Clause order and syntactic integration patterns in Dutch conditionals

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Conditional clauses in Dutch can occur in sentence-initial and sentence-final position. For sentence-initial conditionals, a number of syntactic integration patterns are available. This corpus study investigates to what extent clause order and syntactic integration are associated with text mode (spoken, written) and register (formal, informal). Sentence-initial position of the conditional clause is shown to be most frequent in both modes and registers, although sentence-final position is more frequent than one would expect based on the literature, especially in written texts. The distribution of syntactic integration patterns shows a clear difference between modes, as full integration of the conditional clause into the main clause is most frequent in written texts, whereas the use of the resumptive element *dan* ('then') is most frequent in spoken texts.

Keywords: conditionals, clause order, syntactic integration, corpus, Dutch

1. Introduction

Conditional clauses in Dutch can occur in sentence-initial position and sentence-final position. While the former order is argued to be the default, as exemplified in the predictive conditional in (1), in which the situations expressed are related by causality, the latter order is hypothesized to be associated with spoken language and to express pragmatic relations more often (cf. Diessel 2005), as in (2), in which the conditional clause does not present a cause or condition, but serves politeness purposes (cf. Brown & Levinson 1987: 272).

(1) *Als je je kamer opruimt*, kunnen we nog naar de speeltuin.
(WR-P-E-A-0005926211)
If you clean your room, we can still go to the playground.

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(2) *Voorzitter dan de heer Rietkerk vroeg [...] of de invoeringstermijn van uh in artikel 79 eigenlijk niet verlengd zou moeten worden tot twee jaar als ik me niet vergis.* *(fn000208)*
Chairman Mr. Rietkerk asked [...] whether the introduction period of article 79 should be extended to two years if I am not mistaken.

For sentence-initial conditionals, a number of syntactic integration patterns are available: the integrative word order in (1), the resumptive pattern in (3) and the non-integrative word order in (4).

(3) *Als Berlusconi geen brokken maakt, dan doen zijn kabinetsleden en politieke bondgenoten het wel.* *(WR-P-P-G-0000106263)*
If Berlusconi does not mess up, then his cabinet members and political allies will.

(4) *Als je vragen hebt... ik zit naast een Engels-specialist.* *(WR-U-E-A-0000001292)*
If you have any questions... I'm sitting right next to an English specialist.

While König & Van der Auwera (1988: 104–105) tentatively suggest syntactic integration patterns to be associated with mode of speech, no corpus-based accounts reporting on this association exist. This study investigates associations between mode and register on the one hand, and clause order and syntactic integration on the other hand. Previous studies have either reported on clause order in English conditionals mostly, or on clause order and syntactic integration in Dutch conditionals in written, formal texts only. As a result, there exists a gap in our knowledge with respect to associations between mode and register and the aforementioned grammatical features of conditionals. Several studies have suggested these features to be associated in turn with different types of relations between conditional clause and main clause (see Sections 3 and 4), such as the predictive and pragmatic relations exemplified above, and it is therefore important for research on Dutch conditionals to address this issue and to answer the main question of this study: to what extent are clause order and integration patterns in Dutch *als* 'if' conditionals associated with mode and register?

To offer sufficient detail in the analysis of clause order and syntactic integration, these features are discussed in Section 2. Section 3 offers a brief overview of the data selection and methods, and in Section 4, the results are presented and discussed in light of the available literature. Section 5 offers a conclusion and discussion.

2. Clause order and syntactic integration

As in other languages, the subordinate clause in Dutch conditionals can occur in sentence-initial position and sentence-final position. In case of sentence-initial conditionals, the subordinate clause can show varying degrees of integration into the main clause. These features are discussed in Sections 2.1 and 2.2 respectively. In Section 2.3, a brief conclusion is offered.

2.1 Three clause orders

In the majority of studies on clause order in conditionals two orders are distinguished: conditionals with sentence-initial antecedents and conditionals with sentence-final antecedents, as in (1) and (2) above. In a small number of studies (e.g. Auer 2000; Carter-Thomas & Rowley-Jolivet 2008; Dancygier 1998; Reuneker 2017), a third, "sentence-medial" order has been distinguished, in which the antecedent is inserted into the consequent, as in (5).

(5) *Enige tijd na ontvangst van de cd-rom volgt, als u ons niet hebt gemachtigd, een acceptgirokaart voor de betaling voor een bedrag van de kosten van de special, verhoogd met 2,50 administratiekosten.* *(WR-P-P-D-0000000003)*
Sometime after receiving the CD-ROM, if you have not authorized us, a cheque will be issued for payment of the costs of the special, plus 2.50 administration costs.

Several explanations for preferences in clause order have been suggested in the literature. The stronger preference for sentence-initial position of conditional clauses, as opposed to other adverbial clauses, has been linked to the hypothetical nature of conditionals (see Dancygier & Sweetser 2000: 135; Diessel 2013: 350; Ford 1997; Johnson-Laird & Byrne 2002), and to their "background-creating" function (see Ford & Thompson 1986: 367–368; Haiman 1978). The sentence-final position of antecedents has been linked to the "less planned nature" of spoken language, topic status of information in the consequent, syntactic weight of the antecedent (see Diessel 2005: 453; Ford & Thompson 1986: 367), and to the occurrence of other signals of "non-factuality" in the consequent, such as intonation and modal auxiliaries (see Diessel 2005: 462–463). The sentence-medial position has been linked to metalinguistic use mainly (see Carter-Thomas & Rowley-Jolivet 2008; Dancygier 1998: 106–107, 152–154; Dancygier & Sweetser 2005: 176; Reuneker 2017).

Next to these three clause orders, conditional clauses can occur without a main clause, as in (6).

(6) *Zeker, maar Rademaker gaat niet mee, dus ik dacht, als je nog zin had.*
(WR-U-E-D-0000000038)
Certainly, but Rademaker is not coming along, so I thought, if you still felt like it.

These "insubordinate" conditionals (cf. Evans 2007; see Boogaart & Verheij 2013 for Dutch) will be labelled as such in the results.

2.2 Three patterns of syntactic integration

Antecedents of *als*-conditionals in Dutch are adverbial clauses subordinated to the main clause, which presents the consequent. In regular main clauses in Dutch, the finite verb takes second position. When the main clause functions as the consequent of a conditional, the antecedent of a sentence-initial conditional takes first position and is followed directly by the finite verb of the main clause, resulting in subject-verb inversion in that clause, as in (7).

(7) *Als de regering Schroder daartoe inderdaad besluit, komt*$_{FINITE\ VERB}$ *de regering-Balkenende*$_{SUBJECT}$ *met haar bezuinigingsbeleid in Europa nog meer alleen te staan.* *(WR-P-P-G-0000105269)*
If the Schroder government does indeed decide to do so, stands$_{\text{FINITE VERB}}$ the Balkenende government$_{\text{SUBJECT}}$ alone even more with its economic policy in Europe.

As a result of inversion, the finite verb occurs in first position of the main clause of the conditional, but takes second position in the overall complex sentence, in which the antecedent takes first position (cf. König & Van der Auwera 1988: 127).

Next to this integrative pattern, two other patterns are possible, namely the resumptive and the non-integrative pattern (cf. König & Van der Auwera 1988), as in (8) and (9).

(8) *Als iemand werkelijk gelukkig is dan*$_{RESUMTPIVE}$ *moet*$_{FINITE\ VERB}$ *deze persoon*$_{SUBJECT}$ *in het bezit zijn van het goede.* *(WR-X-A-A-journals-001)*
If someone is really happy then$_{\text{RESUMTPIVE}}$ must$_{\text{FINITE VERB}}$ this person$_{\text{SUBJECT}}$ be in possession of the good.

(9) *Als je kijkt wat er de laatste zes, zeven jaar over ons is geschreven: ik*$_{SUBJECT}$ *ben*$_{FINITE\ VERB}$ *niet anders gewend.* *(WR-P-P-G-newspapers-115000)*
If you look at what has been written about us in the last six or seven years: I$_{\text{SUBJECT}}$ am$_{\text{FINITE VERB}}$ not used to anything else.

In (8) the resumptive element *dan* 'then' is combined with subject-verb inversion. However, integration is lower than in (7), in which the conditional clause takes

first position and functions as a constituent of the main clause, followed by the finite verb *komt*. In (8) the finite verb is also in second position, but the resumptive element *dan* that takes first position and "takes on the function of the *if*-clause" (cf. Iatridou 1994: 193–195), which itself is left-dislocated and no longer a constituent of the main clause (see also von Fintel 1994: 89). In (9), no sign of integration is visible, as the two clauses are juxtaposed without any sign of embedding.

A number of factors of influence on syntactic patterns are suggested in the literature. Dancygier & Sweetser (1997: 116) argue that *then* anaphorically points to the antecedent "and locates the event or state described in the apodosis in that mental space", signalling compatibility with a biconditional implicature ('if and only if'; see also Iatridou 1991). Renmans & Van Belle (2003: 154) suggest that the syntactic weight of the antecedent is another factor triggering the use of the resumptive particle. In the literature on Dutch *als*-conditionals (see König & Van der Auwera 1988; Renmans & Van Belle 2003: 141–142) the degree of syntactic integration is linked to the degree of semantic integration, and it is argued that the integrative pattern is mostly found in predictive conditionals (i.e. cause-effect), whereas the resumptive and non-integrative patterns are used in inferential (i.e. argument-conclusion) and pragmatic conditionals more often. Verbrugge & Smessaert (2011) introduce a further distinction between inferential and meta-inferential conditionals and show how inferential conditionals, such as the example in (8), exhibit a lower degree of syntactic integration than meta-inferential conditionals, in which the inferential process is commented upon explicitly, as in their example in (10).

(10) *Als de gordijnen dicht zijn, dan mag je concluderen dat ze op reis zijn.*
If the curtains are closed, then you may conclude that they are on holiday.

The more peripheral status of the subordinate clause in inferential conditionals is demonstrated by, among other tests, the fact that they cannot occur in focus position of cleft-structures, while those of meta-inferential conditionals, like predictive conditionals, can.

2.3 Conclusion

Conditional clauses in Dutch can appear in sentence-initial, sentence-final and sentence-medial position, and in case of sentence-initial position, three syntactic integration patterns are available. The associations of these features with mode and register will be tested and discussed in Section 4, but first, the data and methods used are discussed in Section 3.

3. Data and method

Although McEnery & Hardie (2012: 10) point out that representativeness is an ideal that is "rarely, if ever" attained, Leech (2007: 143) argues that we should not abandon its pursuit. As existing corpus studies show that the use of conditionals in English differs significantly between modes and registers (e.g. Carter-Thomas & Rowley-Jolivet 2008; Ferguson 2001; Ford & Thompson 1986), a balanced corpus of conditionals was constructed to investigate the aforementioned associations between mode, register clause order syntactic integration.

Contrary to most corpus studies on conditionals, in which spoken language has at most a subordinate role (see e.g. Gabrielatos 2010; Reuneker 2017), the current corpus includes spoken and written texts from the *Corpus Gesproken Nederlands* (Oostdijk 2000), and *SoNaR-500* (Oostdijk et al. 2013) respectively. Although both corpora include language use from the Netherlands and Belgium, only data from the Netherlands was used to limit potential regional differences.[1] Within both modes, further sub-samples were defined, because, as Biber & Conrad (2009: 88) argue, within modes, large differences exist in language use between registers. Balanced samples for both modes were collected from multiple genres and labelled for register as either formal (e.g. newspapers, political debate) or informal (e.g. face-to-face conversations, discussion lists) based on Biber's dimensions (1995: 142, 155–157). For each of the mode-register combinations, approximately 1,250 conditionals were collected. After analysis, a number of conditionals were discarded, because of, for instance, incompleteness and ambiguity between a conditional and a temporal reading.[2] The final sample included 4,667 *als*-conditionals.

Clause order and syntactic integration patterns were manually annotated in the corpus. A sample of 500 conditionals (approximately 10%) was annotated independently by a second researcher to assess annotation reliability. There was high agreement between the two annotators on both features (Cohen's $\kappa = 0.79$ and $\kappa = 0.85$ respectively).[3] As the dataset may involve associations and interactions between more than two categorical variables, log-linear analysis was used

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1. Almost all data from Dutch discussion lists originate from the forum *Ouders Online*. As this raises problems for representativity, data from the forum *Tweakers* was added. Furthermore, academic journals were added to the written-formal sample.

2. Contrary to excluding non-conditional use of English *if* (see e.g. Declerck & Reed 2001: 9; Gabrielatos 2010: 45), identifying which uses of the conjunction *als* constitute conditionals is by no means a trivial task. As space prohibits discussion of this issue, I will refrain from a detailed discussion for now.

3. To correct for trait prevalence, AC1 (Gwet 2014) was also calculated, resulting in a score of 0.86 for clause order and 0.87 for syntactic integration.

(see Agresti 2007: Chapter 7). Backward elimination was carried out and in case of significant higher-order associations (i.e. two-way and three-way interactions), the effects were broken down using separate chi-square tests and standardized residuals (cf. Agresti 2007: 87) as measure of effect size, as they are more readily interpretable than odds ratio's for variables with more than two levels. Standardized residuals reflect the ratio of the difference between the observed and expected frequency to the standard deviation of the expected frequency, and are comparable to *z*-scores (see Field et al. 2012: 826), i.e. they indicate how significant the contribution of each cell is with respect to the overall significance.[4]

4. Results

In Section 4.1, I will discuss the distribution of clause orders in Dutch conditionals, and I will compare the results to findings in the literature. In Section 4.2, I will do the same for syntactic integration patterns. In Section 4.3 a brief conclusion is offered.

4.1 Clause order in Dutch conditionals

The distributions of clause order by mode and register are presented in Table 1.

Table 1. Distribution of clause order by mode and register

Mode	Register	Initial (%)	Medial (%)	Final (%)	Insubordination (%)	Total
Spoken	Formal	710 (63.68)	63 (5.65)	329 (29.51)	13 (1.17)	1115
	Informal	660 (59.57)	28 (2.53)	312 (28.16)	108 (9.75)	1108
	Total	**1370 (61.63)**	**91 (4.09)**	**641 (28.83)**	**121 (5.44)**	**2223**
Written	Formal	655 (53.08)	23 (1.86)	553 (44.81)	3 (0.24)	1234
	Informal	676 (55.87)	23 (1.90)	481 (39.75)	30 (2.48)	1210
	Total	**1331 (54.46)**	**46 (1.88)**	**1034 (42.31)**	**33 (1.35)**	**2444**
Total		**2701 (57.87)**	**137 (2.94)**	**1675 (35.89)**	**154 (3.30)**	**4667**

Note. Percentages are row-based.

What we see in Table 1 is in line with results of studies on English conditionals: sentence-initial antecedents outnumber sentence-final antecedents. Sentence-

4. A value outside ±1.96 is significant at $p < 0.05$, a value outside ±2.58 is significant at $p < 0.01$, and a value outside ±3.29 is significant at $p < 0.001$.

final antecedents are by no means marginal, however, as was shown earlier by Reuneker (2017) for written Dutch. To inspect associations between mode, register and clause order, a three-way loglinear analysis was performed, which produced a final model that retained the *mode*×*clause order* and *register*×*clause order* interactions. The likelihood ratio of this model was $\chi^2 = 7.43$, $df = 4$, $p = 0.11$. The *mode*×*clause order* interaction was significant ($\chi^2 = 147.70$, $df = 3$, $p < 0.001$), which indicates that the distribution of clause orders differed across the two modes. The effect size of this association is medium (*Cramér's V* = 0.18, $df = 3$). To break down this interaction, the residuals were inspected. These showed that all clause orders contributed to the overall significance. Insubordination occurs more frequently than expected in spoken texts as compared to written texts ($z = 5.56$, $p < 0.001$; $z = -5.31$, $p < 0.001$).[5] The same is true for sentence-initial antecedents ($z = 2.33$, $p < 0.05$; $z = -2.22$, $p < 0.05$) and sentence-medial antecedents ($z = 3.19$, $p < 0.01$; $z = -3.04$, $p < 0.01$). Sentence-final antecedents showed a reverse preference ($z = -5.55$, $p < 0.001$; $z = 5.30$, $p < 0.001$), i.e. this clause order occurs less frequently than expected in spoken texts as compared to written texts. The *register*×*clause order* interaction was also significant ($\chi^2 = 110.43$, $df = 3$, $p < 0.001$). The effect size of this association is small (*Cramér's V* = 0.15, $df = 3$). The residuals indicated that only the distributions of insubordinate and sentence-medial antecedents significantly contributed to the overall signifcance individually. Insubordination occurs less frequently than expected in formal texts as compared to informal texts ($z = -6.99$, $p < 0.001$; $z = 7.03$, $p < 0.001$), whereas sentence-medial antecedents occur more frequently than expected in formal texts than compared to informal texts ($z = 2.05$, $p < 0.05$; $z = -2.07$, $p < 0.05$). As this is somewhat surprising, these conditionals were inspected in more detail and results suggest they operate mostly on the pragmatic level, as in (11) (see also Reuneker 2017: 142).

(11) *En daarbij is enige normstelling <u>als je die kunt geven</u> ook wenselijk.* *(fnooo211)*
And in addition, some norms <u>if you can give them</u> are also desirable.

The association between sentence-initial or sentence-final antecedents and register does not contribute significantly to the overall difference in either mode.

In line with Greenberg's universal (1963: 84), Comrie (1986: 84) calls the sentence-initial clause order the "usual order", and Dancygier (1998: 145–149) calls it the "default order", arguing that this holds in other languages too. Declerck & Reed (2001: 367, 397) argue that sentence-final antecedents are "syntactically marked", licensing pragmatic effects. For Dutch, Van der Horst (1995: 144) remarks that "when one would count in a large corpus, the order in (a) [sentence-

5. Please note that *expectancy* here is meant in a probabilistic sense, i.e. expected cell frequencies based on the total distribution.

initial antecedent] is much more frequent than the order in (b) [sentence-final antecedent]". The most prominent difference between previous studies on English conditionals and this study on Dutch conditionals is that sentence-initial antecedents are less dominant. In previous studies, the sentence-initial clause order accounted for 70 to 80 percent of all conditionals (see Diessel 2005; Ford & Thompson 1986; Linde 1976; Nall & Nall 2010; Ramsey 1987). Sentence-initial antecedents in Dutch conditionals make up for roughly 55 percent in this study. Comparing these data, however, is not entirely justified, as the majority of studies mentioned exclude sentence-medial and insubordinate conditionals. Removing these "orders" from the results shows that sentence-initial and sentence-final antecedents account for 66.37 and 33.63 percent respectively for spoken data, and 55.45 and 44.55 percent for written data. These findings corroborate those of Renmans & Van Belle (2003: 147–148), who found an even weaker dominance of sentence-initial antecedents. In their written corpus of 400 Dutch conditionals, only 50.75 percent of the conditionals had sentence-initial antecedents and 49.25 percent had sentence-final antecedents. Given their corpus of mainly newspaper texts, however, a comparison to the formal-written texts of this study may prove more reliable. The balance between sentence-initial and sentence-final antecedents in this sub-corpus is 54.22–45.78 percent. Renmans & Van Belle's (2003: 148) observation thus still holds, as they argue that it is "rather remarkable [...] that the conditionals with preposed protases obviously fail to significantly outnumber the ones with sentence-final *als*-clauses". Whereas almost none of the studies mentioned include sentence-medial antecedents, Ford & Thompson (1986: 356) exclude any sentence not adhering to the initial-final dichotomy, arguing that this clause order has a very low frequency. Although this is not a principled reason for discarding this clause order, Ford & Thompson's findings are in line with the current findings and those by Carter-Thomas & Rowley-Jolivet (2008) and Reuneker (2017).

4.2 Syntactic integration in sentence-initial conditionals

In case of sentence-initial conditionals, the subordinate clause can be integrated into the main clause in varying degrees (see Section 2.2). The distributions of these patterns are presented in Table 2.

Note that the number of conditionals in Table 2 differs from number of sentence-initial in Table 1. The reason is that some conditionals did not fit patterns from Section 2.2 easily. For instance, embedded conditionals sometimes feature a repetition of the conjunction *dat* 'that', as in (12).

Table 2. Distribution of integration patterns by mode and register

Mode	Register	Integration (%)	Resumption (%)	Non-integration (%)	Total
Spoken	Formal	230 (38.02)	348 (57.52)	27 (4.46)	605
	Informal	155 (25.62)	431 (71.24)	19 (3.14)	605
	Total	**385 (31.82)**	**779 (64.38)**	**46 (3.80)**	**1210**
Written	Formal	463 (75.65)	144 (23.53)	5 (0.82)	612
	Informal	449 (77.55)	119 (20.55)	11 (1.90)	579
	Total	**912 (76.57)**	**263 (22.08)**	**16 (1.34)**	**1191**
Total		**1297 (54.02)**	**1042 (43.40)**	**62 (2.58)**	**2401**

Note. Percentages are row-based.

(12) *De eerste dag dat ik daar kwam kreeg ik een uh een stuk ijzer met een vijl erbij en de boodschap dat als stuk ijzer op was dat ik*$_{SUBJECT}$ *in magazijn een nieuw stuk ijzer kon*$_{FINITE\ VERB}$ *komen halen.* *(fno08659)*
The first day I got there I received a uh a piece of iron with a file and the message that if a piece of iron was used up that I$_{\text{SUBJECT}}$ could$_{\text{FINITE VERB}}$ come and get a new piece of iron in the warehouse.

Here, the main clause of the conditional is subordinated itself, which is reflected by the position of the finite verb in the sentence-final verb cluster *kon komen halen*. As the word order in the main clause of the conditional is determined by the fact that it is embedded, this pattern was excluded from further analysis, as were conditionals with non-declarative consequents (e.g. interrogatives).

As Table 2 shows, written texts show a preference for the integrative pattern, whereas in spoken Dutch, resumption is most frequent. The non-integrative pattern has a low frequency in both the spoken and written mode. A three-way log-linear analysis was performed and produced a final model that retained all effects, indicating that the highest order interaction (*mode* × *register* × *syntactic integration*) was significant ($\chi^2 = 19.96$, $df = 2$, $p < 0.001$). Comparing the two-way interactions against the model without the three-way interaction indicated that removing the *mode* × *syntactic integration* interaction would significantly worsen the fit of the model ($\chi^2 = 522.59$, $df = 4$, $p < 0.001$; $\Delta\chi^2 = 502.64$, $df = 2$, $p < 0.001$), as would removing the *register* × *syntactic integration* interaction ($\chi^2 = 28.95$, $df = 4$, $p < 0.001$; $\Delta\chi^2 = 8.99$, $df = 2$, $p = 0.01$). As the largest contribution to the three-way interaction comes from the interaction between mode and syntactic integration, as is reflected in Table 2, the dataset was split into written and spoken datasets, which were subsequently subjected to separate chi-square tests. For written Dutch, there was no significant association between register and syntactic integration ($\chi^2 = 3.93$,

$df = 2$, $p = 0.14$), for spoken Dutch there was ($\chi^2 = 24.85$, $df = 2$, $p < 0.001$). The effect size of this association in spoken Dutch is small (*Cramér's V* = 0.14, $df = 2$), and both integration and resumption contribute to the overall significance. The integrative pattern occurs more frequently than expected in spoken formal texts as compared to spoken informal texts ($z = 2.70$, $p < 0.01$; $z = -2.70$, $p < 0.01$), whereas resumptive conditionals occur less frequently than expected in spoken formal texts, and more frequently than expected in spoken informal texts ($z = -2.10$, $p < 0.05$; $z = 2.10$, $p < 0.05$). The distribution of the non-integrative pattern does not contribute significantly to the overall association between register and syntactic integration in spoken Dutch.

In Renmans & Van Belle's (2003: 148) results, 76 percent of sentence-initial conditionals showed the integrative pattern. In König & Van der Auwera's (1988: 115) recalculation of Schelfaut's (1982) results, 91 percent of Dutch conditionals featured the integrative pattern. Although the numbers are clearly different, here too the overall most frequent pattern in the corpus was full integration of the conditional clause into the main clause. As discussed above, both König & Van der Auwera (1988) and Renmans & Van Belle (2003: 141) argue that this pattern corresponds to the highest degree of "semantic-pragmatic integration", because the complete conditional presents "the propositional content of just one speech act" (Renmans & Van Belle 2003: 145–146). Renmans & Van Belle report 24 percent of conditionals showed the resumptive pattern. In Schelfaut's (1982) results this is only 9 percent. In the current study, the resumptive pattern was much more frequent (43.40%) and this shows the effect of including spoken language in the corpus. Note that the resumptive pattern may even be more frequent than the integrative word order in non-canonical conditionals, as Boogaart (2007: 5–6) shows for verb-first conditionals with *moesten* 'must' and *mochten* 'may'. Beekhuizen (2016: 44) suggests that in such cases *dan* signals conditionality in absence of an explicit conditional conjunction. The least frequent pattern is non-integration, of which Van der Horst (2010: 56–57) argues that it was the default in conditionals in Middle Dutch. This pattern was not found in Renmans & Van Belle's (2003) corpus, which, given the current results, is likely due to their use of written, more formal texts. In spoken language, the consequent of such conditionals is usually separated from the antecedent by intonation, signalling a lack of integration (see also Ford 1993: Chapter 4).

4.3 Conclusion

The current results show that sentence-final antecedents are more frequent than expected based on the English-oriented literature. Clause order in Dutch conditionals is associated with mode and, to a lesser extent, with register. The latter

association is most strongly influenced by the distributions of insubordinate and sentence-medial antecedents. With respect to syntactic integration, written Dutch shows a preference for full integration, whereas spoken Dutch shows a preference for resumption. The non-integrative pattern is infrequent overall. For written texts, no significant association between register and syntactic integration was found, but in spoken Dutch the frequency of resumptive conditionals is significantly higher in informal texts as compared to formal texts, at the cost of the frequency of the integrative pattern.

5. Conclusion and discussion

This study has addressed the question to what extent clause order and integration patterns in Dutch *als*-conditionals are associated with mode and register. The results show that sentence-initial position of conditional *als*-clauses is most frequent in written and spoken texts, both formal and informal. Sentence-final *als*-clauses are more frequent than one would expect based on the literature, especially in written texts. With respect to integration patterns, there is a clear difference between modes. The integrative pattern is most frequent in written texts, while the resumptive pattern in most frequent in spoken texts. This study provides empirical substantiation of previous suggestions that clause order and syntactic integration may be associated with modes of speech.

As previous studies on Dutch conditionals have reported on clause order and syntactic integration patterns in (formal) written texts mostly, these results fill a gap in our knowledge of Dutch conditionals, which is particularly relevant in light of previous studies arguing for associations between clause order and syntactic integration on the one hand and different types of relations between subordinate and main clauses of conditionals on the other hand. The results show that mode and register have systematic influence on distributions of grammatical features of conditionals in Dutch and should therefore be included as factors in future research into the relations between clauses in conditionals. These and other findings are part of a project on the grammatical features of conditionals in Dutch (Reuneker forthc.), in which the main question is to what extent grammatical features such as the above and, for example, modal marking and verb tense, provide clues for interpreting the relation between antecedents and consequents of conditionals.

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