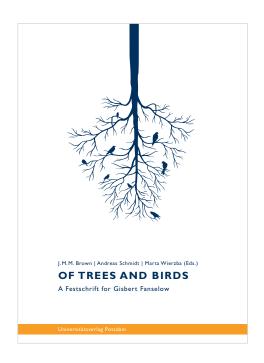
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# Experimenting with *Lurchi*: V2 and agreement violations in poetic contexts

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#### 1 Introduction

The present contribution resumes a project that Gisbert Fanselow initiated roughly ten years prior to the publication date of this paper. To the best of our knowledge, it was originally inspired by the adventures of the amphibian comic character *Lurchi*, told in simple rhymes such as (1), by a manufacturer of children's shoes for advertising purposes:

 Sie singt mit Gefühl: Zum Fest bei der Mühl' Lurchi Euch lädt. Kommt nicht zu spät She sings with feeling: To the party at the mill Lurchi you invites Don't be late

Our paper is concerned with deviations from standard grammar in poetic contexts. In 2010 and under Gisbert's guidance, we conducted a pilot acceptability study investigating poetic licensing of different grammar violations, including the violation of the V2 constraint in German as exemplified in (1) (lines 2-3). This preliminary study suggested that V2

violations are ameliorated in poetic contexts, whereas agreement violations are not. On the occasion of this Festschrift, we ran a follow-up study that replicates the results of the first experiment and extends it to investigate the role of rhyme in poetic licensing. Below we provide some basic theoretical background on our study (section 2), we report our experimental setting and results (section 3) and then conclude (section 4).

# 2 Background: Poetry and grammar

Poetic language<sup>1</sup> is constructed according to specific rules and principles that do not necessarily coincide with the rules of standard grammar (see, e.g., Mukařovský 1964, Bierwisch 1965, 2008, Leech 1969). On the one hand, poetic language is subject to specific form-related constraints (regarding rhyme, meter and so on) that are absent in non-poetic language. Even modern poetry, which freed itself from several constraints on versification, still makes use of rhythm and other patterns and hence submits itself to restrictions. On the other hand, poetic language enjoys greater freedom than prose; marked structures are more frequent, deviations from the rules of standard grammar are acceptable. Deviations and violations can occur at all levels of language description: lexical innovations (neologisms), morphological deviations (mainly regarding word-formation), syntactic deviations (especially unusual word order), phonological deviations (elision, apocope etc.), graphological deviations (e.g., unusual spelling or punctuation and use of non-standard capitalization) as well as semantic deviations (logically inconsistent and often paradoxical meanings). Furthermore, poetic language may diverge from standard language by intermixing registers, areal varieties, dialects, as well as historical varieties (Leech 1969). The stanza in (1) involves a phonological deviation in its second line (Mühle occurs as Mühl' lacking the final schwa) and a syntactic deviation in the third line (the verb *lädt* occurs in clause final position violating the V2-constraint for main clauses). In both cases, the deviation seems to be motivated by rhyme.

<sup>1.</sup> Here we focus on poetic language in the narrow sense, i.e., opposing to prose and not comprising all literary language.

One might consider deviation for rhyming purposes a feature of more simple poems like (1), but deviations that ensure a rhyme scheme occur in more sophisticated poetry as well. The example in (2) is taken from Alexander Pope's *Essay on Criticism* (1711).

(2) Our sons their fathers' failing language see And such as Chaucer is, shall Dryden be.

The poetic effect of the word order deviation in (2) clearly goes beyond rhyming. It brings the moved element into the focus of attention ("foregrounding"). Leech (1969: 61) argues that deviations disrupt normal comprehension and leave a gap that can be filled by the reader/hearer. If so, the deviation gains significance, a special, poetic meaning. "A poem, like any piece of language, must of course put its words into grammatical order. Yet a poem has particular freedom in the way it constructs its grammar, related to the fact that a poem can give to grammar, as to everything it handles, a special meaning in the patterns and design of the poem." (Wolosky 2001: 4-5)

Bierwisch (1965: 52) provides the German examples in (3) to illustrate how poetic effect is achieved by violating different kinds of grammatical constraints, causing different grades of deviation from standard language.

- (3) a. Die nackten Stühle horchen sonderbar. 'The naked chairs listen strangely.' (Lichtenstein)
  - Das am Telefon wollte der Schuldturm nicht sagen.
     'That (thing) at the phone, the debtors' prison wouldn't tell it.'
     (Johnson)
  - c. Dort lint es Böck, dort beint es hohl, es waldet grün und witzt. (Schwitters)

Deviations can be deemed as constitutive for poetic language (e.g., Shklovsky 1965, Mukařovský 1964, Levin 1965, Leech 1969, Baumgärtner 1965). However, not all kinds of ungrammaticality can be licensed by poetic context or cause poetic effects, some remain plainly ungrammat-

ical and unacceptable (Levin 1965, Bierwisch 1965). An example (again from Bierwisch 1965) is given in (4).

(4) \*Es war an eines Sonntagvormittags in schönster Frühjahr.

Bierwisch (1965) provides a theoretical model of poetic text processing from the perspective of generative linguistics in which specific rules of poetic structuring operate on the well-formedness constraints of UG. He proposes an esthetic system P which ranks the output structures of the grammatical system G (whether grammatically well-formed or not) on a scale of *poeticity* (Poetizität) on the basis of a definable set of poetic structure rules. In this system, grammaticality violations in poetry appear to be systematic in the sense that, in Bierwisch's terms, deviant or even ungrammatical structures might be chosen in rather poetic contexts if the rules of P override the rules of G. The observation that nonetheless not all types of grammar violations are licensed by poetic context is a crucial premise for the present study.

More recently, this observation has been worked out in some detail by Bade & Beck (2017), who focus on the semantics and pragmatics of lyrical texts and the potential merit of poetry as a data source for linguistics. Based on exemplary analyses of different text segments (drawn from related earlier studies such as Bauer & Beck 2009 and Markus Bauer et al. 2010, Matthias Bauer et al. 2015), the authors argue that lyrical texts provide a valuable data source for linguistic theory as they help linguists to distinguish between inviolable core parts of the grammar and more flexible constraints. For instance, Bade & Beck (2017) illustrate that in poems certain context-dependent expressions such as pronouns are often used without appropriate salient antecedents (5), which usually leads to presupposition failure (and thus unacceptability), in normal discourse (6).

(5) He fumbles at your soul.

(E. Dickinson)

- (6) A: He sneezed.
  - B: What? I don't know who you mean by "he".

In contrast to permissible semantic/pragmatic violations of this kind, Bade & Beck (2017) argue, basic semantic mechanisms such as composition rules and restrictions on type shifting are inviolable also in poems. Their most central proposal is summarized by the authors as in (7).

(7) Lyrical texts follow the rules of UG. They deviate from G in ways similar to certain language varieties. They do not allow for violations of universal rules, e.g. type shifting rules and rules of composition.

In the same spirit, the 'Development Hypothesis' as formulated by Fabb (2010) states that "Literary language is governed only by rules and constraints which are available to ordinary language, and which refer only to representations which are present (at some stage in a derivation) in ordinary language." Fabb (2010: 1220). In Petzell & Hellberg (2014), this hypothesis is discussed and tested against data from a corpus of 19th century Swedish poetry, with a special focus on word order variation and violation of the V2 constraint in Swedish. In the study described below we pursue a similar goal with a different methodology, eliciting acceptability judgments on constructed materials in German.

## 3 Experiment

#### 3.1 Goals

The first goal of our study is to test empirically whether there are grammatical rules that can be violated in poetry, but not in prose. Second, we aim to test whether there is indeed a distinction between rules that are inviolable even in poetic contexts, and rules that are violable. We compare violations of the (language-specific and sentence-type specific) V2 rule to violations of subject-verb agreement. Finally, the experiment is designed in such a way that it can help to distinguish between two possible explanations for a potential effect of poetic context. If we find an ameliorating effect on violations of a grammatical rule R, it is conceivable that R is inactive in certain text types. Alternatively, R might be active, but its violation could be cost-free if it helps to avoid the violation

of some higher-ranked, poetic/esthetic rule P. Bierwisch's (1965) model is an example of such a constraint-based system with two interacting sets of rules. If the latter account is correct, we would expect it to make a difference whether the violation of R is motivated by an esthetic consideration. In our experiment, we operationalized this by varying whether a rule violation contributed to creating a rhyme at the end of a line or not.

## 3.2 Design and materials

The following factors were manipulated in the experiment: (i) (type of) VIOLATION (levels: no violation, V2 violation, agreement violation), (ii) TEXT TYPE (levels: poem, prose), and MOTIVATION (only manipulated within the poetic conditions with a rule violation; levels: violation motivated by rhyme, violation unmotivated). An example item set is shown in (8) along with a translation. The V2 and agreement violations are marked in boldface (and roughly replicated in the English translation). The rhyming pattern is indicated by letters at the beginning of each line. We tried to keep the prose conditions as close as possible to the poetic ones, but we took care to avoid any rhymes.

## (8) a. Poem – no violation:

A Das Ufer ist steil, The bank is steep
B Es baden Studenten, There are students bathing
C Ein Kater verschreckt A tomcat scares off
B Durch Fauchen die Enten. By hissing the ducks.

#### b. Poem – V2 violation – motivated by rhyme:

A Das Ufer ist steil

B Und von Unkraut bedeckt,

C Ein Kater durch Fauchen

B Die Enten verschreckt.

The bank is steep

And covered with weeds

A tomcat by hissing

The ducks scares off

#### c. Poem – V2 violation – unmotivated

A Das Ufer ist steil, The bank is steep
B Es baden Studenten, There are students bathing

C Ein Kater durch Fauchen A tomcat by hissing B Verschreckt die Enten. Scares off the ducks

#### d. Poem – agreement violation – motivated by rhyme

A Am Ufer sind Hecken,
B Es baden Studenten,
A Ein Kater verschrecken
B Durch Fauchen die Enten.

At the bank are hedges
There are students bathing
A tomcat scare off
By hissing the ducks

#### e. Poem - agreement violation - unmotivated

A Das Ufer ist steil, The bank is steep
B Es baden Studenten, There are students bathing
C Ein Kater verschrecken A tomcat scare off
B Durch Fauchen die Enten. By hissing the ducks

#### f. Prose – no violation:

Am Ufer baden ein paar Schüler. In der Nähe verschreckt ein Kater fauchend die Enten.

'At the bank there are a few pupils bathing. Nearby, a tomcat, hissing, scares off the ducks.'

## g. Prose – V2 violation:

Am Ufer baden ein paar Schüler. In der Nähe ein Kater fauchend die Enten **verschreckt**.

'At the bank there are a few pupils bathing. Nearby, a tomcat, hissing, the ducks scares off.'

## h. Prose – agreement violation:

Am Ufer baden ein paar Schüler. In der Nähe **verschrecken** ein Kater fauchend die Enten.

'At the bank there are a few pupils bathing. Nearby, a tomcat, hissing, scare off the ducks.'

We constructed 32 items in 8 conditions. The items were distributed across 8 lists using a Latin Square Design.

#### 3.3 Participants and procedure

32 native speakers of German, all recruited at the University of Potsdam, took part in the experiment. They received course credit for participation. The study was made available online using the questionnaire software L-Rex (Starschenko 2018). The experimental materials were pseudo-randomized, intermixed with fillers (item-filler ratio 1:2), and presented in two blocks. The first block contained only prose sentences, and the second block contained only poems, which were displayed with line breaks as shown in (8) above. Both blocks were preceded by the instruction to rate how acceptable each text is with respect to language (in German: Wie akzeptabel ist der Text (sprachlich)?) on a scale from 1 (unacceptable) to 7 (acceptable). Each stimulus was presented on a separate page. In sum, each participant rated 96 stimuli.

#### 3.4 Results

The mean acceptability ratings are summarized in Tables 21.1 and 21.2 and illustrated in Figure 21.1.

For the inferential statistic analysis, we performed by-subjects and by-items ANOVAs and computed minF' (Clark 1973) to get a highly conservative estimate of the reliability of the effects. We first computed the overall interaction of the factors (type of) violation and text type in order to address the question whether violations in poetry are judged differently from violations in prose. The interaction was significant, minF'(2, 119) = 15.09, p < .001. While the no violation and agreement violation condition showed no significant effect of genre, both minF's < 1, the difference between poetry and prose for the V2 violations turned out to be significant, minF'(1, 62) = 37.20, p < .001: V2 violations were judged as much less acceptable when presented in prose than in poetry (2.21 vs. 4.69).

For the poetry conditions, we further checked for the effect of motivation on the violation types. To do so, we first again computed the overall interaction of motivation and violation; only cases with violations entered into this analysis, rendering this a  $2\times 2$  subdesign. The interaction turned out to be not reliable, minF'(1,61) < 1, and there

was no effect of motivation, minF'(1,61) < 1.

Table 21.1: Mean acceptability ratings by TEXT TYPE and VIOLATION, standard deviation in parentheses

	no violation	V2 violation	agreement violation
poem	5.94 (1.49)	4.69 (1.74)	3.05 (1.98)
	5.70 (1.42)	2.21 (1.46)	2.94 (2.07)

Table 21.2: Mean acceptability ratings by MOTIVATION and VIOLATION (only for the subset of conditions in which motivation was manipulated), standard deviation in parentheses

	V2 violation		agreement violation	
	motivated	unmotivated	motivated	unmotivated
poem	4.84 (1.70)	4.55 (1.77)	3.07 (1.93)	3.04 (2.03)

#### 4 Discussion

Our new experiment, this time with more systematically controlled materials, replicated the core result of the 2010 pilot study: some grammatical violations (here: violations of the V2 word order constraint in German main clauses) are ameliorated in poetic contexts, whereas others (here: violations of subject-verb agreement) consistently lead to an acceptability decrease irrespective of the prose/poetry manipulation.

This finding supports the claim that not all ungrammatical sequences are poetically licensed (Levin 1965, Bierwisch 1965). Moreover, the observed discrepancy in poetic licensing between the V2-violation and the agreement violation is in line with the example in (4) taken from Bierwisch (1965) and repeated here as (9a) (together with the grammatical version in (9b) which is the first sentence in Kafka's *The Judgement*).<sup>2</sup>

<sup>2.</sup> The example is taken from prose but the argument holds for poetic language in the narrow sense, i.e. poems, as well.

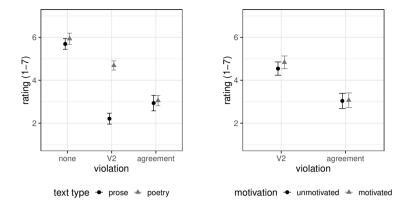


Figure 21.1: Left plot: mean acceptability ratings by Text type and Violation. Right plot: ratings by motivation and Violation (only for the subset of conditions in which motivation was manipulated). Error bars correspond to  $\pm$  two standard errors.

- (9) a. \*Es war an eines Sonntagvormittags in it was at a.masc.gen Sunday.morning.(masc).gen in schönster Frühjahr.
  nicest.fem.dat spring.(neut)
  - b. Es war an einem Sonntagvormittag im it was at a.masc.dat Sunday.morning.(masc).dat in schönsten Frühjahr.
    nicest.Neut.dat spring.(Neut)

'It was on a Sunday morning at the most beautiful time of spring.'

The ungrammatical version in (9a) involves an agreement violation, in this case NP-internal gender agreement, in addition to violations of case. The word form *schönster* is ambiguous with respect to its morphosyntactic features, but no possible combination of case, gender and number fits the gender and number of the noun *Frühjahr*. Thus, the adjective does not agree with the noun. As Bierwisch (1965) pointed out, this violation cannot be licensed by a poetic context. The same holds for the

agreement violation in the experiment. Participants deemed agreement violations as degraded in poetic and prose contexts likewise. Apparently, deviation from word order constraints is more easily licensed in poetic contexts than other deviations from morphosyntactic constraints. Feature-related deviations seem to be rare if they occur at all. This bears an interesting resemblance to speech errors. Though many phonological errors can be analyzed either at the level of the segment or the feature (e.g., pits and beeses for bits and pieces, which could be an exchange of the features [+voiced] and [-voiced] or the segments /p/ and /b/), unambiguous feature errors are quite rare (Shattuck-Hufnagel & Klatt 1979). Admittedly, this generalization concerns phonological errors and cannot be directly compared with syntactic deviations as in our experiment. Agreement errors do occur in language production but mainly in configurations that involve interfering elements (so called agreement attraction). We consider it an interesting topic for future research to compare the distribution of speech error types (unintended deviations) to the distribution of deliberate deviations in poetic contexts. Perhaps a deviation is more effective in evoking surprise and creating attention if it is unlikely to be unintended.

Another difference between V2-violations and agreement violations that might be crucial here is that deviations from V2 are grammatical in other sentence types—e.g., embedded clauses are verb-final and yes/no-questions are verb-initial in German. Agreement violations, on the other hand, are not licensed in any sentence type or discourse context. It is conceivable that this difference underlies the observed difference in the acceptability of the violations in poetic contexts.

In addition to the factors violation and text type, we tested whether the amelioration in poems takes place only if the violation of the grammatical rule serves to satisfy an esthetic constraint. We found no support for this view: the V2 violation was accepted in both conditions (+motivated and —motivated) likewise. This null effect does not exclude, however, that poetic licensing is facilitated when motivated by some poetic constraint or effect. Perhaps, the motivating factor we manipulated in the experiment (rhyme) was not appropriate or not strong enough.

Putting the verb in (8b) at the end of the last line and thereby violating the V2 constraint creates an *ABCB* rhyme scheme. However, (8c) follows the same rhyme scheme. We created the material this way because we wanted to minimize the impact of any preference for a certain rhyme scheme.<sup>3</sup> Given that every poem in our experiment involves only a single stanza, readers cannot know which rhyme scheme the authors of the poem aimed for and might be satisfied with any rhyme scheme. Judging by the result, both (8b) and (8c) fulfill a rhyme scheme. To see that the rhyme in (8b) is the result of the unusual position of the verb one would have to compare (8b) to a V2-obeying version of it. However, obeying the V2 constraint would result in rhyme schemes as well. This is shown in (10).

(10) a. Version of (8b) obeying V2

A Das Ufer ist steil

B Und von Unkraut bedeckt

B Ein Kater verschreckt

C Durch Fauchen die Enten

The bank is steep And covered with weeds A tomcat scares of By hissing the ducks

b. Version of (8c) obeying V2
A Das Ufer ist steil,
B Es baden Studenten,
C Ein Kater verschreckt
B Durch Fauchen die Enten.

The bank is steep
There are students bathing
A tomcat scares of
By hissing the ducks

Putting the verb in its canonical clause-second position has no effect for the rhyme scheme in the [-motivated] condition—(10b) retains the *ABCB* scheme of (8c). In the [+motivated] condition, the original rhyme scheme is lost. The *ABCB* scheme of (8b) is converted into an *ABBC* scheme in (10a). Though this is not a common rhyme scheme, it involves at least a rhyme and it is the verb which rhymes with the preceding line.

<sup>3.</sup> An alternative would be to compare versification including some rhyme scheme to free verse. One would probably need to test both types of versification in all three levels of the factor Violation in order to control for a general preference for rhyming poems.

Taken together, the benefit of the V2 violation in (8b) in order to ensure a certain rhyme scheme might be too small to be observable by comparing (8b) to (8c).<sup>4</sup>

In principle, it is conceivable that different types of violation require different motivations. Rhyme requirements might primarily license phonological deviations and lexical choices, everything that concerns the form of the element at the end of the line, but be less effective for licensing syntactic violations as in our case. We leave this issue for future research but note that rhyme seems to license at least some instances of word order deviations. The first stanza of Goethe's *Prometheus* shall serve as evidence. The ordering of the two verbs in line 7 deviates from their canonical order (which would be *stehen lassen*, the embedding verb in final position) but result in a rhyme with line 5.

(11) Bedecke deinen Himmel, Zeus,
Mit Wolkendunst!
Und übe, Knaben gleich,
Der Disteln köpft,
An Eichen dich und Bergeshöh'n!
Mußt mir meine Erde
Doch lassen steh'n,
Und meine Hütte,
Die du nicht gebaut,
Und meinen Herd,
Um dessen Glut
Du mich beneidest.

Cover your heaven, Zeus
With cloudy mist
And exercise, like a boy
Who beheads thistels
With oaks and hills
You must my earth to me
Still let stay
And my hut
Which you didn't build
And my hearth
The fire of which
You envy me

## 5 Conclusion

Most existing research on linguistic deviations in poetic language pursues a qualitative research approach. Many studies analyze poems from one or several authors and describe their linguistic peculiarities. The

<sup>4.</sup> Interestingly, meter seems to play a minor role. Although the metric pattern is less well-formed in (8c) compared to (8b), this did not result in a measurable penalty.

present study complements this qualitative research with a quantitative approach. Our study contributes experimental evidence showing that some syntactic violations are accepted in poetic contexts but not in prose. In line with the observation that certain types of deviation do not occur in poetic language, the experiment demonstrated a split between the two types of violations that were included: While V2 violations received higher acceptability ratings in poems compared to prose, agreement violations received virtually the same low ratings in both text types.

The experiment presents a piece of evidence for poetic licensing but leaves many questions open. In future research, it would be interesting to extend the empirical range to further violation types and languages. We are looking forward to potential follow-up studies in collaboration with the original initiator of the project!

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