Creativity in name-based word formation: Evidence from the experimental study of personal name blends

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- Creativity in personal name blending.

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This paper:

- Creativity in experimentally elicited PN blends (no previous studies).
- Creativity is operationalized in terms of the order of name constituents in PN blends.
- Creative PN blends bear a constituent order that is different from the constituent order in lexical blends (e.g., *brunch*) and binomials (e.g., *Romeo and Julia*).
- Applying the criteria underlying the order of constituents in lexical blends proposed by Kelly (1998) on PN blends.

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- In lexical blends, shorter constituents usually occupy the first position.
- More prototypical and more frequent constituents occupy the first position in lexical blends.

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- A schema-based approach to blending (s. Kemmer 2003): PN blends emerge from cognitively entrenched patterns of experience with the order of constituents in lexical blends and binomials.

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- Investigating the selection between regular and creative order of name constituents in PN blends by testing Kelly's hypotheses.
- Providing experimental evidence for the interaction between linguistic and non-linguistic factors influencing the order of names in PN blends.

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- Linguistic factors influencing the constituent order: syllabic length of name constituents.
- Extralinguistic factors: prototypicality (operationalized in terms of familiarity with name constituents, see Zimmer 2018).
- Gender as a name-specific variable.

Production experiment

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- 56 name pairs (based on 16 female and 16 male first names) presented in a minimal context.

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- In addition: gender-specific properties of German first names (see Nübling 2017) were controlled: stress position, distribution of vowels and consonants, and final sound.

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Production experiment

Four conditions:

1. familiar male bisyllabic name + unfamiliar female three-syllabic name
2. familiar male name + unfamiliar female name (same syllabic length)
3. bisyllabic familiar name + threesyllabic unfamiliar name (same gender)
4. bisyllabic male name + threesyllabic female name (same familiarity)

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Participants:

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- 45 students (73 % native speakers of German and 27 % bilinguals, 80 % female and 20 % male, average age 24.1 years, SD = 3.6).
- 80 % had experience with lexical and name blends.
- within-subjects design

Production experiment

Hypotheses:

- Hypothesis 1: Familiar, male and shorter names are preferred in the first position compared to unfamiliar female and longer names (e.g., *Marlihe*: *Martin and Salihe* rather than *Sartin*: *Salihe and Martin*).

Production experiment

Hypotheses:

- Hypothesis 2: Familiar male names occupy the first position compared to unfamiliar female first names (given the same syllabic length of both names), e.g., *Christide*: *Christopher and Hamide* rather than *Hanofer*: *Hamide and Christopher*.

Production experiment

Hypotheses:

- Hypothesis 3: Familiar and shorter first names occupy the first position compared to unfamiliar and longer name constituents (given the same gender of name constituents), e.g., *Torstian*: *Torsten and Gratian* rather than *Grasten*: *Gratian and Torsten*.

Production experiment

Hypotheses:

- Hypothesis 4: Male and shorter names occupy the first position (if both constituents are familiar or unfamiliar), e.g., *Stenate*: *Stefan and Renate* rather than *Refan*: *Renate and Stefan*.

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Results:

- 2752 tokens (31 % hapaxes)
- Blends without AD structure, such as *Nihanna* from *Nina and Johannes*, or clipped compounds (*Chrisle* from *Christofer and Lena*) were excluded from the analysis.
- 2193 tokens (38 % hapaxes) were investigated.

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Results:

- Manual annotation for the order of constituents, the gender of names (male or female), their length (bi- or threesyllabic names), and familiarity (familiar or unfamiliar).

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- Manual annotation for the order of constituents, the gender of names (male or female), their length (bi- or threesyllabic names), and familiarity (familiar or unfamiliar).
- Pearson's chi-square test for goodness of fit: measure whether the difference between the observed distribution of name order and a random distribution is statistically significant.

Production experiment

Hypothesis 1: Familiar, male and shorter names (e.g. *Martin* in *Marlihe = Martin and Salihe*) are preferred in the first position compared to unfamiliar female and longer names (e.g., *Salihe* in *Sartin = Salihe and Martin*).

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This is true in 60 % of cases.

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This is true in 60 % of cases.

The distribution of conventional and creative structures is statistically significant ($\chi^2 = 9.8, p = 0.001, df = 1$).

Production experiment

Hypothesis 2: Familiar male names (e.g., *Christopher* in *Christide* = *Christopher and Hamide* occupy the first position compared to unfamiliar female first names, such as *Hamide* in *Hamofer* = *Hamide and Christopher* (given the same syllabic length of both names).

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This is true in 50 % of cases (no statistical significance: $\chi^2 = 0.01, p = 0.89, df = 1$).

The hypothesis does not account for cases where both names are bisyllabic.

Production experiment

Hypothesis 3: Familiar and shorter first names occupy the first position compared to unfamiliar and longer name constituents (given the same gender of name constituents), e.g., *Torstian*: *Torsten and Gratian* rather than *Grasten*: *Gratian and Torsten*.

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Hypothesis 3: Familiar and shorter first names occupy the first position compared to unfamiliar and longer name constituents (given the same gender of name constituents), e.g., *Torstian*: *Torsten and Gratian* rather than *Grasten*: *Gratian and Torsten*.

This distribution of conventional and creative constituent orders is statistically significant ($\chi^2 = 10.5$, $p = 0.001$, $df = 1$) and occurs in 57 % of cases.

However, it is only true if both names are male.

Production experiment

Hypothesis 4: Male and shorter names occupy the first position (if both constituents are familiar or unfamiliar), e.g., *Stenate* from *Stefan* and *Renate* rather than *Refan* from *Renate* and *Stefan*).

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The hypothesis is true in 60 % of cases.

The distribution of regular and creative constituent orders is statistically significant ($\chi^2 = 7.08, p = 0.007, df = 1$).

Conclusions and outlook

- Hypothesis 1: Familiar, male, and shorter names are preferred in the first position over unfamiliar female and longer names.
- Hypothesis 2: Familiar male names occupy the first position compared to unfamiliar female first names (given the same syllabic length of both names).
- Hypothesis 3: Familiar and shorter first names occupy the first position compared to unfamiliar and longer name constituents (given the same gender of name constituents).
- Hypothesis 4: Male and shorter names occupy the first position (if both constituents are familiar or unfamiliar).

Conclusions and outlook

PN blends are rather not creative (according to the definition of creativity proposed in this paper) since language users usually do not deviate from the order of constituents underlying binomials and lexical blends.

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Future studies:

- Addressing the role of extralinguistic factors related to the properties of language users, such as age and linguistic experience with blending.

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- Addressing the role of extralinguistic factors related to the properties of language users, such as age and linguistic experience with blending.
- Including further linguistic factors, such as the preference for particular switch points and transparency grades and their interaction with extralinguistic factors.

Thank you very much!

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