

## Trangressing the Communicative Contract

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### ABSTRACT

A testing situation constitutes a social episode in which a series of tacit rules (or "contract") regulates communicative exchanges between interlocutors, contributing to the establishment of an intersubjectivity. This poster presents three studies which examined the dysfunctioning of the communicative contract in a testing situation in order to observe the existence of these interactional norms. Children (aged 4-5 and 11-12 years) were placed in different interactive contexts where the adult deliberately transgressed the communicative contract (by cheating or by presenting the child with a meaningless task). Quantitative and qualitative analyses of subjects' behaviors suggest that children's responses in testing situations are indissociable from the conditions of their production.

### Introduction

Adult-child communication in a testing situation is part of a complex socio-cognitive interaction with systems of rights, obligations, rules, and tacit agreements. These rights and rules are organized in terms of a tacit *social contract* which constitutes a system of reciprocal expectations that regulates the communicative exchanges between participants. Both the adult and child come to the situation with a certain number of expectations concerning the contractual rules that determine the kind of acceptable questions to be posed by the adult and the authorized answers to be given by the child. This poster presents three studies which each transgressed a contractual expectation. How will children react when confronted with the adult's aberrant behaviour? Will they denounce the adult's transgression or conform to the communicative contract?

## STUDY 1

(N. Bell)

### Contractual expectation transgressed

*The adult's requests and questions will be meaningful.*

#### Research questions

- How will children react when the adult deliberately transgresses this rule by presenting the child with an unknown task which is virtually impossible to solve?
- Will the child construct meaning for this task in the *hic et nunc* of the interaction? If so, what kinds of strategies do children adopt to make sense of the adult's aberrant request?

**procedure:** At the end of a series of psychomotor tasks, 28 4-5 year old children, attending a private school in Geneva, Switzerland, were presented with a combination of unrelated materials (pieces of paper, raisins, nuts) and were asked to make a "sutemi" (an invented name).

#### Results

- Despite the impossibility of knowing the task procedures, 83% of the subjects did attempt to respond to the adult's demand to make a sutemi.
- No subject questioned the intentions or knowledge of the adult and all seemed to take the experimenter's demand seriously.
- 62% of the subjects initially responded with a reaction of surprise (e.g., "what?"), a question of definition (e.g., "what is that?") or a declaration of lack of knowledge (e.g., "I don't know what that means") thereby tacitly stating the conditions which render contractual fulfillment problematic while remaining within the contract.

The acceptance of the adult's demand by trying to perform the task by the majority of the subjects allows them to remain within the contractual obligation but, at the same time, obligates them to actively construct meaning for this meaningless task. The following are examples of interactive strategies children used to respond the adult's demand to "make a sutemi":

- *anchoring* the adult's unusual request to procedures used in the preceding tasks (e.g., "oh, I have to make a pattern!")

- *redefining* the task (e.g., "I made a bird's nest")
- *negotiating* with the adult (e.g., "I'm going to write my name with these things, is that O.K.?.")
- *invention* of performance criteria (e.g., "that's too long")
- *transformation* of incomprehension into incapacity (e.g., "I don't know how to close this fold here")

## STUDY 2

(M.L. Schubauer-Leoni)

### Contractual expectation transgressed

*The problems posed by the adult will have a solution and the information presented in the problem will be pertinent to its resolution.*

#### Research questions

- What cognitive strategies will children adopt when the adult asks them to solve math problems containing absurd information which is irrelevant to the solution?
- Can the modification of contextual and interactive features facilitate or inhibit the child's denunciation of the adult's transgression?

**procedure:** 75 fifth and sixth graders (11-12 years) attending a public elementary school in Geneva, Switzerland participated in this study. Subjects were presented a series of mathematics problems varying in familiarity culminating in the following story problem:

*"There are 12 girls and 15 boys in a class. What is the age of their teacher?"*

The following contextual conditions were examined:

- 1) one-to-one *interview* situation
- 2) collective classroom situation with a *congruence* between the social reality (the age of the class teacher (27 yrs.)) and a likely false response ( $12+15=27$ ) which could inhibit denunciation of the contractual transgression
- 3) collective classroom situation with a *dubitative intervention* by the classroom teacher which could facilitate denunciation of the contractual transgression
- 4) collective classroom situation *without adult intervention*

#### Results

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While the majority of the subjects responded to the adult's absurd

question, the modification of the contextual and interactive features had a noticeable effect on responses: the act of another adult casting doubt on the legitimacy of the math problem presented to the subjects increased the tendency to evoke the impossibility of its resolution while the social congruence between a feature of the social context and a likely answer increased compliance to the adult's absurd demand. It also seems more difficult to renounce the contract in an one-to-one interview situation than in a collective situation.

### STUDY 3

(M. Grossen)

#### Contractual expectation transgressed

*The adult will not knowingly mislead or trick the child.*

#### Research questions

- How will the adult's deliberate falsification of information presented to the child affect the elaboration and maintenance of a cognitive response in the testing situation?
- Will the forewarning by another adult of a possible transgression facilitate the child's apprehension of the type of contract in force in this episode?

**procedure:** 48 10-11 year old children, attending public elementary school in Neuchatel, Switzerland, who demonstrated acquisition of the notion of conservation of weight on a pretest were presented with a modified version of the Piagetian conservation of weights test which had been manipulated to give the child the false impression of disequilibrium in order to present visual evidence directly contradicting the child's conserving judgement. Two conditions were presented:

- 1) *forewarning:* subjects were alerted by another adult to the possibility of the use of "magic" by the experimenter (thus modifying the communicative contract).
- 2) *no forewarning:* subjects were not forewarned of the possibility of the use of "magic"

In the posttest immediately following, the classical version of the Piagetian conservation of weights test was administered to all subjects by a different adult.

#### Results

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It seems that the simple fact of giving an explicit indication of the rupture of the communicative contract is not sufficient to permit subjects to attribute the apparent non-congruence between their conserving judgement and the empirical proof presented by the (falsified) material to the adult's transgression of the contract. However, the higher percentage of conserving responses given by forewarned subjects on the posttest suggests that this warning allowed these subjects to facilitate the re-construction of a conserving responses in this new situation.

#### GENERAL CONCLUSION

The results of these studies indicate that children's responses given in testing situations are indissociable from the conditions of their production. Their actualization is a socio-cognitive act embedded in the adult-child relationship and is subject to regulation by communicative norms (or "contracts"). Both the child and the adult come to the testing situation with expectations and implicit presuppositions which serve as the basis of their behaviors and interpretations. The ease in which subjects conformed to the adult's unusual demands and behaviours in the three studies suggests that a response is not a mere reflection of the child's individual cognitive capacities but it is also a social construction taking place within the social context of the testing situation.

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see also: Schubauer-Leoni, M.L., Bell, N., Grossen, M., Perret-Clermont, A.N. (1990). Problems in the assessment of learning: The social construction of questions and answers in the scholastic context. *International Journal of Educational Research*, 671-683.

Responses of conserving subjects to the conservation of weights tests during experiment (with deception) and posttest according to experimental condition

responses to conservation of weights test during experiment				
	non-conserving	inter-mediate	conserving	total
forewarned condition	13 (54%)	6 (25%)	5 (21%)	24 100%
not forewarned condition	15 (62%)	5 (21%)	4 (17%)	24 100%
total	28 (58%)	11 (23%)	9 (19%)	48 100%

( $z=.39$ ;  $p<.34$ )

responses to conversation of weights test during posttest				
	non-conserving	inter-mediate	conserving	total
forewarned condition	5 (23%)	8 (36%)	9 (41%)	22 100%
not forewarned condition	14 (58%)	6 (25%)	4 (17%)	24 100%
total	19 (41%)	14 (31%)	13 (28%)	46 100%

( $z=2.28$ ;  $p<.01$ )

Responses to "There are 12 girls and 15 boys in a class:  
what is the age of their teacher?" according to contextual  
condition

	contextual conditions				
response type	interview situation	solution congruent with reality	adult intervention	no intervention	total
answer: 27 yr.s or other no.	15 (68%)	17 (85%)	6 (35%)	8 (50%)	46 (61%)
answer: 27 yr.s + "impossible"	1 (5%)	0 (0%)	0 (0%)	2 (12%)	3 (4%)
answer: "impossible to solve"	3 (14%)	3 (15%)	10 (65%)	5 (31%)	21 (28%)
other responses	3 (14%)	0 (0%)	1 (0%)	1 (6%)	5 (7%)
total	22 100%	20 100%	17 100%	16 100%	75 100%