

The English Passive Under Corpus Scrutiny: Some Cognitive Models of Transitivity Revisited

There have been numerous attempts over the past several decades to give a more conceptually and/or discourse motivated account of what most of us now assume to be a range of constructions known familiarly as the English Passive. Two accounts, in particular, are multi-factorial in spirit and each uses an acceptable passive construction as an indicator of “high transitivity” in the corresponding active: Hopper & Thompson’s 1980 analysis based on 10 binary features more or less linkable to morphosyntactic coding in the proposition (the verb and its arguments) and Rice’s 1987 analysis based on 15 more global (propositional and extra-propositional) features which she interprets as somewhat inter-dependent continua. The details of these two models of transitivity can be found on the next page. Neither analysis, both developed in a pre-corpus era, looked across the full range of construction-related phenomena that contemporary corpus linguists take for granted: modality (spoken vs. written), genre (formal vs. casual), lemma effects, inflectional effects, and collocational effects in general (such as presence of a negative, intensifier, other modifying or manner material).

In this study, we searched for passive participial forms from Mark Davies’ Corpus of Contemporary American English (COCA) that could occur with at least two of the three “passive” auxiliaries (*be*, *get*, *become*). We randomly selected 500 instances per auxiliary by genre (spoken vs. written), ending up with 3000 concordance lines in total. We then coded each concordance line according to the high or low binary values of the 10 features of the Hopper & Thompson 1980 model, the 15 features of the Rice 1987 model, as well as a variety of syntactic and semantic values for the participants (e.g., pronominal vs. nominal form, person, number, animacy, etc.).

In statistically comparing between these two models as well as between them and our own factors, we applied both (1) polytomous logistic regression (see e.g. Arppe 2008) as well as its novel extension to (2) corresponding polytomous mixed-effects logistic regression modeling. The key benefit of these two statistical methods is that they allow us to estimate the relative weights of the linguistic explanatory variables in natural terms as odds, as well as to model the impact of their joint occurrence in various combinations as expected probability distributions for the alternative constructions. Moreover, with the latter model we can directly incorporate the effect of extra-propositional factors such as modality, genre, and even lemma-specific biases, these being the standard types of factors that contemporary corpus linguists (especially those taking a cognitive/constructional perspective) look at today. As an additional outcome, we have also developed specialized profiles for *be* passives, *get* passives, and *become* passives in English. This research is part of a larger study investigating the collostructional analysis of the individual auxiliaries as well as the constructional behaviour of some “classic” alternating argument structure constructions (e.g., datives, *load-locatives*).

References

- Arppe, Antti (2008). *Univariate, bivariate & multivariate methods in corpus-based lexicography – a study of synonymy*. [PhD Diss.] Publications of the Dept of General Linguistics, University of Helsinki, No. 44. URN: <http://urn.fi/URN:ISBN:978-952-10-5175-3>.
- Hopper, Paul & Sandy Thompson (1980). Transitivity in grammar and discourse. *Language* 56 (2): 251-299.
- Rice, Sally (1987). *Towards a cognitive model of transitivity*. [UC San Diego PhD Diss.]

Table 1. *Hopper and Thompson's (1980: 252) ten binary components of high and low transitivity.*

	HIGH TRANSITIVITY	LOW TRANSITIVITY
A. PARTICIPANTS	2 or more (A and O)	1 participant
B. KINESIS	action	non-action
C. ASPECT	telic	atelic
D. PUNCTUALITY	punctual	non-punctual
E. VOLITIONALITY	volitional	non-volitional
F. AFFIRMATION	affirmative	negative
G. MODE	realis	irrealis
H. AGENCY	A high in potency	A low in potency
I. AFFECTEDNESS OF O	O totally affected	O not affected
J. INDIVIDUATION OF O	O highly individuated	O non-individuated

Table 2. *Rice's (1987: 145) fifteen continua of high and low transitivity.*

TRANSITIVITY	
+	-
contact.....	proximity/distance
direction.....	location
force-dynamic.....	configurational
external reaction.....	internal reaction
speed or force plus movement.....	pure motion
change of location.....	serial position
interaction between co-animates.....	action within a setting
goal-oriented.....	source-oriented
directed approach.....	outward extension
independence of participants.....	contingence of participants
asymmetrical participants.....	symmetrical participants
perfective action.....	imperfective situation
communicative effect.....	minimal differentiation
non-spatial cognitive domain.....	spatial cognitive domain