

Relative pronouns in German

d-pronouns already in Old High German (Axel-Tober 2017, Coniglio 2019):

- (2) pî demo Satanase, **der** inan uarsenkan scal:
 by the.DAT Satan that.M.NOM him ruin shall
 'by Satan, who will ruin him'
 (*Muspilli* 45; Coniglio 2019, 140)

most frequent option (alongside the complementiser strategy and doubling) already in Old High German (Schrodt 2004, 176)

no reanalysis of *d*-pronouns into relative complementisers (↔ English) – *d*-pronouns remain in the language and constitute the dominant option in headed relatives

Welch-pronouns

welch-pronouns come into the system as an additional option –
origin from the *so*-WH-*so* construction (Coniglio & Paul 2019)

- (3) alliu so **uuelihiu** loannis quad fon desemo uuario uuarun
all so which John said of this true were
'Everything that John said about this was true.'
(*Tatian* 134; Coniglio & Paul 2019, 36)

no borrowings from French but French may have fostered their
spread in the 13th century (Coniglio & Paul 2019)

Equivalents

the 1534 version (missing examples due to Luther's notes missing):

	SU	DO	IO	OBL (PP)
welch-pronouns (85)	<i>welch</i> -: 43 missing: 1	<i>welch</i> -: 22 <i>d</i> -: 3 missing: 1	<i>welch</i> -: 2	<i>welch</i> -: 12

→ *welch*-pronouns not a late introduction to the text

Analysis

analysis (Fisher's Exact Test):

- no significant difference between SU and DO ($P=0.3858$)
- significant difference between DO and PP ($P<0.01$)
- altogether very few examples for IO (recall Fleischer 2004a, Herrmann 2005, Bacskai-Atkari 2020b) – data not reliable; no significant differences between DO and IO ($P=0.1978$) or between IO and PP ($P=0.09983$)

→ grammatical differentiation below DO and above OBL – similarly to the differences between *d*-pronouns and *wo*

Luther's system

- ↔ but: in Luther's system the distinction is between two series of
[+case] relative pronouns
- morphological case alone does not explain the asymmetries

English

not a unique situation: same applies for the variation between *that* vs. *which* in English

- *which*-relatives appearing already in Middle English (Mustanoja 1960, Rydén 1983, van Gelderen 2004, Gisborne & Truswell 2017, Bacskai-Atkari 2020b, 2022)
- *which* not inflected for case at any point, also possible for [+personal] referents till Early Modern English (Johansson 2012)
- cut-off point between SU and DO – already in Middle English texts (Bacskai-Atkari 2023b, 2024a,b)

So...

- grammatical distinctions along the Accessibility Hierarchy not necessarily related to differences in morphological case marking:
 - English: morphological case marking does not account for *which/that*, but there is a syntactic distinction
 - German (Luther's text): *welch*-pronouns and *d*-pronouns do not differ in terms of morphological case and both are relative pronouns
- distribution apparently not grounded in surface distinctions

Origins

two series of relative pronouns have different origins:

- *d*-pronouns stem from demonstrative pronouns (see Pittner 2009, following Behaghel 1928, Johansen 1935, Wunder 1965, Dal 1966, Helgander 1971, Lehmann 1984, Lühr 2004, Harbert 2007; cf. also Lenerz 1984 and Axel-Tober 2012)
- *welch*-pronouns stem from interrogative pronouns, via the comparative *so-WH-so* construction (Fleischmann 1973, Coniglio & Paul 2019, Fuß 2021), where the *wh*-element is an indefinite (see also Schrodtt 2004, Watanabe 2009, Gisborne & Truswell 2017)

Consequences

- two series of relative pronouns differ in the original [\pm def] feature – consequences:
- difference in the [rel] feature (Bacskai-Atkari 2023a,b):
d-elements are [i-rel], *wh*-elements are [u-rel]
 - difference in the lexical NP complement

Matching analysis

matching analysis of relative clauses (Lees 1960, 1961, Chomsky 1965, Sauerland 1998, 2003, Salzmann 2017, Pankau 2018, Fuß 2021)

relative pronoun in D takes an NP (nP) complement that is the copy of the antecedent – deleted under identity:

- (8) [DP the book [CP which ~~book~~ [TP the child is reading which ~~book~~]]

English

NP-complement of *which* usually silent but sometimes visible:

- (9) He rode twenty miles to see her picture in the house of a stranger, **which stranger** politely insisted on his acceptance of it.
(Radford 2019, 9, citing Jespersen 1949, 126)

German

similar examples attested with *welch*-pronouns but not with *d*-pronouns

- (10) Freilich zwei ganz gleiche Hälften waren es nicht, konnten es nicht sein, weil natürlich nur eine Hälfte den Stängel hatte, **welcher Stängel** denn auch Veranlassung zu Beginn einer Unterhaltung wurde, wonach sich die Schmolke schon seit lange sehnte.
'Admittedly, they were not exactly two identical halves; they could not have been, because naturally only one half had the stem, which stem then became the starting point for a conversation that Schmolke had been longing for for a long time.'
(Theodor Fontane, *Frau Jenny Treibel*)

English

visible NP complement can be different from the matrix NP:

- (11) He had hired a vessel to convey him to Constantinople,
for which city he should sail in a few hours.
(Mary Shelley, *Frankenstein*)

German

similar examples attested with *welch*-pronouns but not with *d*-pronouns

- (12) Hans bat Anna, den Fußboden zu putzen,
Hans asked.3SG Anna the.ACC floor to mop.INF
welche Bitte sie entschieden ablehnte.
which.F.ACC request she flatly refused.3SG
'Hans asked Anna to mop the floor, which request she
flatly refused.'
(Webelhuth 2011, 171, citing Holler 2005, 101)

Differences

examples like (9)–(12) continuative relative clauses (Holler 2005, Webelhuth 2011; see also Radford 2019), which differ in their anchoring (see Blümel et al. 2017, Fuß 2021) – such relative clauses regularly formed with *was* in German, without attachment to a lexical noun (see Webelhuth 2011, Brandt & Fuß 2014, 2018, 2019, Fuß 2021)

but: difference shows that *welch-* is compatible with an overt NP

Luther's translation

welch + overt NP combinations also in Luther's translation (18 SU and 3 OBL, all of them already in the 1534 translation) – pattern attested also in Luther's other writings (Fleischer 2026)

- (13) Darumb hies sie den Brunnen / ein brunnen
 therefore called.3SG she the.ACC well a.NOM well
 des Lebendigen / der mich angesehen
 the.GEN living that.M.NOM I.ACC looked.at.PTCP
 hat / **welcher** **Brun** ist zwischen Kades vnd Bared.
 has which.M.NOM well is between Kades and Bared
 'Therefore she called the well a well of the living, who saw
 me, which well is between Kadesh and Bered.'
 (Genesis, 16:14)

Historical development

welch-pronouns with an NP originally more frequent than without it

Middle High German

Coniglio & Paul (2019, 35) for Middle High German:

Time	<i>swelch-</i> + NP	<i>swelch-</i>	<i>welch-</i> + NP	<i>welch-</i>
11th century	3 (0.39%)	3 (0.39%)	–	–
12th century	53 (0.82%)	47 (0.72%)	1 (0.02%)	–
13th century	221 (1.62%)	63 (0.46%)	20 (0.15%)	1 (0.01%)
14th century	121 (1.31%)	38 (0.41%)	16 (0.17%)	6 (0.07%)

Middle Low German

Coniglio & Paul (2019, 36) for Middle Low German:

Time	<i>swelch-</i> + NP	<i>swelch-</i>	<i>welch-</i> + NP	<i>welch-</i>
13th century	60 (5.14%)	3 (0.26%)	8 (0.69%)	–
14th century	121 (1.31%)	38 (0.41%)	16 (0.17%)	6 (0.07%)
15th century	1 (0.05%)	1 (0.05%)	20 (0.94%)	26 (1.22%)
16th century	–	–	22 (0.95%)	36 (1.56%)

Proposal

syntactic difference between *d*-pronouns and *welch*-pronouns regarding the NP complement

- *welch*-pronouns take a genuine NP complement (with a root N) that is deleted under identity
- *d*-pronouns take no NP complement

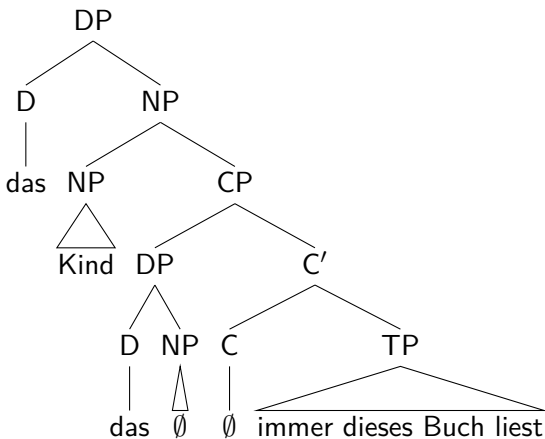
difference relates to referentiality and the original [\pm def] feature

D-pronouns

d-pronouns essentially deictic – reference taken from the matrix D head (agreement in inherent inflectional features, i.e. number and gender, with the matrix D – phonologically zero in free relatives, van Riemsdijk 2006), NP complement reconstructed under identity (if there is any NP)

Structure

(14)

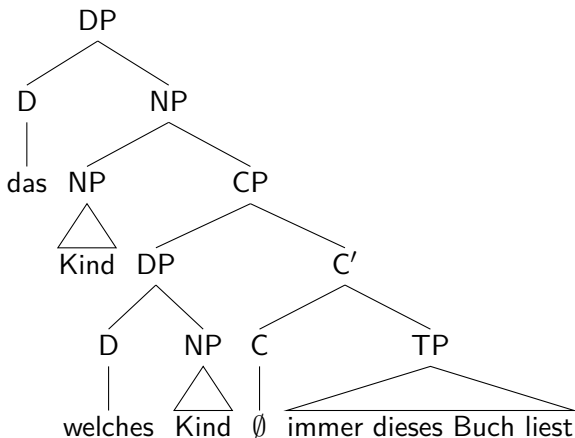


Welch-pronouns

welch-pronouns have the same features as the matrix D head in a matching configuration, and they regularly take an NP complement – this can be deleted in a relative configuration under identity (recoverability)

Structure

(15)



Implications

→ *welch*-relatives inherently more complex – distribution in line with the Accessibility Hierarchy

implication for diachronic processes:

- *d*-pronouns can lack an NP complement – reanalysis into a C head possible for the unmarked form (*that* in English, see van Gelderen 2004, 2009, Bacskai-Atkari 2020b) – also *wh*-based elements without an NP complement, e.g. English *what* and Bavarian *was* (see Bacskai-Atkari 2023b for discussion)
- *welch*-pronouns equipped with an NP complement – no reanalysis into a C head (also for English *which*)

→ syntactic differentiation predicts further asymmetries

Conclusion

distribution of *welch*-pronouns versus *d*-pronouns

- alternation in many contexts apparently purely stylistic
- single system: Luther's Bible translation – asymmetries between *d*-pronouns and *welch*-pronouns
- syntactic difference in terms of referentiality and the status of NP complement – motivation also from other differences

→ asymmetries along the Accessibility Hierarchy not necessarily tied to $[\pm\text{case}]$ differences – other notions of complexity may also play a role

Thank you!

Danke!

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