## LINGUISTIC PARALLELISM: A REAL-TIME STUDY

## Maria Marta Pereira Scherre (UnB/CNPq/UFRJ) Anthony Julius Naro (UFRJ/CNPq)

We show that the discourse level parallel processing effect is the strongest variable constraint in subject/verb concord in spoken Brazilian Portuguese. Parallel contexts are represented by sequences of clauses, typically topic chains in narratives, that repeat the same subject, whether explicit or not. The parallel processing constraint can be stated as: marking leads to more marking, lack of marking leads to more lack of marking.

We study data from two random samples recorded at an interval of about twenty years. In this real time study, we analyze 4713 tokens from the 1980's and 2079 tokens from the 2000's. In terms of relative weights, our overall results are:

	1980	2000
	Input .81	Input .92
Verb preceded by unmarked verb	.20	.18
Verb preceded by marked verb	.64	.62
Isolated or first of a series	.48	.42
Range	.44	.44

The parallel effect group is the first chosen by the VARBRUL step-up procedure in both samples.

Scherre & Naro 1992, studying noun phrase and subject/predicate adjective concord, claim that variation is so tightly constrained in contexts where parallel processing operates that it is virtually immune to social pressures, such as education, that favor prestige variants. Their study contains data from two levels of education (5-8 years and 9-11 years of schooling) and uses the same data as our 1980 sample.

Here we study subject/verb concord and add the 1-4 years of schooling level. As in the previous study, education is not selected as a valid constraint for serial contexts in 1980, although it is selected in 2000. Nonetheless, it is important to note that in the 2000 results, the range of the education variable in serial contexts is less than for isolated/first contexts. Furthermore, for isolated/first contexts, education is the first variable selected, while it is not selected until the fourth step for serial contexts. This indicates that while the effect of education is not suppressed for parallel contexts in 2000, it is weaker than in non-parallel contexts.

## Our results are:

	1980			
	All tokens	Only Isolated/First	Only Serial	
	Input .81	Input .81	Input .81	
Years of schooling	5th group selected	4th group selected	not selected	
1-4	.43	.40	(.46)	
5-8	.55	.55	(.54)	
9-11	.54	.57	(.50)	
Range	.12	.17	(.08)	
	2000			
	All tokens	Only Isolated/First	Only Serial	
	Input .92	Input .89	Input .94	
Years of schooling	3rd group selected	1st group selected	4 <sup>th</sup> group selected	
1-4	.27	.20	.35	
5-8	.50	.52	.48	
9-11	.82	.83	.77	
Range	.55	.63	.42	

The selection of education in serial contexts in 2000 may be due to the fact that education exhibits a stronger effect in 2000, with an overall increase of 10 percentage points with respect to 1980. Our findings indicate that the hypothesis that parallel contexts are immune to social pressure was true of all three variable agreement rules in 1980. Nonetheless, the stronger effect of education was sufficient to penetrate parallel contexts in 2000.

## References

Scherre, Maria Marta Pereira & Naro, Anthony J. The serial effect on internal and external variables. *Language Variation and Change*, **4** (1992), 1-13.