION. (WILCOXON SIGNED-RANK TEST, N = 12)

MAJOR VERBAL CATEGORY	FIRST	REST	T	p
Initial Structuring	63	62	14.5	NS
Initial Questioning	100	100	*	
Responding	16	20	8	.05
Acceptance-Evaluation	78	75	37.5	NS
Probing	100	95	14	NS
Sustaining	90	85	14	NS

* Because of the number of instances where there was no difference between the scores, there were insufficient pairs to use the Test which requires a minimum of six.

APPENDIX A

CIRCULAR TO PARENTS

Hamilton Teachers College,
Private Bag,
HAMILTON.

3 September 1975

Dear

Mr [redacted] letter has introduced a research project that I am proposing at [redacted] School. This is really a development from another piece of research I conducted at two other local schools in 1972. At that time I was looking at children's language behaviour while they engaged in a series of tasks with their mothers and myself. This time I want to look at children's language behaviour in the home and at school.

Let me explain briefly what this would involve. Over a six week period, beginning mid-October, I want to gather language samples from a group of 7½ - 8½ year old children interacting with their parents, teachers, other adults (e.g. neighbour, relative), and other children in a number of different situations. If you are willing to participate this would mean the following for you:

1) To record a number of interactions (each of 5 - 7 minutes' duration) over the six week period - one week recording, one week rest

2) To arrange 4 interactions between your child and another adult (friend, neighbour, relative) again of 5 - 7 minutes' duration.

3) To arrange 4 interactions between your child and another child.

In all this means approximately 1 interaction of 5 - 7 minutes' duration on each day of the three recording weeks. During the whole six week period teachers at the school will also be doing recordings of children, mainly at normal classroom activities. In total (i.e. both home and school) this would mean an involvement of about one hour per week over the whole period.

As you can imagine, research projects of this type rely very heavily on the goodwill and co-operation of the parents involved, and I sincerely hope that you will be able to participate in a project that I believe will provide new insights into children's verbal behaviour. If we get more than the required number of people willing to participate then some random selection of subjects will have to be done. This selection procedure has nothing to do with some people being more suitable than others. It is a procedure very much akin to drawing numbers for lottery winners and is simply a research technique for getting the required number of subjects from a larger group.

Finally, may I assure you that all information given is treated confidentially and in any material published no child or family is identified individually. I would be grateful if you could forward the slip below by return mail in the stamped, addressed envelope provided.

Yours sincerely,

(N.N. Hanlon)
Senior Lecturer in Education.

RESEARCH STUDY OF CHILDREN'S VERBAL BEHAVIOUR

PLEASE CROSS OUT THE INAPPROPRIATE RESPONSE.

1. We would be willing to assist you in your project.

2. We are sorry but we are unable to help you with your project.

Signed _____

CHILDREN'S VERBAL

BEHAVIOUR

Parent's Instruction
and Record Booklet

Language
Research
Project:

N.M. Hanlon
1975

INTRODUCTION

This Research Project is a development of an earlier study that investigated children's verbal behaviour in a number of structured situations. This time we are looking at children's language performance in the natural surroundings of the home and classroom, where the child interacts with familiar people. The more we can find out about the language children use the more likely we are to come to a fuller understanding of the dynamics of language behaviour.

This booklet contains the following material:

1) "Before recording" and "After recording" checks
2) Operating the Recorder
3) Recording times and topics for discussion
4) Interaction Summary Sheet
5) Interaction Sessions
6) Mother-child Session Records
7) Father-child Session Records
8) Other Adult-child Session Records
9) Parents-child Session Records
10) Child-child Session Records

BEFORE RECORDING

DO OR CHECK THE FOLLOWING:

1 Check that the recorder is ready for recording (see pages 3-5).

2 Enter tape counter setting on appropriate record sheet.

3 Immediately before starting to record enter starting time on the record sheet.

AFTER RECORDING

DO OR CHECK THE FOLLOWING:

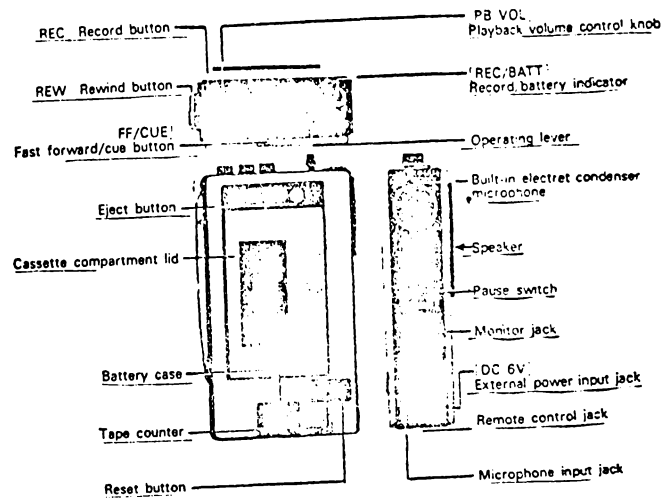
1 Enter finishing time and counter setting on appropriate record sheet.

2 Complete all other details and comments on the record sheet.

3 Complete interaction summary sheet (page 7).

4 If necessary plug recorder to recharge unit (page 5).

OPERATING THE RECORDER



TO RECORD

The recorder will come with a cassette loaded ready to record.

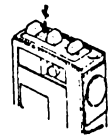
1 Plug in microphone as shown.

2 While depressing the Record button (1) slide the operating lever (2) to FWD position. RECORDING NOW BEGINS.

3 To stop recording, return the operating lever (2) to STOP.

TO REWIND

1 Depress and lock the REW (Rewind) button.



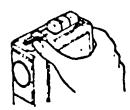
2 To stop, push this button again to release it.

CAUTION The Rewind button will stay down even when the tape is rewound. ALWAYS RELEASE THE REWIND BUTTON.

TO PLAYBACK

1 REWIND to required place on tape (use TAPE COUNTER)

2 Slide the operating lever to FWD position.

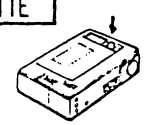


3 Adjust the sound volume by turning the PB VOL (playback volume) control knob. SEE MASTER DIAGRAM.

4 To stop tape, return the operating lever to STOP.

TO TURN CASSETTE OR INSERT NEW CASSETTE

1 Depress the EJECT button to open the cassette compartment lid.



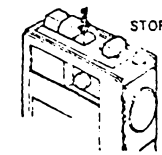
2 Load a cassette with desired side up for recording and exposed tape-path facing you.

3 Close the lid.

4 Set the tape counter to 000 by pushing the ~~reset button.~~

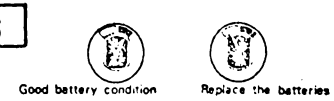
FAST FORWARD

1 To advance the tape rapidly, set the recorder in the STOP mode, then keep depressing the FF/CUE (fast forward/cue) button until desired place is reached.

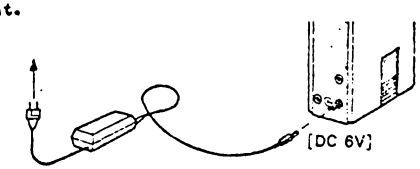


TO RECHARGE BATTERIES

1 When setting the operating lever to the FWD position the REC/BATT (record/battery) indicator shows the condition of the batteries.



2 Connect the recorder to an AC outlet with the power adaptor. Power source automatically switches from the internal batteries to the house current.



RECORDING TIMES AND TOPICS FOR DISCUSSION

Recording sessions of 5 - 7 minutes in length are designed to allow parents to capture on tape the spontaneous interactions that often occur before the children leave for school, after school, when Dad comes home, before bedtime, and so on.

The topics of these interactions are those that occur when parents and children have experiences they wish to share with each other (e.g. happenings at school, what was seen on the way to or from school) or discussions about activities or events that involve members of the family (e.g. talking about a friend's birthday, planning a trip, hobbies, sporting interests).

NOTES

1 Although the recording sessions are only 5 - 7 minutes in length do not stop as soon as the time is up as this is likely to create an artificial situation. However, if the discussion is still going after 10 minutes STOP THE RECORDER but FINISH your talk.

2 Try to vary the type of interaction (mother-child, father-child, child-child, etc.) and spread them over the whole recording period. The interaction summary sheet (page 7) will show the pattern of completed sessions.

3 Try to do ONE interaction per day (this leaves a 'spare' day in the three week period). It may sometimes be appropriate to do a SECOND interaction on a day (e.g. visit of a relative, a special topic to discuss). Unless there are very exceptional circumstances do not record more than two interactions on any one day.

INTERACTION SUMMARY SHEET

	SESSION NUMBER 1	2	3	4
Mother-Child				
Father-Child				
Other Adult-Child				
Parents-Child				
Child-Child				

NOTE 1 Complete after recording has finished.

2 Place DATE in appropriate box to show interaction has been completed.

INTERACTION SESSIONS

The following pages are to be used to record details and comments about each session you have.

Most of the sub-headings are self explanatory.

1 Under SCENE please give a brief description of the setting and how the discussion came to start (e.g. In the kitchen. Mary came home from school and started to talk about day's happenings).

2 Under COMMENTS give any information that you think may be useful to add to an understanding of the situation (e.g. your son or daughter may be making something and talking to you about it. A description of what they are doing would add meaning to the audio tape.

MOTHER-CHILD SESSION 1

Date: Starting Time Finishing Time

Tape Counter Setting: Start Finish

Scene:

Comments:

MOTHER-CHILD SESSION 2

Date: Starting Time Finishing Time

Tape Counter Setting: Start Finish

Scene:

Comments:

N.B. Sufficient sheets for each session of all the different types of interaction in the home setting were included in this booklet.

CHILDREN'S VERBAL BEHAVIOUR

Teacher's Instruction and Record Booklet

Language Research Project:

M.M. Hanlon 1975

INTRODUCTION

This Research Project is a development of an earlier study that investigated children's verbal behaviour in a number of structured situations. This time, we are looking at children's language performance in the natural surroundings of the home and classroom where the child interacts with familiar people. The more we can find out about the language children use the more likely we are to come to a fuller understanding of the dynamics of language behaviour.

This booklet contains the following material:

1) "Before Recording" and "After Recording" checks
2) Recording times and topics for discussion
3) Interaction Summary Sheet and Notes
4) Interaction Sessions
5) Teacher–Child Session Records
6) Teacher–Children Session Records
7) Children Session Records.

BEFORE RECORDING

DO OR CHECK THE FOLLOWING:

1) Check that the recorder is ready for recording

2) Enter tape counter setting on appropriate record sheet.

3) Immediately before starting to record enter starting time on record sheet.

AFTER RECORDING

DO OR CHECK THE FOLLOWING:

1) Enter finishing time and counter setting on appropriate record sheet.

2) Complete all other details and comments on the record sheet.

3) Complete interaction summary sheet (page 4).

4) If necessary plug recorder to recharge unit.

RECORDING TIMES AND TOPICS FOR DISCUSSION

Recording sessions of 5 - 7 minutes in length are designed to allow teachers to capture on tape the interactions they have with children as part of the daily life of the classroom.

The topics of these interactions should relate to the types of discussions teachers have with children about the work they are doing (e.g. a teacher conference in an independent reading programme, discussion of written work the child has been doing, discussion about a story a group have read) or the sharing with the teacher of experiences the child has had.

Noise level in the classroom is a factor the teacher will have to consider, particularly when completing the group interaction requirements of the project.

NOTES

1) Although the recording sessions are only 5 - 7 minutes in length do not stop as soon as the time is up as this is likely to create an artificial situation. However, if the discussion is still going after 10 minutes STOP THE RECORDER but FINISH your talk.

2) Try to spread the interactions over the recording period of six weeks. How you do this will depend of course upon the number of subjects that are in your class. The interaction summary sheet (page 4) will show the pattern of completed sessions.

3) Try to do only ONE interaction per child on any one day. However, it may sometimes be appropriate to do a SECOND interaction on a day if some special occasion arises. Unless there are very exceptional circumstances do not record more than two interactions per child on any one day.

REFERENCE SHEET

TASK ORDER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
(1) (11)	*(5) (9)	(2)	*(6) (7) (10)	(3) (12)	(4) (8)

* These are linked activities to follow each other in the same recording session.

CROSS OFF AS TASK IS COMPLETED FOR ALL CHILDREN.

INDIVIDUAL (I)

1. Individual Reading Conference (I/1)
2. Discussion Pupil's Written Work (I/2)
3. Teacher's choice (I/3)
4. Teacher's choice (I/4)

PUPIL GROUP ACTIVITIES (P)

5. Zoo Game (P/1)
6. Million Monsters (P/2)
7. Nothing is Something to Do (P/3)
8. "What's it like going ...." (P/4)

TEACHER-PUPIL GROUP ACTIVITIES (TP)

9. Discussion Zoo Game (TP/1)
10. Discussion Million Monsters and "Nothing is Something to Do" (TP/2)
11. Teacher's choice (TP/3)
12. Teacher's choice (TP/4)

INTERACTION SUMMARY SHEET

Read NOTES on following page before filling in details on tables below.

TEACHER - CHILD	SESSION NUMBER 1	2	3	4

TEACHER - CHILDREN	SESSION NUMBER 1	2	3	4
Group 1				
Group 2				
Group 3				
Group 4				

CHILDREN	SESSION NUMBER 1	2	3	4
Group 1				
Group 2				
Group 3				
Group 4				

NOTES FOR SUMMARY SHEET

1) Complete after recording has finished.

2) Place DATE in appropriate box to show interaction has been completed.

3) TEACHER-CHILD. Down the left-hand side enter the names of all the children in your room who are subjects in the study.

4) TEACHER-CHILDREN. Group the subjects in the study from your room in THREES according to SEX. In some cases you will require additional children. For example, there may be 7 subjects in the study from your room - 5 boys and 2 girls. We would need two boys' groups (one additional boy) and one girls' group (one additional girl). The names of additional children will be supplied by the experimenter from his research list.

   Enter the names of the children in each group in the space on the left-hand side of the table.

5) CHILDREN. The groups for this part of the study will be the same as those in the previous section. Pre-enter the names on this table.

INTERACTION SESSIONS

The following pages are to be used to record details and comments about each session you have.

Most of the sub-headings are self-explanatory.

1) Under SCENE please give a brief description of the setting and how the discussion came to start (e.g. group discussion of the story in reading book, or discussion of story John has been writing for the class newspaper).

2) Under COMMENTS give any information that you think may be useful to add to an understanding of the situation. This may be relevant where a great deal of non-verbal communication may also be going on.

TEACHER-CHILD SESSION 3: NAME

Date: Starting Time: Finishing Time:

Tape Counter Setting - Start: Finish:

Scene:

Comments:

TEACHER-CHILD SESSION 4: NAME

Date: Starting Time: Finishing Time:

Tape Counter Setting - Start: Finish:

Scene:

Comments:

N.B. Sufficient sheets for each session of all the different types of interaction in the school setting were included in this booklet.

APPENDIX C

RECORDING EQUIPMENT AND SERVICING PROCEDURES

1. Recording equipment for Home use

These were Sony TC45 Recorders. Parents were also supplied with Sony (BP23) recharging battery packs and Sony ECM16 electret condenser microphones. These microphones were sensitive, and most parents were able to leave the recorder on the table in the room where they were talking with the child and move about if they felt like it. The recorders were very compact, and they were used in cars, during walks, outside in the garden, and so on.

2. Servicing Recording Equipment

When the investigator collected the recorders from the home each week for redistribution, an unused cassette was inserted in the recorder for the next parent. This ensured that material was not erased by accident, and also enabled a start to be made on the preparation of transcripts while data collection was still in progress. All cassettes were BASF C90's which gave 2 x 45 minutes recording time. This allowed an adequate margin to guard against a tape running out in the middle of an interaction. In all, 45 cassettes were used, and in the 297 interactions only one session was interrupted by a tape running out.

3. School recording

Teachers' cassettes were replaced at the end of each fortnight, but at the end of each week they were turned over to the reverse side. Teachers used National RQ413S Recorders and operated them of Mains Supply.

APPENDIX D

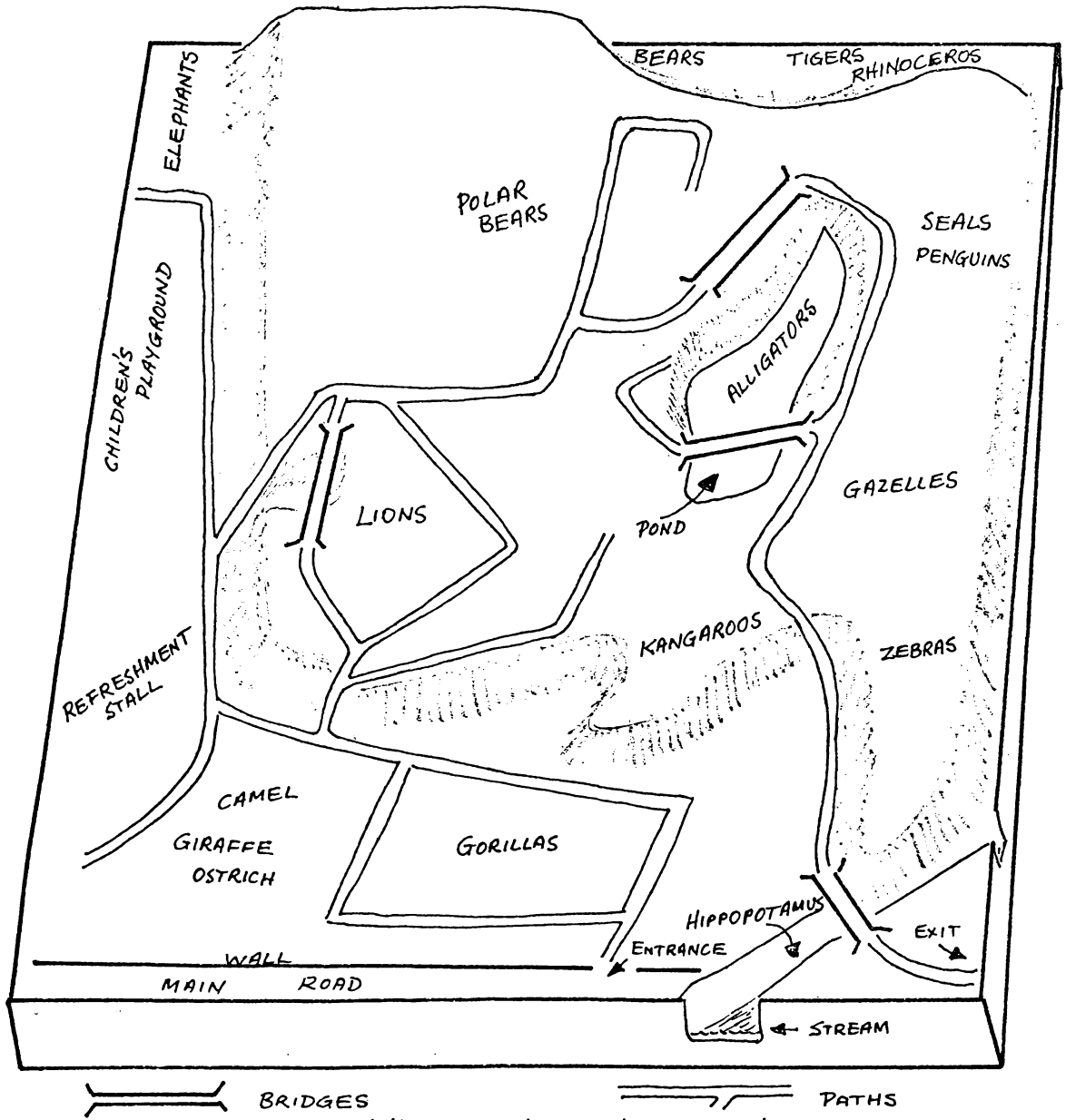
SPECIFIED TASKS CHILDREN-ONLY SESSIONS IN SCHOOL SETTING

The four specified tasks were all done in a small room located between two classrooms. The room was used for small group activities and was completely shut off from the two adjoining classrooms and could only be entered from the main corridor. There were several low tables in the room, and at one end a free-standing display unit had been moved to create a partially-screened area for the investigator to sit behind out of view of the children.

For each task the children were brought into the room by the investigator and the instructions, as set out below, were given. The investigator switched on the recorder and retired to the screened area and took no further part in the interactions, but kept a check on the time, and made brief notes that would help in the transcribing of the recorded interactions.

Task 1: 'The Zoo Game'

On a low table a model zoo was set up. The model measured 60cm x 58cm, and, to add interest, various features (hills, pond, stream) were contoured on the model. Zoo animals came from a commercially produced kitset (Airfix Playsets: Zoo Cat. No. 1686), as did the people (Airfix HO-OO Scale: People). The diagram below shows the layout of the 'zoo'. A number of features were deliberately included (or left out). For example, some fences were missing and it would be possible for the alligators to roam at large. In other instances animals were put together in the same enclosure where this would not be likely to occur under normal conditions.



The children were provided with the model of a person attached to a long thin wire and they used this to take their 'walk' around the zoo.

They were given the following instructions:

"You are going to visit the zoo, and I want you to talk about the things you see and what you want to do, in the way you would if you went on a real trip.

(Name a child) will take the person and lead the way. You will start here at the entrance gate."

Task 2: 'Million Monsters'

When the children came into the room they found the pieces of the set, a type of 'identi-kit' (Million Monsters, produced by the Chad Valley Co. Ltd, Birmingham, England), spread on a low table. A range of hair styles, eyes, faces, mouths, bodies, arms and legs could be combined in different ways, in a supplied frame, to construct monsters.

Children were given the following instructions:

"Have a look at the pieces spread on the table, and as you take turns to make a 'monster' talk about what you are doing. (Name a child) you can start."

Task 3: Nothing is Something to Do.

Children were shown a sound-filmstrip Nothing is Something to Do from the series Who Am I? This is a set of five sound filmstrips concerned with the special world of the child and helping the young child understand himself. The Unit is produced by Inside Out Productions for Scholastic Magazines, New York. The sequences showed different children engaged in a series of aimless activities apparently 'doing nothing' (sitting on fences, throwing stones in ponds, etc.) and talking about what they were doing.

Before showing the sound filmstrip, the following comment was made:

"I am going to show you a filmstrip about children. I want you to watch what is happening and what the children say, and afterwards I would like you to talk about it."

After showing the filmstrip, a brief instruction was given.

"Would you like to start (a child was named).

Task 4: 'Things I like to do'

A large colourful picture (45cm x 60cm) was shown to the group.

The picture depicted people engaged in a whole range of leisure and sporting interests (swimming, camping, driving cars, sun-bathing). Across the top of the picture, drawn especially for this task, was the caption:

"What's it like going to ...."

A series of cards (10cm x 8cm) had various endings to the caption printed on them ('to the beach', 'for Sunday drives', 'swimming', etc.)

The following instruction was given:

"We all like to do things in our spare time and this picture shows some activities people enjoy. I want you to talk about things you like doing. The cards might help you start."

APPENDIX E

RECORD SHEET AND TRANSCRIBED INTERACTION

RECORD SHEET

Subject Mark Code Description 001-062

Session Description Teacher-child 2 Date 30·10·75

Session Time ~~Morning~~ Afternoon ~~Evening~~ Tape No. 22 Setting Start 184 Finish 283

Comments Rest of class - recreational reading
Talked to Mark about the book he had just finished reading. Very excited about trips he was going on!

SAMPLE OF TRANSCRIBED INTERACTION

001-062

T.	What did you do then? - - -
M.	Um I waited until I finished saying everything I wanted to about the pony and then I went on about the dog.
T.	Good boy. Now why did you do that? - - -
M.	Because if I put it in the middle now it wouldn't have made sense. - - -
T.	Mmm. - - -It might have made sense but it would have um - - -
M.	Muddled it up a wee bit.
T.	That's right. Now - - - you always have problems with your spelling, don't you?
M.	Yes.

APPENDIX F

M O D I F I E D S Q U A I E S

A Reciprocal Interaction Analysis System

Noel N. Hanlon,
Robert W. Katterns.

University of Waikato,

1975

SECTION 1: INTRODUCTION

The Modified SQUAIES Reciprocal Interaction Analysis Coding System (hereafter described as Modified SQUAIES) was derived from the SQUAIES Interaction Analysis Coding System (Katterns, 1974) to analyze verbal behaviour in a range of interaction situations, both within and outside the classroom. The parent SQUAIES system was developed primarily to analyze the teacher and pupil verbal behaviours that occur during small group discussion sessions. For the more general application of SQUAIES, however, it was felt that a reciprocal coding system might better cope with the greater informality of many interaction situations outside the classroom. Thus, in Modified SQUAIES all verbal moves in the system may be made by any participant in the interaction. This reciprocity has made it necessary to introduce additional speaker identification categories. A number of minor changes have also been made to specific categories; some of which are a direct consequence of the coding system becoming reciprocal. The changes that have been made in no way affect the theoretical basis on which the parent and Modified systems rest.

Field trials of Modified SQUAIES have shown it to be a useful instrument in analyzing both the types of interaction that occur between adults and children in informal situations and the verbal behaviour in more formally constructed small group classroom encounters.

Both the SQUAIES system and Modified SQUAIES are seen as complementing each other. Therefore, the Coding Manual for Modified SQUAIES summarizes the extended discussion of the theoretical rationale for the system presented in the Coding Manual of the parent system. In some areas, discussion of coding categories is not carried out with the same degree of detail as is found in the Manual for the SQUAIES system. However, definition of categories, coding rules, and examples contained in this Manual for Modified SQUAIES are presented in sufficient detail for the document to be used as a primary research resource.

SECTION 2: BACKGROUND TO THE SQUAIES AND MODIFIED SQUAIES ANALYSIS SYSTEMS[1].

The analysis systems are an extension and modification of a theoretical model and analysis system developed by Bellack (Bellack et al. 1966). Adopting Wittgenstein's view of language, Bellack sees classroom discourse as a kind of "language game" in which participants make various verbal moves. These moves are classified in terms which indicate how discussion participants relate to each other by making statements which set the context for discussion, by asking questions, by attempting to provide answers, and by commenting on previous statements. Such moves are regarded as having an educational function, and are thus termed pedagogical moves. These moves are classified as follows:

1. Structuring
2. Soliciting
3. Responding
4. Reacting - accepting
   - rejecting
   - modifying
   - expanding.

Structuring moves. Structuring moves serve the pedagogical function of setting the context for subsequent behaviour, by launching or halting-excluding interaction between pupils and the teacher, and by indicating the nature of the interaction.

Soliciting moves. Moves in this category directly elicit verbal, physical, or mental response. Thus, all questions are solicitations, as are commands, imperatives, and requests.

Responding moves. These moves fulfil the expectation of solicitations. That is, they bear a reciprocal relationship to soliciting moves and occur only in relation to them. Thus, answers by pupils and the teacher to pupil questions, or answers by pupils to teacher questions, are responding moves.

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1. A detailed statement of the theoretical basis of the SQUAIES and Modified SQUAIES system is contained in Appendix A of SQUAIES Interaction Analysis Coding System (Katterns, 1974).

Reacting moves. These moves are occasioned by a structuring, soliciting, responding, or another reacting move, but are not directly elicited by them. Pedagogically, these moves serve to modify (by clarifying, synthesising, or expanding), and/or to rate (positively or negatively) what has been said previously. Reacting moves differ from responding moves in that, while a responding move is always directly elicited by a solicitation, preceding moves serve only as the occasion for reaction.

A pedagogical move, whether it is made by a teacher or a pupil, serves two highly inter-related functions:

i) an inter-personal control function,
ii) a content or meaning function.

It will be seen that the control function refers to the moves of structuring, soliciting, responding, and reacting. However, in exercising such control, a verbal move also communicates meaning. For example, a teacher question (solicitation) functions to elicit pupil responses, but the meaning in the question, related to certain content or subject matter, will also tend to determine the content or meaning in any response elicited. This dual function of control and meaning is not universal among verbal moves, for some verbal behaviours appear to have only a single function: lecturing, for instance, appears to have only a content or meaning function, and the giving of directions ("Put your hands down.") appears to have only a control function, in the sense that there is not reference to subject matter.

A closer analysis of the content or meaning function of pedagogical moves reveals that their meaning may be of three different kinds:

i) Substantive-logical. A pedagogical move may involve certain kinds of cognitive thinking process related to some subject matter, topic, or situation. For example, a teacher question may aim at, and actually elicit, pupil responses which involve one of the following processes: remembering, understanding, interpreting, analysing, synthesising, or evaluating.

ii) Substantive-affective. A pedagogical move may involve

certain kinds of affective thinking processes related to some subject matter, topic, or situation. For example, a teacher question may aim at, and actually elicit, pupil responses which involve expression of feelings or opinions ranging from snap reaction to deeper valuing.

iii) Instructional-logical. A pedagogical move may involve thinking related to some procedural, managerial, or organisational matter, or thinking that evaluates in a positive or negative way the ideas expressed by others.

As an extension and modification of Bellack's structuring, soliciting, responding, and reacting model of classroom discourse, the SQUAIES Interaction Analysis Coding System gives much emphasis to the control function of pedagogical moves made by the teacher. In addition, the analysis systems incorporate coding categories for each of the three kinds of meaning described above, as these are embodied and communicated in specific kinds of moves. However, the control function in Modified SQUAIES may be assigned to any participant - adult or child - in the verbal communication situation. A brief discussion of the extension and modifications to SQUAIES is presented in Section 3.

SECTION 3: THE MODIFIED SQUAIES RECIPROCAL INTERACTION ANALYSIS CODING SYSTEM

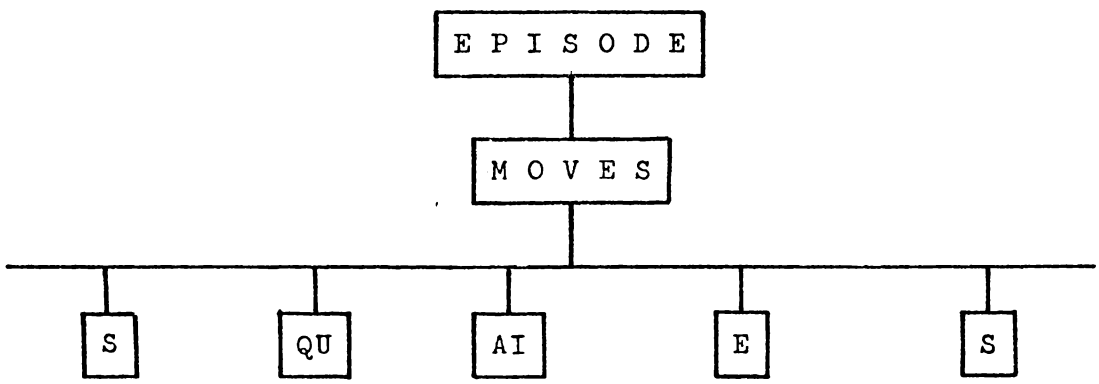
The Coding System

Bellack's interest in the pedagogical move, as a basic unit of analysis in classroom discourse, is with reference to the teaching cycle. The SQUAIES Analysis System was specially designed to classify and code not only teaching cycles but the patterns for teaching cycles within each discussion episode, with particular reference to the functional significance of teacher questions and reacting moves at different points in an episode.

Modified SQUAIES extends the analysis of situations beyond the immediate environment of the classroom. The reciprocal nature of the system makes no pre-judgement as to who occupies

the pivotal point in an interaction situation. Indeed, the Modified coding system is totally open, in that all the moves in the system can be made by any speaker on the basis of the nature of his participation, and not on the basis of some ascribed social status. However, the communication moves in Modified SQUAIES (as shown in Fig. 1) remain basically the same as the pedagogical moves of the SQUAIES Interaction System.

Fig. 1: Communication Moves in the Modified SQUAIES Reciprocal Interaction Analysis Coding System



Within each of the major communication move categories are extended categories for the classification of a range of specific moves. These coding categories refer to both the control function and the meaning function of each move.

Categories

The Modified SQUAIES uses two major types of category: speaker-identification categories and verbal behaviour categories. Because the system is reciprocal, it is necessary to identify the speaker before each performance move, and a range of categories have been devised for this purpose. Status within an episode of interaction is determined, not by any status ascribed by a

societal position (teacher, pupil, mother, father, and the like) but, on the basis of the verbal moves one makes. The verbal behaviour moves are essentially the same as those used in the original SQUAIES system.

Units of Analysis

The Modified SQUAIES uses two basic units of analysis: the episode and the move. Interaction sessions with dyads or small groups are audio-taped and transcribed. The transcription is subdivided first into episodes, and these are then analysed to determine:

i) who made certain verbal moves
ii) the nature of these moves (control and meaning function).

Episodes and Themes

Typically, a discussion during an interaction situation can be divided structurally into a number of episodes. An episode consists of all the communication moves which relate to one theme in a discussion. The theme represents the substantive focus of the episode, and during an interaction a number of different themes may arise, some of which may be repeated at different points in the interaction. The coding system does not contain categories to identify themes, and any analysis of thematic patterns in an interaction would be additional to the procedures outlined in this manual.

An episode often begins with the initiator combining a structuring or information-giving move with an initial question move; or with the initiator using an initial question move only. The substantive meaning of an episode may be primarily cognitive or primarily affective in nature. That is, the initial question for an episode may concentrate on substantive-logical meaning (it asks for thinking about a theme which involves such processes as remembering, evaluating), or the initial question for an episode may concentrate on substantive-affective meaning (it calls for an expression of feelings or opinions.

The Verbal Move

The verbal move is the smaller of the two basic units of analysis. It is defined as a verbal statement with a single identifiable communication function (control and meaning function).

A verbal move is independent in the sense that it represents a change in control and/or meaning function. While it is often the case that this change in function occurs because a new speaker makes a new move, it may also happen that the same speaker uses several moves, each of which serves a different function. For example, a parent may orient his son or daughter towards responding to a question by providing some background information to it; the function of this information being to add meaning to the forthcoming question and to focus attention on it. The question is then asked and its function is to elicit responses. In this example, control and meaning functions can be recognised in each of the two moves by the same speaker; the move functions being different in each case.

On occasions, contiguous repetitions of moves may occur. For example, an adult or a child may repeat a question in the same, or nearly the same, form and thus with the same control and meaning function. Strictly speaking, the repetition is not a new move. However, the Modified SQUAIES Analysis System is designed to identify repetitive moves by speakers and includes a special coding category for this purpose.

In Fig. 2 a summary is provided of all speaker identification and behaviour category moves that are used to analyse transcripts of interaction situations with Modified SQUAIES. This summary is organised in keeping with the model provided in Fig. 1, and is a transcript coder's quick reference guide. It lists the major and extended category moves.

In Section 4 of the Manual more detailed discussion of each type of communication move may be found, together with fuller operational definitions and coding rules.

SPEAKER IDENTIFICATION			
F	Father	A	Other adult
M	Mother	B	Boy
T	Teacher	G	Girl

BEHAVIOUR CATEGORIES			
1. INITIAL STRUCTURING			
S^{sub}	Substantive	S^{Proc}	Procedural

2. INITIAL QUESTIONING			
Q^{M}	Memory	Q^{An}	Analysis
Q^{C}	Comprehension	Q^{Sy}	Synthesis
Q^{Ap}	Application	Q^{Ev}	Evaluation

3. RESPONSE MOVES			
A	Answers	I	One idea
N	Answer-Initiations	S	Short (2 - 4 ideas)
RE	Reactions	E	Extended (5 - 11 ideas)
Y/N	Yes/no	L	Lengthy (12+ ideas)

4. EVALUATION MOVES			
AC	Simple acceptance-acknowledgement	+	Explicit praise
AC^{rep}	Repeat response	$+^{bec}$	With criteria
AC^{para}	Paraphrase response	-	Aversive reinforcement
AC^{feel}	Acceptance of feelings	$-^{bec}$	With criteria
		COR	Correction
		COR^{bec}	With criteria

5. SUSTAINING MOVES			
R	Redirect	U^{q}	Using respondent ideas to ask a question
P^{prom}	Probe-prompt	U^{st}	To frame a statement
P^{clar}	Probe-clarification	C	Speaker comment
P^{caw}	Probe-critical awareness	SS	Sustaining structuring
P^{ref}	Probe-refocus	AOQ	Answer own question
PR	Probe-redirect		

INITIAL OR SUSTAINING QUESTIONS	
Q^{Op}	Opining
Q^{Affec}	Affective
Q^{Rhet}	Rhetorical
Q^{Proc}	Procedural
Q^{Exhort}	Exhortatory

Fig. 2: Speaker Identification and Behaviour Categories.

SECTION 4: DEFINITIONS AND CODING RULES FOR SPECIFIC VERBAL MOVES IN THE MODIFIED SQUAIES RECIPROCAL INTERACTION ANALYSIS CODING SYSTEM

Speaker Identification Categories

The first letter of the analysis code identifies the speaker. Where there is more than one adult, teacher, boy, or girl participating in the situation the initial letter is subscripted with a numeral (e.g. First boy B^1; second boy B^2; third boy B^3, and so on). The following initial letters are used to identify speakers:

Father	(F)
Mother	(M)
Teacher	(T)
Other Adult	(A)
Boy	(B)
Girl	(G)

Summary of moves in each episode that the Analysis System codes

Moves that Initiate episodes

1. The Initial Structuring Move
   - 1.1 The substantive structuring move
   - 1.2 The procedural structuring move
2. The Initial Question Move
   - 2.1 The substantive-logical question
     - 2.1.1 The memory-recall question
     - 2.1.2 The comprehension question
     - 2.1.3 The application question
     - 2.1.4 The analysis question
     - 2.1.5 The synthesis question
     - 2.1.6 The evaluation question
   - 2.2 The opining question
   - 2.3 The substantive-affective question
   - 2.4 The rhetorical question
   - 2.5 The procedural question
   - 2.6 The exhortatory question
   - 2.7 The abortive question
   - 2.8 The repeated-rephrased question
   - 2.9 The tagged question

Response Moves during episodes

3. Answer Moves
   - 3.1 The yes/no answer

4. Answer Initiation Moves

5. Reaction Moves

6. The Chorus Response Move

Evaluation Moves

7. The Acceptance-Acknowledgement Move
   - 7.1 The simple acceptance-acknowledgement move
   - 7.2 The repeat response move
   - 7.3 The paraphrase response move
   - 7.4 The accept feelings move.

8. The Positive Reinforcement (Praise) Move
   - 8.1 The positive reinforcement move without criteria
   - 8.2 The positive reinforcement move with criteria

9. The Aversive Reinforcement (Punishment) Move
   - 9.1 The aversive reinforcement move without criteria
   - 9.2 The aversive reinforcement move with criteria

10. The Correction Move
    - 10.1 The correction move without criteria
    - 10.2 The correction move with criteria

Moves that Sustain responses

11. The Redirect Move

12. The Probe Move
    - 12.1 The probe-prompt move
    - 12.2 The probe-clarification move
    - 12.3 The probe-critical awareness move
    - 12.4 The probe-refocus move
    - 12.5 The probe-redirect move

13. The Comment Move

14. The Use Respondent Ideas Move
    - 14.1 The use respondent ideas question move
    - 14.2 The use respondent ideas statement move

15. The Sustaining Structuring Move

15.1 The sustaining structuring substantive move

15.2 The sustaining structuring procedural move

16. The Answer Own Question Move

Moves that Initiate episodes

1. The Initial Structuring Move

The initial structuring move sets the context for subsequent verbal behaviour in an episode. Often it does this by linking substantive or procedural information to an initial question. A structuring move may occur prior to, or following, an initial question, and on occasions the initial structuring move may stand on its own. Sometimes the move is sandwiched between repetitions of an initial question or between several different kinds of initial question. There are occasions when two or more persons attempt to initiate an episode. The coding rules take account of this contingency.

1.1 The substantive structuring move. S^{sub} This kind of move provides information of the following kinds that may or may not be accompanied by an initial question: stating a proposition, quoting or reciting, retelling an event, describing a situation, giving an opinion, posing a problem, or motivating a response.

Examples

(a) Mother: Mrs Jones rang today to say that the Annual General Meeting was on tomorrow night. (S^{sub}) Why did you say you couldn't go? (Initial Question)

(b) Child: What did you think about school when you were a boy? (Initial Question) We have lots of good things at school now. (S^{sub})

1.2 The procedural structuring move. S^{proc} This kind of move provides procedural or managerial information of the following kinds: giving directions, indicating organisational points, setting limits for the interaction, indicating initiator expectancies of the respondents, or as a means of gaining attention. Again, the move may or may not be accompanied by an initial question.

Example

Mother: Tracey will you leave that now and come here. (S^{proc}) What time do you have to go to music? (Initial Question)

Coding rules for the Initial Structuring move

i) Initial structuring moves do not normally abort. The only instance where this happens is when two or more persons compete to initiate an episode, and where no responses at all occur between the competing initiations.

Examples

(a) Mother: I went to town today and did some shopping. (S^{sub})
Father: I saw Bill after lunch. (S^{sub})
Mother: What was he doing? (Probe Clarification)

Mother's initial structuring move aborts because Father's competing move received a response.

(b) Mother: I went to town today and did some shopping. (S^{sub})
Father: Mmm. (Acknowledgement)

Father: I saw Bill after lunch. (S^{sub})
Mother: What was he doing? (Probe Clarification)

These are not competing initial moves as they are separated by a simple acknowledgement move in this case.

Where a time pause appears between two or more initial structuring moves they should be treated as separate episodes, one or more of which may not develop.

ii) When an initial structuring move is repeated or re-stated, the repetition should be coded as a repeated structuring move.

iii) When an initial question separates initial structuring moves, separate coding should occur for these structuring moves.

iv) When an initial structuring move takes the form of a rhetorical question (for which no response is expected or received), the coding should be for the rhetorical question and not a structuring move.

v) Sometimes initial structuring includes the provision of hints, clues, or prompts. When this occurs, the probe-prompt

category should be used for coding purposes (P^{prom}). It is sometimes the case that structuring, prompting, and an initial question initiate an episode.

vi) When a procedural structuring move of the attention-seeking type (e.g. Hey! Mummy! Look!) is followed by an acknowledgement (AC) from another person before the initiator continues, the attention-seeking acknowledgement sequence is circled to indicate the special nature of this type of procedural-response sequence.

Example

Boy:	Hey, Mummy!	S^{proc}
Mother:	Yes.	AC
Boy:	What time are we going to town to-morrow?	Q^{M}

vii) If a simple acknowledgement move breaks up an initial structuring move but does not appear to affect the substantive content then linking lines should be used to indicate this is an interrupted response.

Example

Father:	When I was in town to-day-	F. S^{sub}
Mother:	Mmm.	M. AC
Father:	- I saw Rob and he said he would come out on Sunday -	F S^{sub}
Mother:	Mmm.	M AC
Father:	- and fix up the roof.	F S^{sub}

2. The Initial Question move

The initial question move is defined as one which introduces a new episode by calling for responses related to a new or different theme. By definition, it follows that preceding responses would be inappropriate to this new question. In beginning an episode the initial question may or may not be accompanied by one or more structuring moves, rhetorical questions, or prompts.

2.1 The Substantive-logical Question. The substantive-logical question calls for thinking and responding related to certain subject matter at one of six levels of the thinking process: memory-recall, comprehension, application, analysis, synthesis, and evaluation. The coding symbols and examples for each of these thinking levels are presented below.

2.1.1 The Memory-Recall Question. This question Q^M calls upon individuals to remember, recall, define, recognise, identify, state facts, describe, report, re-tell, or name. To answer this type of question the respondent merely provides previously acquired information in substantively the same form.

Examples

What is a typewriter?
When was the Treaty of Waitangi signed?
Where is Auckland?
What did the car look like?
What did John say when he went home?
Who was that girl I saw you with yesterday?

2.1.2 The Comprehension Question. This question Q^C calls upon individuals to demonstrate their understanding of ideas by translating them into their own words or into a different form, by explaining and relating them, by interpreting them, by comparing them, and by making inferences from them. Answers to these questions have to be worked out or inferred by relating ideas in any information that is provided or, when the information provided is data poor, by relating remembered ideas.

Examples

What do you think John meant yesterday?
Why should we need to have a capital city?
How do you know that an earthquake occurred?
What type of behaviour would you say Tom's was?
If I took that support away what might happen?

2.1.3 The Application Question. This type of Q^{Ap} question calls upon individuals to use remembered and understood ideas in order to recognise and solve new problems. Thinking required here is at a higher level of understanding than is called for by comprehension questions.

Examples

If plants need air as you've agreed, how then do some plants grow well inside a plastic bag?

How can we use these planks to get us over the stream?

What other games could we make up using this ball?

Q^{An}

2.1.4 The Analysis Question. This type of question calls upon individuals to perceive the parts and the interrelationships among parts in a whole idea, statement, point of view, piece of behaviour, presentation, or composition. Thinking here is at a higher level than that called for by comprehension or application questions. This is because an understanding is required of both the content and the structural form of the information or material.

Examples

Where do you think Tom went wrong?

Can you pick out several irrelevant parts in Mr Smith's argument?

Which of these ideas do you think are true, and which seem to be more a matter of imagination?

Where has the girl in the story got her ideas confused?

Can you make up another title for the story which tells us what it is really about?

Q^{Sy}

2.1.5 The Synthesis Question. This type of question calls upon individuals to solve a problem by putting ideas together in a new way. Hypothesising would be included in this category. Synthesis questions usually elicit divergent responses. Thus they are classified as open questions.

Examples

How could the Hamilton City Council solve its parking problems?

How many different ways could we use these bricks?

What could happen if the car wouldn't stop?

What do you think would improve safe driving?

2.1.6 The Evaluation Question. This type of question calls upon individuals to judge the worth, rightness, or appropriateness of ideas, statements, a point of view, a piece of behaviour, a presentation or a composition. Judgments should be based on definite criteria which may be determined by the individual, or he may be given them. Q^{Ev}

Examples

What makes this picture better than that one?

What do you think about letting children develop their own set of school rules?

In your opinion who should be allowed to have the picture?

Coding rules for the Substantive-logical Question

i) Questions are not coded in isolation but within the context of responses elicited by them and by any related probing moves. In the second example below, the initial question was developed through the use of a probe and the reason given was sufficient to meet the criteria of an evaluative question. This development does not occur in the first example and the question is coded as an opine (Q^{Op}).

Example

(a)	Father:	Was the film good?	(Q^{Op})
	Boy:	Yes.	
(b)	Father:	Was the film good?	(Q^{Ev})
	Boy:	Yes.	
	Father:	Why? (Probe-Critical Awareness)	
	Boy:	Because it showed how we can do things to make the world a better place to live in.	

ii) In some circumstances an initial question is reacted to and not answered. The episode is considered to be still active because the focus is being sustained. The substantive content of both the initial question and the following move should be looked at to ensure that this is not an example of competing initial moves.

Examples

(a) Father: Have you got the bird ready to take up? (Q^{Op})
Girl: We'd better get talking to it so it brightens up.
(Reaction and not answer so question aborts)

(b) Father: Have you got the bird ready to take up? (Q^{Op})
Girl: Bob is taking his Cockatoo. (Competing move) (S^{sub})
Father: Mmm.
(Simple acknowledgement makes previous move active and opining question aborts)

iii) In some instances different initial questions are asked and are answered. Where this happens, all such questions that are answered are left active and the first response to each is coded as an answer.

Example

Teacher: From how many different countries did the people come? Where did the family come from?
Boy: Scotland.
Teacher: Mmm.
Boy: Three.

Some question types can be used to either initiate episodes or to sustain them once they have started. Modified SQUAIES has five questions that can perform this dual function: affective, opining, rhetorical, procedural, and exhortatory questions. Definition of these questions, examples, and coding rules are detailed in this section of the manual.

2.2 The Opining Question. This category includes all Q^{Op} questions that seek an opinion, not necessarily based on any criteria, and often being more affective than substantive-logical in nature. Response to an opining question is usually of the

"Yes", "No", "Mmm" variety, expressing agreement or disagreement with some proposition, behaviour, point of view, or situation. Opining responses may come from individuals or involve a chorus response from two or more individuals.

Examples

(a) Mother: What did you think of the picture?
Girl[1]: Great.

(b) Boy[1]: Is Sesame Street better than the Electric Company?
Boy[2]: No.

(c) Father: Was Mary a good girl today?
Mother: Yes.

(d) Boy[1]: It was good fun when we had the film, eh? (Equivalent to 'Wasn't it?, Don't you think?', and so on)
Boy[2]: Yeah.

Coding rules for the Opining Question

i) When first response moves are not followed up by sustaining moves to elicit reasons or criteria behind expressed opinion, then the initial question should always be coded as an opining question.

ii) When there is follow-up to the first expression of opinion by the use of such sustaining moves as the Probe-Critical Awareness, Probe-Prompt, and the Probe-Redirect, and provided that the responses elicited reveal reasons for holding the opinion, then the question that might have been coded as an opine will be coded substantively at an appropriate level. In most cases it will be found that this appropriate level is Evaluation (Q^{Ev}).

Example

Father: The man tried to break into the building to save the animals. F. S^{sub}_{Ev}
Was he sensible to try this? F. Q^{Ev}
Boy: No.
Father: Why not? (Probe-Critical Awareness)
Boy: Because the .... (response gives reasons).
Sufficient follow-up has occurred to this point to qualify the initial question at the substantive evaluation level and not as an opine.

iii) Some initial questions which have the potential to be an opining question, have a strong affective flavour about them.

Examples

(a) Well, you've seen the movie. Did you enjoy it?

(b) What part of this poem did you like or find most interesting?

If questions like these are not followed up by use of sustaining moves to elicit reasons behind first responses, then these questions should be coded as opines. However, if questions like these <u>are</u> followed up by use of sustaining moves to elicit reasons behind first responses, then the initial question should be coded in accord with its essential nature.

Example

Teacher:	What was interesting about the story?	(Q^{Affec})
Boy:	Oh, the adventure stuff.	
Teacher:	Why did you find that part interesting? (Probe Critical Awareness)	
Boy:	Oh, 'cause .... (Gives reasons)	

The initial question here qualifies as an affective question and not as an opine.

Q^{Affec}

2.3 <u>The Affective Question</u>. The affective question calls for an expression of feelings, likes, dislikes, enjoyments, how one would feel in certain situations, or interests.

Examples

(a) Can you describe your feelings straight after you'd read this poem?

(b) Tell me about the most horrifying experience you've ever had.

(c) What kinds of television programme give you most pleasure?

(d) How would you feel if you were a zoo animal locked up day after day in a pen?

(e) What part of this story did you like (best)?

Coding rule for the Affective Question

Questions that call for recall, interpretation, or analysis of the feelings of some other person or being, are not coded as affective questions. The affective question refers only to the emotional experience of the person to whom the the question is addressed.

Q^{Rhet}

2.4 The Rhetorical Question. The rhetorical question is one for which no response is intended and for which none is actually elicited.

Examples

(a) That's right, isn't it?
(b) You do, don't you?
(c) Cats, aren't they?
(d) They do, don't they?

Coding rule for the Rhetorical Question

If used at the end of an introduction to an episode and actually eliciting a response, the rhetorical question cannot be coded as such but as either an opining question or substantive question, depending upon the nature of the response to it.

Q^{Proc}

2.5 The Procedural Question. Included in this category are any questions which call for responses indicating that any procedural matters are understood or ready to be acted upon. These questions tend to occur more often once an episode is in progress, but they may also occur at the start of an episode.

Examples

(a) Can we have some?
(b) Who are they all for?
(c) Could you teach me how?
(d) Who will start off?
(e) Any questions?
(f) Where is it?
(g) Is it in there?
(h) Eh? Or What? (Equivalent to 'What did you say?')

Coding rules for the Procedural Question

i) Sometimes a procedural question is asked to get a repeat of a response given or question asked. The procedural question and answer or repeated response are encircled to show they interpose in the substantive flow of the interaction, which may or may not continue following the clarification.

Examples

(a)	Girl:	What is an extension?	G. Q^{M}
	Mother:	What is an extension?	M. Q^{proc}
	Girl:	Yes.	G. Y/N
	Mother:	Well it is .... (Gives answer)	M. Answer
(b)	Boy:	No. Ronald got it.	B. AS
	Father:	Who?	F. Q^{proc}
	Boy:	Ronald.	B. AI
(c)	Father:	What was he doing?	F. Q^{M}
	Mother:	Pardon?	M. Q^{proc}
	Father:	What was he doing?	F. Q^{M}
	Mother:	Making a boat.	M. AI

ii) Procedural questions may also be used as attention-seeking strategies to get episodes started. Where this happens the procedural question and the acknowledgement are circled to show the special nature of the moves.

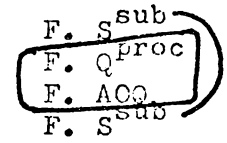
Examples

(a)	Boy:	What do you think we have been doing?	B. Q^{proc}
	Father:	What?	F. AC
	Boy:	We went to see	B. S^{sub}
	The boy's second move in effect becomes the start of the episode.		
(b)	Boy:	Mum?	B. Q^{proc}
	Mother:	Yes.	M. AC
	Boy:	Who went to town with you today?	B. Q^{M}

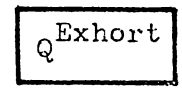
iii) Sometimes when a person is making a statement he temporarily forgets a word, poses a question to find the word, then answers the question himself. This is treated as a special type of aside and both the question and the answer are encircled. If the statement continues, the two parts are linked to show the continuation of the move.

Example

Father: We went down to - - Where as it now? Oh, Ohinemutu to see Fred and Mary.



2.6 The Exhortatory Question. Included in this category are urgings, questions, commands, demands, and admonitions to try harder, respond better, or respond more frequently. Although more common once interaction has moved beyond the first response, the exhortatory question (or statement) may be used in combination with one or more substantive questions at the beginning of an episode. This is more likely to occur when response in one or more previous episodes has not been especially forthcoming.



Examples

(a) Now, let's see if we can think a little harder about this question!

(b) Come on, now, get your thinking caps on!

Coding rule for the Exhortatory Question.

This move bears relationship to some kinds of Procedural Structuring move. The difference is that the exhortatory question or statement is expressed more strongly. When in doubt about which of these two moves to code, the rule is to code as a Procedural Structuring move.

2.7 The Abortive Question. This category applies to all questions which clearly call for a response (that is, they are not rhetorical questions) but which fail to elicit any substantive response.

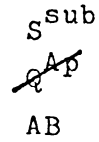
Example

Father:	How could he make the car go without petrol?	
Boy:	(Silence)	(Abort)
Father:	Well can you think of what might work?	
Boy:	(Silence)	(Abort)

Coding rules for the Abortive Question

i) Code questions that abort by drawing a slash diagonally

from bottom left to top right through the coding symbol. An example from a transcript might be:

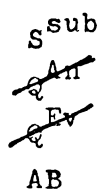


ii) If an initial question eventually gets a response by means of prompting or redirecting, then that question is <u>not</u> coded as abortive. The eventual response need not be correct.

<u>Example</u>

Mother:	Where is the workbox, Kim?	
Girl[1]:	(Silence)	(Abort)
Mother:	Do <u>you</u> know, Tracey?	
Girl[2]:	In the bottom cupboard.	(Incorrect Response)
Mother:	No. I looked there.	(Correct)

iii) When more than one question is used in an effort to initiate an episode, each of which calls for a different kind of substantive response, it is possible that all of the questions may abort. In these circumstances, no first response is present to guide coding of the substantive level of the abortive questions. One must rely, therefore, upon estimation of the initiator's intent for each question by using the form, content, and context of the question. Of course, in the circumstances described above, each question is coded as abortive. An example from a transcript might be:



iv) An initial question <u>and</u> its repetition may both abort. An example from a transcript might be:

2.8 <u>The Repeated or Rephrased Question.</u>

Included in this category are substantive questions which are repeated with the same, or nearly the same,

form and content.

The repeated or rephrased question qualifies as such when the following criteria are met:

i) It occurs prior to the first substantive response in the episode.

ii) It is an independent question qualifying as an initial question in its own right, but calling for the same kind of response as the initial question introducing the episode.

Example

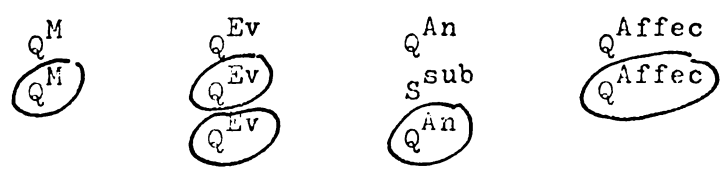
Teacher: How many people came to your party?
How many came to the party?

Coding rules for the Repeated or Rephrased Question

i) A repeated initial question may follow immediately after the question it repeats, or it may be separated from it by one or more structuring moves, questions asking for a different kind of substantive response, address moves, or rhetorical questions.

ii) Once response to any initial question has begun in an episode, any repetition of that initial question is the signal for the episode to begin anew. The initial question in this new episode is coded substantively and encircled to indicate that it is a repeated question. The marking off of such a new episode will have been completed on a transcript prior to coding beginning.

iii) In a repeated question series, the first instance of the question is coded substantively and each repetition of it is coded substantively but encircled. Some examples from transcripts might be:



iv) A repeated initial question may abort - it may not elicit any response. When this occurs, each question in the

repeating series is coded as abortive. An example from a transcript might by:

AB

2.9 The Tagged Question. Some questions are presented in statement form with a tag at the end.

Example

He walked down the road, didn't he?

Coding rules for Tagged Questions

i) If there is sufficient substantive content in the statement preceding the tag to allow it to stand on its own, then the statement should be appropriately coded as separate from the tagged question.

ii) The tagged question should be coded depending on the response (or lack of response) it elicits and whereabouts it occurs in the episode.

Response Moves

Response moves during an interaction may occur following initial or sustaining moves, and after evaluative remarks, comments, or other response moves.

All responses are classified as belonging to one of the following major categories:

3. Answer moves
4. Answer Initiative moves
5. Reaction Moves
6. Chorus Response moves.

In addition, a special coding category exists for situations where a question meets with no response, or with some verbal indication of not knowing, or of not being able to respond. This special category is the 'abort'. To give some information on complexity, all response moves are classified and coded according to the number of ideas expressed in the response. In the

following complex sentence four ideas are represented:

"The rock that rolled down the mountain crushed the tiny hut at the edge of the woods."

Idea 1: The rock rolled down the mountain.

Idea 2: The rock crushed the hut.

Idea 3: The hut was tiny.

Idea 4: The hut was at the edge of the woods.

This type of classification is intended only to be an indicator of semantic complexity, however, and on the basis of the number of ideas a response[1] is coded as one of the following:

i) The one idea response (I)
ii) Short responses, 2 - 4 ideas (S)
iii) Extended responses, 5 - 11 ideas (E)
iv) Lengthy responses, 12+ ideas (L)

The boundaries of these 'idea' groups were established from an analysis of tapes from the field studies. The grouping of ideas has the added advantage of reducing the margin of error in calculating the number of ideas. Responses could, therefore, be identified in the following way:

Short answer (AS)
Extended reaction (RE)
Lengthy answer-initiation (NL)

and so on.

Examples

(a) Mother: When did they get the strap? (Question)
Girl: In the afternoon. Just before we went home. In front of the class. (Short Answer)

(b) Mother: Where did you go? (Question)
Boy: To the creek. (One Idea Answer)
Girl: Down by the old hut. (Short Answer-Initiation)

(c) Teacher: Tell me about it. (Procedural)
Girl: We went to the creek down by the old hut. I saw the pool where we caught those frogs last year for that pond study. We got told off for being late home. (Extended Answer)

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1. The 'yes/no' and 'chorus' responses are exceptions to this type of categorising.

3. The Answer Move [A]

A move is classified as an answer when it is a direct response and the first response to a question or a probing sustaining move.

Examples

(a)	Father:	What was the picture about?	(Question)
	Girl:	Well there was this man and	(Answer)
(b)	Teacher:	What did Henry do that evening?	(Question)
	Boy:	He slipped into the flat and took the jewel. Boy, that was dumb!	(Answer)
	Teacher:	Why do you say that?	(Probing Move)
	Boy:	Because he knew	(Answer)

3.1 The Yes/No Answer. This move occurs in response to some initial questions, sustaining questions, and probes. It may or may not be followed by more substantive responses. [Y/N]

Examples

(a)	Mother:	Did you like the picture?	(Question)
	Girl:	Yes.	(Yes/No Answer)
(b)	Father:	Will you go now?	(Question)
	Boy:	Yes.	(Yes/No Answer)
	Father:	Why?	(Probe)
	Boy:	Because I can pick up Bill as soon as he finishes practice.	(Answer)
(c)	Teacher:	Is that really the better one?	(Question)
	Boy^1:	Yes.	(Yes/No Answer)
	Boy^2:	It has more lights in it than the other one and you can see what you are doing.	(Answer)

4. The Answer Initiation Move [N][1]

A move is classified as an answer-initiation when it provides additional information relevant to the theme of the episode, but is not directly solicited by initial questions or probing moves. Sometimes a person makes an answer-initiation move immediately after an answer he has given.

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1. This letter code is used to avoid confusion with the one idea answer which would be shown as AI.

Examples

(a)	Father:	What else did you little tackers do today?	(Question)
	Girl[1]:	Well, we done some dusting in the morning.	(Answer)
	Girl[2]:	And I did the dishes without Mum telling me to.	(Answer-Initiation)
(b)	Mother:	What room are you in?	(Question)
	Girl:	Eight.	(Answer)
		We are near Mr Jones' room.	(Answer-Initiation)

5. The Reaction Move [R]

A move is classified as a reaction when a person reacts verbally to the substance of any previous move, and when it meets the following criteria:

i) It is a voluntary contribution to a discussion. That is, a reaction to one or more previous statements by others.

ii) It occurs without any direct solicitation or request from other persons.

Reactions involve a person in responding to initial structuring or sustaining structuring moves, challenging or debating the content of earlier comments, evaluating previous comments in a positive or negative way, or verbally reacting to someone else's non-verbal behaviour.

Examples

(a)	Girl:	What one's do you like?	(Question)
	Boy:	I think the big calculators would be the best.	(Answer)
	Father:	We've got a big one at work and it broke. And it wasn't a very good thing to have so	(Reaction)
	Boy:	Okay then, not typewriters. They aren't electronics.	(Reaction)
(b)	Father:	What went smack?	(Question)
	Girl[1]:	A book.	(Answer)
	Father:	Oh!	(Reaction)
	Girl[2]:	Not a book.	(Correction)
	Girl[1]:	It was so a book.	(Reaction)
(c)	Teacher:	The town was so old that some of the walls had crumbled away.	(Structuring)
	Boy:	They couldn't be that old.	(Reaction)

(d)	Boy:	Well he .... (Gives a detailed explanation)	
	Teacher:	That's a terrific answer.	(Praise)
	Girl:	He just read that in a book.	(Reaction)
(e)	Mother:	Which one would you use?	(Question)
	Girl:	I'll use this one.	(Answer)
	Mother:	No, that's a big fat one.	(Correction)
	Girl:	This isn't a fat one.	(Reaction)
(f)	Teacher:	What was it?	(Question)
	Boy^1:	A big, fat slug.	(Answer)
	Boy^2:	Yuck!	(Reaction)

6. The Chorus Response Move — CHOR

Included in this category are verbal responses uttered simultaneously, or nearly simultaneously, by two or more persons and consisting of the same, or almost the same, substantive content. The chorus response may be of the simple "Yes", "No" type, or it may consist of one word or a short phrase. A transcript will indicate where chorus responses occur by the term CHORUS.

Coding rules for Response Moves

i) Only the first response to an initial question or a probing move can be coded as an answer. (See Coding Rule 3 Initial Substantive-logical Questions for special exception to this rule). Even where the same person subsequently adds to his original answer, if other moves have occurred between the answer and the additional information the second response is coded as an answer-initiation.

Example

Teacher:	What happened that day?	(Question)
Boy:	He went down to the river to see if Thomas had come back.	(Answer)
Teacher:	Mmm.	(Simple Acceptance)
Boy:	Oh, he found a strange looking object too.	(Answer-Initiation)

ii) When a yes/no answer is followed by another person's response which directly answers the question posed then this becomes the first substantive response and is coded as an answer move.

iii) Where a "yes" or "no" response is followed by supporting comment from the same person then the "yes" or "no" should

be coded as part of the response move.

Example

Mother:	Did Tom go too?	(Question)
Boy:	Yes, he came after the game had finished.	(Answer)

iv) If a person completes another person's move then the completion is coded as a reaction.

v) When a person verbally indicates that he can't answer a question directed at him, the response is coded as a reaction and the question aborts unless it is subsequently answered by someone else.

Example

Teacher:	When did Captain Cook discover New Zealand?	(Question)
Boy:	I can't remember.	(Reaction - Question Aborts)

vi) Interrupted responses. A transcript will show when a response has been interrupted by a hyphen after the last word spoken before the interruption. If an interrupted response continues after the interruption the 'pick up' is shown by another hyphen at the beginning of the continuing statement. As well, loop lines down the transcript link the speaker's continuing response. Where the substance of the response suggests that the interruption has not influenced the substantive content, the response should be coded to show the sequence but the ideas aggregated to indicate that this was in effect a complete response.

Example

Girl:	I were at kindy -	G. AS
Boy:	Mmm.	B. Ac
Girl:	- and I done um a funny girl -	G. AS
Boy:	Yeah.	B. Ac
Girl:	- with a head and two eyes.	G. AS

vii) If a person's response move is interrupted before there is sufficient substantive content to code then the speaker identification category only is used to indicate this type of incomplete response.

viii) Quoting from a text or reciting. Part or all of a response may consist of quoting from a text or reciting. When this occurs the move should be given one idea credit regardless of the length of the quotation or recitation.

ix) Distinguishing Yes/No answers and evaluation moves. Sometimes 'Yes' and 'No' are used to evaluate responses given and these should be coded appropriately and distinguished from yes/no answers which occur only in response to questioning or probing moves.

x) Distinguishing answer-initiation and reaction moves. When difficulty arises in classifying a response as an initiation or a reaction, examine first the relationship between the response and the previous response, or the relationship between the response and the previous question (initial question or sustaining question). If the response bears a closer relationship to the question than to the previous response then code the move as an answer-initiation. If the relationship is closer to the previous response than to the previous question then code the move as a reaction. When there is still doubt, the response should be coded as a reaction.

xi) Distinguishing reaction and evaluative moves. Where the substantive content of a response which occurs in 'reaction' to a previous response move is clearly evaluative in nature, it should be coded as the appropriate evaluative move and not as a reaction.

xii) Distinguishing reaction and correction moves. Reaction and correction moves should not be confused. The correction move must contain the element of negation, indicating that the previous response or statement is incorrect. This may be done by giving only the correct response without an accompanying negation statement. Where this happens, the move should be examined closely in the context to see whether the comment is an opinion rather than a correction. If the former, the move should be coded as a reaction. When in doubt code the move as a reaction.

Evaluation Moves

Verbal behaviour which indicates evaluation of another move as being acceptable, unacceptable, appropriate, inappropriate, correct, or incorrect, is coded in this category.

7. The Acceptance-Acknowledgement Move

7.1 The Simple Acceptance-Acknowledgement Move. These indicate acceptance or acknowledgement of another person's move, or a supportive attitude when another person has difficulty in responding. AC

Examples

Mmm.	Okay.
Goodness me.	Gosh.
Really.	Gracious me.
Could be.	Alright.
Thank you.	Whee!
Perhaps.	You don't say.
Maybe.	Rig-h-h-t.
You could be right.	Uh-huh.
Yeah.	Yes okay.
For goodness sake.	Oh I see.
Might too.	Might be.
Ohh!	That's nice.

7.2 The Repeat Response Move. All moves which repeat the immediately preceding move verbatim or in nearly the same words. AC^{rep}

7.3 The Paraphrase Response Move. All moves which are a simple paraphrase of the immediately preceding move. AC^{para}

7.4 The Accept Feelings Move. Included in this category are statements which clearly indicate acceptance of another person's feelings, whether these feelings are of a positive or negative kind. AC^{feel}

Examples

(a) I understand how you feel.

(b) All right, Mary, I can see you're really excited about this.

8. The Positive Reinforcement (or Praise) Move.

Included in this category are any praise statements which

indicate explicitly to a person that his response or statement is correct, very appropriate, or very acceptable.

8.1 The Positive Reinforcement Move without criteria. [+] This category includes explicit praise for acceptable or correct responses or statements but provides no reasons why the praise is given other than, perhaps, some personal criteria.

Examples

Right!
Correct!
That's good.
Excellent.
I think that's a good idea.
Terrific!
Well done.
Grand.
That's an interesting point.
Yes!
Fine.
Good.
Yes, sir!
That's right.
You're on the right track.
Great!
Sure.

8.2 The Positive Reinforcement Move with criteria. [+bec] This category includes explicit praise for acceptable or correct responses or statements, supported by a publicly verifiable reason for the praise. Examples of publicly verifiable criteria would be reference to: data in an article, book, encyclopaedia, dictionary, or atlas; a universal law; a principle; a well-known fact; a reputable authority figure; some empirical validation, etc.

Examples

(a) That's right because as the television series on Man and Nature showed, the platypus is a marsupial.

(b) Yes, there's scientific proof that this idea of yours is correct, John.

(c) Sure, the information was in the paper the other night.

9. The Aversive Reinforcement (or Punishment) Move

Verbal moves in this category inform a person that his response statement or behaviour is being punished, strongly criticised, rejected, or ridiculed because of its incorrectness or inappropriateness. Facetious or sarcastic remarks would be included in the aversive reinforcement category. In addition,

the category includes behaviour management, e.g. calling out a person's name in strong tones to prevent his 'inappropriate' behaviour.

9.1 The Aversive Reinforcement Move without criteria. [-] This category includes remarks which indicate explicitly to a person that his response statement or behaviour is being strongly criticised or rejected because of its incorrectness or inappropriateness. The statement provides no reason why the criticism or rejection is being given, except perhaps the individual personal opinion.

Examples

No!
No, no!
Goodness me!
Don't do that!
That's a poor answer!
Not at all!
Nonsense!
No, that's not right at all.
What kind of an answer is that.
Leave it alone!
I disagree!
Aren't you a smart alec!

9.2 The Aversive Reinforcement Move with criteria. [-bec] This category includes comments which indicate explicitly to a person, with reasons, that his response statement or behaviour is being strongly criticised or rejected because of its incorrectness or inappropriateness. The reasons given are publicly verifiable ones, that is, they make reference to: data in an article, book, encyclopaedia, dictionary, or atlas; a universal law; a principle; a well-known fact; a reputable authority figure; some empirical validation, etc.

Examples

(a) Nonsense! If you had read the material on page 7 you wouldn't have said that.

(b) Rubbish! You can see on the map here that the river runs to the east of the town and not the west.

10. The Correction Move

Included in this category are comments that indicate to a person that his response or statement is incorrect or inappropriate, but the communication is not punitive in nature. Thus, the correction move does not have the negatively critical tone of an aversive reinforcement move.

10.1 The Correction Move without criteria. COR

Included in this category are mild, simple negation statements (which may or may not be accompanied by provision of the correct answer) indicating to a person the incorrectness of his response or statement. Sometimes the incorrectness of the response is indicated by another person giving the correct response without an accompanying negation statement.

Examples

No.

I'm afraid not.

No, it's really the larva.

Uh-huh. (denial)

You're off the track a bit there.

Sorry, it's a chemical process, not electrical.

Boy: I runned down the road.
Mother: Ran!

10.2 The Correction Move with criteria. COR^{bec}

Moves in this category are mild negation statements indicating not only the incorrectness of a response but also providing one or more reasons why the response is incorrect. The reasons may make reference to some publicly verifiable information such as: data in an article, story, encyclopaedia, dictionary or atlas; a universal law; a principle; a well-known fact; a reputable authority figure; some empirical validation, etc; or give an elaboration to show why the previous response is incorrect.

Examples

(a) No, because scientists haven't yet discovered how to do that.

(b) No, you have to go into that one.

(c) I think you may be confusing the first and the second points the article discusses.

(d) No they didn't. They had three on each hand.

(e) Not really, because not all plant reproduction needs both a male and a female plant.

(b) No, that's a big, fat one.

Coding rules for Evaluation moves

i) Refer to Coding Rules xi and xii Response Moves (p.366) to distinguish between reaction, evaluative, and correction

moves.

ii) When combinations of different kinds of evaluation moves are used by a person, the general rule to follow is to code these as a single evaluation move. Common examples and their correct coding are as follows:

Acceptance and Positive Reinforcement (no criteria) coded as + only, <u>not</u> coded as AC <u>and</u> + :

Okay, you're right.
Yes, good.
Right, that's good.
Mm, good.
Good, mmm.
Good, right.
Mm, that's right.

Acceptance and Correction (no criteria) coded as COR, <u>NOT</u> coded as AC <u>AND</u> COR :

Yes, but the paper says that it's ....
Okay, yet the answer really is ....

iii) Some moves which appear to be corrections are really probes seeking critical awareness, e.g.

But what about ...?
Yes, but you haven't thought about ....

iv) Sometimes the same words that communicate an acceptance of a response are used to preface a question or comment. When this occurs, these words are not coded as acceptance moves, e.g.

Alright, what ...?

v) The correction move and the move whereby a person answers his own question (AOQ) should not be confused. When preceding attempts to obtain a response to a question have <u>all</u> failed or aborted and the person answers his own question, the coding symbol AOQ is used for this answer. If responses have occurred which are partially correct or incorrect and the person who asked the question provides the answer, then the move is a correction move (COR).

EXAMPLES

(a)	Teacher:	What is the capital city of New Zealand?	(Question)
	Girl:	(Silence)	(Aborts)
	Teacher:	Tom?	(Redirect)
	Boy:	It's - - - -	(Aborts)
	Teacher:	Oh dear! It's Wellington.	(AOQ)
(b)	Teacher:	What is the capital city of New Zealand?	(Question)
	Girl:	Auckland.	(Answer)
	Teacher:	No, it's Wellington.	(COR)

Moves that Sustain responses

Following the first response to an initial question or structuring move, some person may sustain the idea contained in the opening move of the episode, by following through on responses to it with further questioning and/or information-giving moves. A sustaining move is any communication move used which helps to maintain the theme of an episode.

11. The Redirection Move R

This move occurs only in situations involving more than two people and addresses the same initial question in an episode to one or more other persons. In large groups a series of redirection moves may follow the first response to an initial question. The initial question itself does not have to be repeated, and the move often consists of merely calling another person by name. In general, the objective of the redirection is to gain additional ideas.

Coding rules for the Redirection Move

i) Although non-verbal signals may act to direct, the analysis system codes verbal moves only. Moves coded as answer-initiations (N) may, in fact, have been non-verbally redirected and thus should really be answers. However, the analysis system cannot discern such non-verbal redirection, and responses to such behaviour must, therefore, be coded as answer-initiations.

ii) A redirect move may occur not only in the series of moves immediately following an initial question, but also after further sustaining moves and responses. In such cases, clear

reference is usually made back to the initial question.

12. The Probing Move

Included in this category are questions which seek to go beyond a first response - to expand it, improve its quality, justify it, or broaden it, by relating it to other ideas. A probing move may be addressed to the same person who has just responded or, following a response, the probing move may be addressed to other persons.

In addition to the function of going beyond first responses, the probing move serves to sustain the idea or ideas presented in an initial question which begins an episode.

The probing question is likely to be used when a response is superficial, vague, poorly organised, or incomplete. It may also be used when it is felt that a correct or appropriate response needs to be explored further. A probe may be used to encourage someone who is having difficulty expressing ideas.

12.1 The Probe-Prompt Move. Included in this P^{prom} category are moves which provide clues, hints, or prompts to help someone make a response if he cannot answer, or if he has trouble expressing what he wants to say. The category does not include moves which exhort persons to respond, or which admonish them for not responding well enough. However, the category does include nurturant or encouraging remarks.

Examples

(a) Does anyone know?

(b) Can anybody tell me?

(c) It begins with A———.

(d) Let me try and help. It's a kind of dog I'm thinking of.

12.2 The Probe-Clarification Move. Probes P^{clar} which ask for elaboration, amplification, or classification of a response are included in this category. These probes may be addressed to the same person who has just responded, to other persons following someone else's response, or in such a way that either the person who has just responded or anyone else

may answer.

Examples

(a) What else?
(b) Anything else?
(c) Any other ideas?
(d) What do you mean?
(e) What did she do?
(f) Can you explain further what you mean?
(g) What went 'smack'?
(h) What's meant here?

12.3 The Probe-Critical Awareness Move. p^{caw}

Probes in this category seek to make persons more critically aware of responses already given. They are questions which ask for three main kinds of response:

i) justification for an answer
ii) the evaluation of an answer
iii) a critical examination of the appropriateness of an answer.

The probe-critical awareness may be addressed as an open question to the same person who has just given a response, or to other persons who are called upon to look critically at a response just given by another person.

Examples

(a) Why?
(b) Why do you say that?
(c) How do the worms help?
(d) And where do you think the bank gets its money from?
(e) What have you left out?
(f) Do you agree with Bill's idea?
(g) What's been left out?

12.4 The Probe-Refocus Move. This type of p^{ref} probe calls for an idea in a response to be taken and:

i) related to other ideas or events
ii) applied in a different situation.

As with the probe-clarification and probe-critical awareness moves, the probe-refocus question may be directed at any person or persons in the interaction situation.

Examples

(a) How does this idea of yours relate to ...?

(b) If this is true, what will happen if ...?

(c) Now apply this idea to a bike. Will it work?

(d) How does this idea fit into the view that ...?

12.5 The Probe-Redirect Move. As its name suggests, this move is defined as a redirection which occurs after a preceding probing move and the response or non-response to it. Like the Redirection move, the probe-redirect only applies in situations involving more than two persons. PR

Examples

Father:	And what did you do at school today?	(Initial Question)
$Girl^1$:	We went down to see the birds at Gary Miller's place.	
Father:	Uh-huh. Kerry?	(Redirect)
$Girl^2$:	Mrs Quinton took us too.	
Father:	What kind of birds did you see?	(Probe-Clarification)
$Girl^2$:	Finches, canaries.	
Father:	Mmm. Tracey?	(Probe-Redirect)

Coding rules for Probing Moves

i) When a probing question is framed in such a way that it results in a "Yes", "No", "Mmm" type response it is coded as an opining question (Q^{Op}). However, if subsequent probing obtains elaboration of the response then the original question is coded as a probe.

Examples

(a)	Mother:	What happened to Terry today?	(Initial Question)
	$Girl^1$:	He got into trouble with Mr Johnson.	
	Mother:	Was it his fault again?	(Probe-Critical Awareness)
	$Girl^1$:	Yeah.	
	Mother:	Why?	(Probe-Critical Awareness)
	$Girl^1$:	Because he had been told not to go over to the storeroom.	

(b)	Mother:	What happened to Terry today?	(Initial Question)
	Girl[1]:	He got into trouble with Mr Johnson.	
	Mother:	Was it his fault again?	(Opine)
	Girl[2]:	Yeah.	
	Mother:	Why?	(Abortive-Probe-(Critical Awareness)
	Girl[1]:	I don't know.	

ii) When a probing move directed at a person receives no answer the probe is coded as abortive by drawing a diagonal slash through the coding symbol (~~p^prom~~). To show that the person did not respond only the speaker identification symbol is used.

Example

(Lead up interaction to probe)

Teacher:	Why didn't he go?	T. ~~p^caw~~
Boy:	- - - -	B.

If through subsequent probes a response to the original probe eventuates then the original probe is <u>not</u> coded as abortive.

iii) When a probing move directed at a person receives a response that indicates the answer is not known (e.g. I don't know, Search me) the response is coded as a reaction and, unless subsequent probes elicit a response, then the probe is coded as abortive.

iv) A probing move may be repeated with the same, or nearly the same, form and content. The repeated probing move qualifies as such when the following criteria are met:

i) It occurs prior to the first response
ii) It is a separate question but calls for the same kind of response as the probe preceding it.

The repeated probe may follow immediately after the probe it repeats or be separated from it by a comment or a structuring move. The repeated probe is coded by an encircling line. An example from a transcript might be:

B. AS
F. P^{clar}
F. P^{clar}
B. AI

A probe and its repetition may both abort and should be coded accordingly. A sample from a transcript might be:

B. AS
F. ~~P^{clar}~~
F. ~~P^{clar}~~
B.

v) Two or more different probes may follow a response. To identify the active probe the first response should be examined. The other probe(s) should then be coded abortive. Repetition of probes may also be involved. Some examples from transcripts might be:

(a)
G. AI
M. P^{clar}
M. ~~P^{caw}~~
G. AS (relates to P^{clar})

(b)
B. AS
F. P^{caw}
F. P^{caw}
F. ~~P^{clar}~~
B. AS (relates to P^{caw})

13. The Comment Move [C]

Included in this category are any statements which add new information to that already offered by one or more preceding responses. Statements giving the speaker's own opinions are classified as comments.

Coding rules for the Comment Move

i) When a comment is immediately repeated or restated, both the comment and its repetition are coded as a single move.

ii) Distinguishing the Comment and Answer-Initiation Moves. Both moves add new information. The answer-initiation adds new information to an initial question or probing move which has already been answered, whereas the comment refers to the information in preceding response moves.

iii) The comment move can follow an evaluation made by the speaker.

Example

Father:	Who were the Vikings?	(Initial Question)
Boy:	I think they lived in the North.	(Answer)
Father:	That's right.	(Praise)
	They lived in what we call Norway today.	(Comment)

14. The Use Respondent Ideas Move.

Included in this category is any sustaining question or statement which clearly draws upon the ideas presented by other persons for its content. Because the move is based on preceding response moves within an episode, it is coded as sustaining that episode.

14.1 The Use Respondent Ideas Question Move. U^q

To qualify as a U^q move, the sustaining question must clearly lead out of a preceding move or moves. The question may ask for any of the following:

A summary of preceding ideas.
An analysis of preceding ideas.
A synthesis of preceding ideas.
An interpretation of preceding ideas.
A comparison of preceding ideas.
An inference from preceding ideas.

14.2 The Use Respondent Ideas Statement Move. U^{st}

This move meets the same criteria as the U^q move except it is made in statement form.

Coding rules for the Use Respondent Ideas Move

i) Distinguishing the U^{st} and Comment Moves. The U^{st} move clearly makes reference to the ideas of response moves made by other persons. The Comment move involves the presentation of new information which is added by the speaker. When in doubt as to whether a move should be coded U^{st} or C, the rule is code it as C.

ii) When a statement and question form of the Use Respondent

Ideas Move are combined, the rule is to code the question form only.

iii) Sometimes the U^q and U^{st} move may refer to ideas across several preceding episodes. When this occurs the rule is to code the move within the present episode.

iv) The U^q move may be repeated and any repetitions are encircled.

v) The U^q move may abort, as also may its repetition.

15. The Sustaining Structuring Move

The Sustaining Structuring move may accompany other sustaining moves such as the redirect, probing question, probe-redirect, and use respondent ideas, or be used on its own.

15.1 Sustaining Structuring Substantive Move. SS^{sub} This move performs the same functions as the Substantive Initial Structural Move (S^{sub}) except that it occurs within an episode.

15.2 Sustaining Structuring Procedural Move. SS^{proc} This move performs the same functions as the Procedural Initial Structuring Move (S^{proc}) except that it occurs within an episode.

Coding rules for the Sustaining Structuring Move

i) A sustaining structuring substantive move can be made by any person and is seen as a deliberate attempt to maintain the thematic focus of the episode.

ii) A sustaining structuring procedural move can be made by any participant in the interaction situation. In the reciprocal system the managerial function can be exercised by any participating member in the interaction.

iii) Distinguishing the Comment and Sustaining Substantive Moves. The comment move adds new information to preceding response moves, whereas the sustaining substantive move is a development of the content of the initial substantive structuring

move or preceding sustaining substantive moves.

iv) Distinguishing the Sustaining Substantive and Answer-Initiation Moves. The sustaining substantive move relates to a previous substantive structuring move (initial or sustaining), whereas the answer-initiation move relates to an initial question or probing move.

16. The Answer Own Question Move AOQ

When a question (initial or sustaining) is answered by the person who asked it, either immediately following the question or because no response is forthcoming, the answer move is coded as an AOQ. Where a person provides an answer to his own question because someone else has given an incorrect or inappropriate response, the answer is a correction move (COR or COR^{bec}) not an AOQ.

Examples

(a)	Mother:	Where did we go the Christmas before last?	(Question)
	Girl:	Um - - - -	(No Answer)
	Mother:	Wellington, you silly goose.	(Answer Own Question)
(b)	Mother:	Where did we go the Christmas before last?	(Question)
	Girl:	Um - - - - Wanganui.	(Wrong Answer)
	Mother:	No, it was Wellington you silly goose.	(Correction)

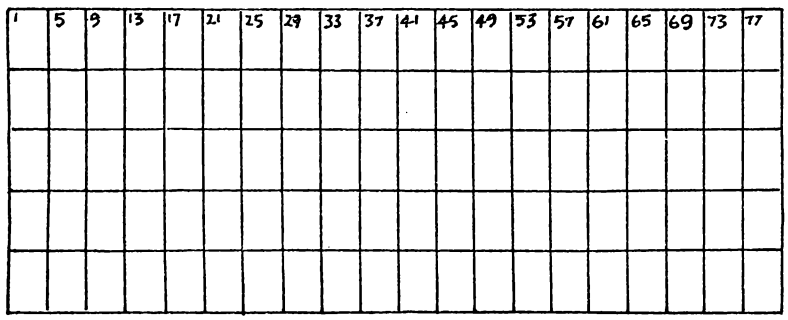
APPENDIX G - SAMPLE CODED INTERACTION

N.B. New episode indicated by horizontal line drawn across sheet.

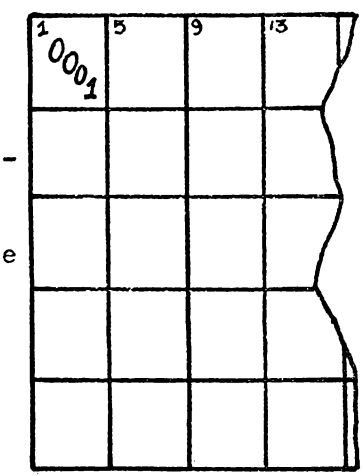
		001-062
T.	What did you do then? - - -	T Q^M
M.	Um I waited until I finished saying everything I wanted to about the pony and then I went on about the dog.	B AE
T.	Good boy. Now why did you do that? - - -	T + T pcaw
M.	Because if I put it in the middle now it wouldn't have made sense. - - -	B AS
T.	Mmm. - - - It might have made sense but it would have um - - -	T AC T Ust
M.	Muddled it up a wee bit.	B RS T +
T.	That's right. Now - - - you always have problems with your spelling don't you?	T Ssub T Q^{OP}
M.	Yes.	B Y/N
T.	What did you do today about your spelling - - - of words that you didn't know? - - -	T Q^M
M.	Well I I looked them up if I wasn't too sure of it I I looked it up in the dic up in the dictionary -	B AS
T.	Mmm.	T AC
M.	-ary if I if to be too sure of it.	B AS

APPENDIX H

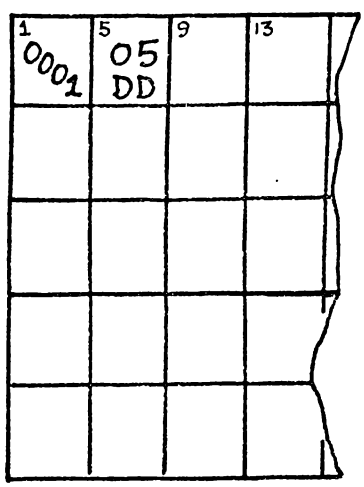
PROCEDURE FOR TRANSFERRING DATA FROM CODED TRANSCRIPTS TO RECORD SHEETS FOR PUNCHING.



Each column on the specially prepared sheet shown above represented four columns on the computer punch card. The rows represent the major categories in Modified SQUAIES (structuring, questioning, responding, acceptance-evaluation, sustaining). This was done to provide an easily followed visual record of the sequence of an interaction.

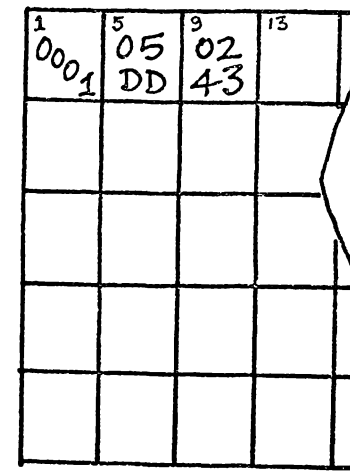


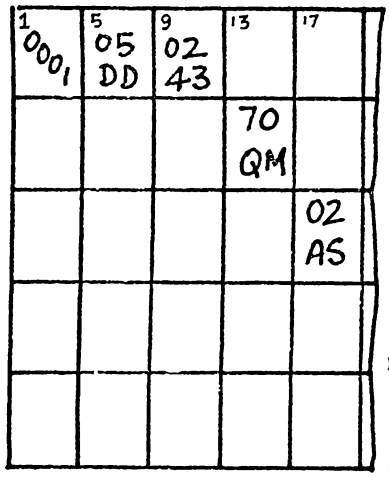
Each punch card was given a numeric identification and this was a four digit number appearing in the first column on each card. The numbering sequence carried right through all punch cards and did not recommence at the beginning of each different interaction.



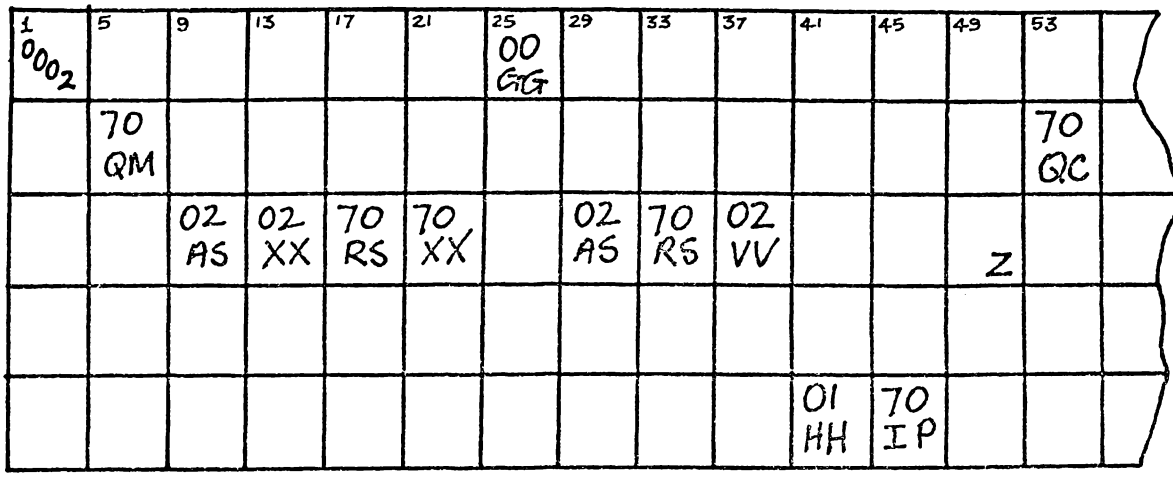
The different interactions were identified in two ways. First by a series indicator which appeared in the second column set (i.e. columns five to eight on the punch card) and showed how many punch cards there were in that particular interaction. Thus, in the example given there were five cards in the series and the 'DD' was the special

symbol to show a new interaction was commencing. This symbol was also useful for checking errors in the sequencing of cards. Second, by a numeric code of four numerals that identified the subject, the type of interaction, and the session in that interaction. This numeric code appeared in the third column set (i.e. columns nine - 12) on the first card of each new series. Thus, the code 0243 would be interpreted as follows: 02 identified the subject (in this case the second boy in the sample), 4 was the number code for the other adult-child situation, and the 3 indicated this was the third of the four sessions in that situation.





The remaining column sets on each card were used to record the moves in sequence. The pattern was always the same. The first two columns of the set used the numeric code to identify the speaker and the second two columns a letter code to identify the type of verbal move. In the example given a memory question (QM) was asked by the adult (70) and received a short answer (AS) by the subject (02). As indicated above, structuring moves were placed in the first row, initial questions in the second row, then responses, acceptance-evaluation moves, and sustaining moves. There was no significance in this order for punching the computer cards, but the sequence in this manner was used for determining the pattern of each episode.



The example above indicates most of the key symbols used. This was the second card (0002) of all the cards used in the study. Because this is not the start of an interaction, neither the series indicator nor the subject and interaction indicators are used. An adult (70) asks a memory question (QM), and this is answered by the subject (02) giving a short answer(AS), which is interrupted (02XX) by the adult(70) who starts to react (RS). The adult's reaction is also interrupted (70XX) by the subject finishing his answer (02AS) and the adult completes his reaction (70RS). While this exchange was going on a minute of interaction had elapsed (00GG) and this was indicated at the appropriate place. After the adult had completed his reaction the subject started to speak again but was interrupted before there was sufficient substantive content to code the move (02VV). The interruption was caused by an aside (HH) of one move (01) by the adult (70) making a procedural comment (IP) to someone not involved in the interaction. The episode finished at this point (Z) and a new episode commenced (70QC).

APPENDIX I

EPISODE INTERACTION PATTERNS

The analysis of interaction patterns was intended, at this stage, only to identify the general parameters of recurring sequences of verbal moves. The opportunity to do this arose from the nature of the procedures adopted to transfer the raw data onto computer punch cards. Advantage was taken of the special episode marker set (Z) to use an additional letter-numeric code to label episode sequences. Because of the principles adopted in writing the programme for analyzing the data, four columns on a punch card were allocated to each verbal move. Appendix H explains the reasons for doing this and the manner in which this was done. Therefore, it was more convenient to use four columns for the end of episode marker (Z), and instead of using Z in each of four columns it was decided to use the other three columns to describe the interaction pattern of that episode.

A combination of letters and numbers was used to give a greater range of possible combinations, and the remaining three columns of the set were used in the following way. The first column was used to describe the manner in which the episode opened (the opening sequence). The second column identified the pattern of moves (if any) following the opening (the body). The third column identified the last move in the episode (the closing move). Thus, each episode was described by the opening sequence of moves, the 'body' of the episode, and the closing move.

Opening sequences. For the purpose of this very general level of analysis an opening sequence was defined as a simple series of complementary verbal moves. These complementary moves related to the five major categories of move used in the coding system: initial structuring (IS), initial questioning (IQ), responding (R), acceptance-evaluation (AE), and sustaining (S). The notion of a complex series of moves arises in discussion of the body of an episode. Sixteen possible opening sequences were identified. These are listed below, and the simplified code used for the second phase of analysis is shown in brackets.

(1) Initial question, response (QA)

(2) Initial question, response, acceptance-evaluation (QAE)

(3) Initial question, response, acceptance-evaluation, sustaining (QAES)

(4) Initial question, response, sustaining (QAS)

(5) Initial structuring, initial question, response (SQA)

(6) Initial structuring, initial question, response, acceptance-evaluation (SQAE)

(7) Initial structuring, initial question, response, acceptance-evaluation, sustaining (SQAES)

(8) Initial structuring, initial question, response, sustaining (SQAS

(9) Initial structuring, initial question, sustaining (SQS)

(10) Initial structuring, response (SA)

(11) Initial structuring, response, acceptance-evaluation (SAE)

(12) Initial structuring, evaluation (SE)

(13) Initial structuring, response, acceptance-evaluation, sustaining (SAES)

(14) Initial structuring, response, sustaining (SAS)

(15) Initial structuring, acceptance-evaluation, sustaining (SES)

(16) Initial structuring, sustaining (SS)

Examples:

(SQA)

Teacher:	Now today I want to consider the effects of banning private cars from the city centre. (S) What do you think might happen if this were done? (Q)
Pupil:	Nobody would come to town to shop. (A)

(SAE)

Teacher:	The Mayor said he would decide how the matter should be resolved. (S)
Pupil:	But he's only one person on the Council. (A)
Teacher:	Right! (E)

(QAES)

Teacher:	Where did the Vikings come from? (Q)
Pupil:	They sailed down the coast from Norway I think. (A)
Teacher:	That's right. (E) They spread all over Western Europe and even sailed through the Mediterranean Sea. (S)

In many instances the opening sequence is synonymous with the episode. That is, there are no other moves in the episode. Where this happened the episode was described as being a simple sequence. The examples given above could all stand as episodes.

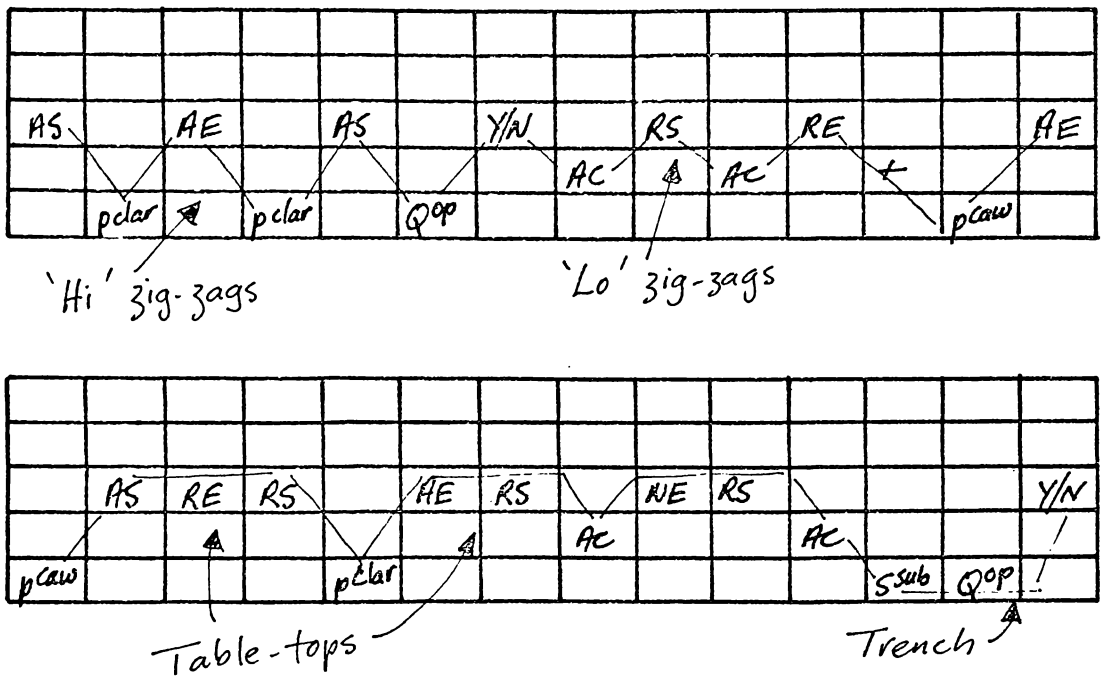
The opening sequences described above were all allocated a single letter or number for the first phase of analysis, and this was placed in the first column of the set at the end of the episode. The letter-numeric code simplified the processing of information through the initial phase of analysis which was directed at cumulative frequencies of moves that opened episodes, were in the 'body' of episodes, and concluded episodes.

The 'body'. Some episodes continued beyond a series of opening moves, and where this happened the subsequent moves were matched against a series of stylised episode profiles. These profiles had been developed from a preliminary analysis of more then 1,000 episodes which indicated three basic characteristics of moves in longer sequences. The profiles were drawn in relation to the forms used to record information from the transcripts.

i) Zig-zags. A repetition of moves from different 'levels' e.g. 'response-sustainer-response-sustainer....' or 'response-evaluation-response-evaluation....' Combinations of those examples could be described as 'hi' or 'lo' zig-zags.

ii) Table-tops. These were a series of two or more moves of the same major category, usually responses, preceded and/or followed by moves from a 'lower' level e.g. 'sustainer-response-response-response-response-evaluation'.

iii) Trenches. These were a series of two or more moves of the same major category, usually sustainers or evaluation, preceded and/or followed by moves from a higher level, e.g. 'response-sustainer-sustainer-evaluation'.



A large number of these stylised profiles were developed from the analysis of the pilot episodes. Following the first phase computer analysis, these profiles were collapsed according to the essential 'shape' of the episode, which meant, in effect, disregarding the incidence of 'table-topping' and 'trenching'. The frequency of many of these profiles was so small that collapsing patterns within the basic 'zig-zag' form was adopted. In the original analysis 34 'body' profiles were developed, and after the first results these were collapsed to one of four types. These involved a repetition of moves of different types.

1) A series of response and sustaining moves (AS).[1]

Example

(The opening sequence precedes this)
Boy: He went to town. (A)
Teacher: Why? (S)
Boy: To get a present for his father. (A)
Teacher: Why? (S)
Boy: Because it was his birthday. (A)
Teacher: Was it really? (S)
Boy: No. (A)

2) A series of acceptance-evaluation and sustaining moves (ES). These occurred very infrequently and tended to be a series of short sustaining statements encouraged by acceptance moves.

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1. At this level of analysis probing moves were collapsed into the category of sustaining moves.

3) A series of response and acceptance-evaluation moves (AE).

Example

(The opening sequence precedes this)
Boy 1: He went over the hill first. (A)
Teacher: Mmm. (E)
Boy 2: But that was only after John called to him. (A)
Teacher: Right. (E)
Boy 2: And then he climbed the hill to see if the hut was still there. (A)
Teacher: Mmm. (E)
Boy 1: It was but the windows were all broken. (A) ....

4) A series of response, sustaining, and evaluation moves (ASE).

Example

(The opening sequence precedes this)
Teacher: Why did Encyclopaedia Brown think John had done it? (S)
Boy 1: Because the footprint was in the sand. (A)
Teacher: Yes. (E)
Girl 1: And it was heavier on one side and he knew he limped. (A)
Teacher: That's right. (E)
Was there anything else? (S)
Girl 2: Oh yes. Encyclopaedia Brown found a ring in the bush. (A)
Teacher: Good girl. (E) ....

In the first phase analysis single letters or numerals were used to identify the 34 types of 'body', and this identification was placed in the second column of the set. Where the episode was of the 'simple' type, a zero was placed in the second column to indicate that there was no 'body' in this sequence.

Episode Ending. The third phase of the interaction sequence related to the type of move with which an episode finished. The end of an episode was really established by the beginning of the following episode. That is, when a change in focus occurred then a new episode had started. There were only three types of move with which an episode could finish:

1) a response,

2) an acceptance-evaluation move,

3) a sustaining move.

The third column of the set was used to indicate the type of move the episode ended with. Where the episode was a simple one, the end move was considered to be the final move in the opening sequence.

Checking the profiles. Although the analysis was only conducted to give general indications of recurring patterns, a sample of 300 of the original 1,000 plus episodes was re-classified by the investigator. An agreement formula was used to test the reliability of these judgements. This was the same type of formula as described in the Method Chapter (p.72). For both opening sequences and episode endings, 100% agreement was obtained, and for 'body' profiles 86% agreement. On the re-classification the judgement was made using the 'collapsed' series of profiles. These were subsequently checked against the profile category on the original 34 profiles.

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