# The German *Perfekt*: Activation of the Resultant State?

#### Edith Scheifele

Eberhard Karls Universität Tübingen Edith.Scheifele@gmx.net

#### Introduction

The German *Perfekt* is an intricate structure; sometimes exhibiting a preterit reading similar to the *Präteritum* (1a - 1b) and sometimes exhibiting a resultant state reading which the *Präteritum* lacks. Continuing with an adjectival passive, explicitly referring to the resultant state, is therefore felicitous after a *Perfekt* sentence (2a) but somewhat odd after a sentence in the *Präteritum* (2b).

- (1) a. Ich habe eine Zeitung gelesen.
  - I have a newspaper read.
  - 'I read/was reading a newspaper.'
  - b. Ich las eine Zeitung.
    - I read a newspaper.
    - 'I read/was reading a newspaper.'
- (2) a. Tom hat die Tafel gewischt. Die Tafel ist also gewischt.

Tom has the board cleaned. The board is thus cleaned.

'Tom has cleaned the board. The board is thus cleaned.'

b. Tom wischte die Tafel. ?Die Tafel ist also gewischt.

Tom cleaned the board. The board is thus cleaned.

'Tom cleaned the board. The board is thus cleaned.'

The resultant state expressed by the *Perfekt* and referred to by the adjectival passive *ist* gewischt can be thought of as a contingent state of Tom's action of cleaning the board, as indicated by the also ('thus'). Furthermore, the example in (2a) shows that the resultant state attributed to the *Perfekt* is present at the moment of speech, making it possible to refer to it by the present tense of the copula (*ist*) of the adjectival passive.

### Theoretical accounts

Some (older) theoretical accounts (e.g., Admoni 1966) treat the resultant state reading as a side-effect of the *Perfekt* whose main function is to locate a situation in the past, or do not assign a resultant state (reading) to the *Perfekt* at all, treating the *Perfekt* as being semantically equal to the *Präteritum* (e.g., Glinz 1994). Current accounts on the other hand (e.g., Musan 1999, Kamp et al. unpublished) consider the resultant state as a core meaning component of the grammatical meaning of the *Perfekt*.

Additionally, the situation type of the verb seems to play a major role when analyzing the meaning of a *Perfekt* sentence. For Musan (1999) verbs and verbal phrases that provide a

resultant state are pragmatically relevant to the interpretation of the resultant state attributed to the German *Perfekt* (Musan 1999: 15). Ehrich & Vater (1989) differentiate between resultative (e.g., *ein Haus bauen*, 'to build a house' and *finden*, 'to find') and non-resultative verbs (e.g., *tanzen*, 'to dance' and *husten*, 'to cough'), within their account, only the former provide a resultant state reading with a *Perfekt*. They account for that resultant state as being 'real' rather than merely fictitious (Ehrich & Vater 1989: 124).

## **Online experiment**

The goal of my experiment was to investigate whether the resultant state is mentally more activated after having read a sentence in the *Perfekt* as opposed to having read the corresponding sentence in the *Präteritum*. To test the mental availability of the resultant state, I used a variant of the picture-sentence-verification task (Clark & Chase 1972) as has been developed and implemented by Claus & Kriukova (2012) to test the mental availability of the contrasting state of adjectival passives.

Participants (n = 32, mean age 26.1 years) read a sentence either in the *Perfekt* (3a) or in the *Präteritum* (3b). Subsequently, they saw a picture depicting either the resultant state of the described action or the intermediate state (Figure 1). As soon as they had identified the depicted object, they were to press a button.

- (3) a. Eva hat eine Banane geschält. Eva has a banana peeled. 'Eva has peeled a banana.'
  - b. Eva schälte eine Banane.Eva peeled a banana.'Eva peeled/was peeling a banana.'

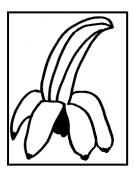




Figure 1: Example of the pictures used; Left: resultant state picture, right: intermediate state picture

I used verbal phrases denoting a resultant state (a subgroup of Vendler's (1957) *accomplishments*). Those verbal phrases are claimed to enhance the resultant state reading of a *Perfekt* (Ehrich & Vater 1989, Musan 1999). To make corresponding pictures easier to draw, I used exclusively change-of-state verbs.

If the German *Perfekt* activates the resultant state more than the *Präteritum* does, then participants should be faster in identifying the resultant state after having read a sentence in the *Perfekt* than after having read the corresponding sentence in the *Präteritum*.

A linear-mixed-effects analysis with trail (the sequence of items) and picture type as fixed effects and participants and picture as random effects yielded no interaction between sentence type (*Perfekt* or *Präteritum*) and picture type (resultant state or intermediate state). The two main effects were trail (participants who were fast at the beginning slowed down whereas those who were slower at the beginning got faster) and picture type. The main effect of picture type was due to the resultant state pictures being significantly faster identified than the intermediate state pictures. This effect is difficult to interpret. For though paying attention to keep the two picture types similar to each other (with regard to complexity, format, ect.), they might nevertheless have not been equally easy to identify.

According to these results, that is, lacking an interaction effect of picture type and sentence type, participants equally fast identified the resultant state pictures whether they had previously read a sentence in the *Perfekt* or *Präteritum*. So my hypothesis could not be confirmed.

From a null effect like this, it is premature to conclude that the *Perfekt* does not denote a resultant state at all. The experimental design might not have been appropriate to reveal a difference between the *Perfekt* and *Präteritum*. Several reasons are possible. One might be that the effect of the resultative verbal phrases might have over-ruled the flimsy effect of the *Perfekt*. Despite of being claimed to be good candidates for exhibiting a resultant state reading with a *Perfekt* (Musan 1999, Ehrich & Vater 1989), further research on other situation types should be considered.

#### References

Admoni, V. (1966) Der deutsche Sprachbau, Moskau/Leningrad.

Clark, H. H. & Chase, William G. (1972): On the process of comparing sentences against pictures, *Cognitive Psychology*, 3 (3): 472-517.

Claus, B. & Kriukova, O. (2012) Interpreting adjectival passives: Evidence for the activation of contrasting states. In B. Stolterfoht and S. Featherston, eds., *Empirical approaches to linguistic theory*, 187-206.

Ehrich, V. & H. Vater (1989) Das Perfekt im Dänischen und Deutschen. In W. Abraham and T. Janssen, eds., *Tempus, Aspekt, Modus*, 103-132.

Glinz, H (1994) Grammatiken im Vergleich. Deutsch, Französisch, Englisch, Latein: Formen, Bedeutungen, Verstehen, Tübingen.

Kamp, H., U. Reyle, & A. Rossdeutscher (unpublished) Perfects as Feature Shifting Operators, 1-84.

Klein, W. (2000) An Analysis of the German Perfekt, Language, 76 (2): 358-382.

Musan, R. (1999) Die Lesarten des Perfekts, In W. Klein and C. Fabricius-Hansen, eds., Das deutsche Perfekt (Zeitschrift für Literatur und Linguistik, 113): 6-51.

Vendler, Z. (1957) Verbs and Times, Philosophical Review, 66 (2): 143-160.