‘Kinsto it Frysk ferstea?’
Intelligibility of West Frisian for Dutch native speakers

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West Frisian is a minoritized language spoken in the province of Fryslân, in the Netherlands. It has been said to be converging with Standard Dutch (see De Haan, 1997; Nerbonne, 2001), and it has been found to be largely intelligible for speakers of regional language varieties in the Netherlands, such as Low Saxon or Limburgish for example (see, for instance, De Vries, 2010).

In this research, we tested how much Frisian native speakers of Dutch can actually understand, as well as the degree of difficulty of each type of task. An online test was designed ($N=225$) to measure the intelligibility of both written and spoken Frisian. The results seem to indicate that West Frisian is highly intelligible for Dutch native speakers, which we argue should be used to enrich the school curriculum and foster receptive skills in the minoritized language (see Fonseca, 2012; Belmar, 2019b), which could in turn boost its use.

**Keywords:** West Frisian, intelligibility, Dutch, minoritized languages, receptive multilingualism

1. **Introduction**

Mastering a language other than our mother tongue is, for most of us, a high cost time and effort investment. However, when two closely related languages are similar enough in terms of grammar, vocabulary and pronunciation, speakers of one language can understand the other without learning it. They are, therefore, able to communicate using two different languages and without the need of a lingua franca. The study of intelligibility of closely related languages was first used to study the Algonquian dialect continuum (see Pierce, 1952), and was followed by research looking into the possibility to communicate across similar languages (e.g., Jensen, 1989 on the intelligibility of Portuguese and Spanish). Such a com-
municative interaction – which one may refer to as semi-communication (see Haugen, 1966) – seems to contradict the generally accepted notion that interlocutors need to share the code in which the message is transmitted. In fact, accommodation to a lingua franca is expected.

The present study investigates the intelligibility of West Frisian for Dutch native speakers, both in written and in spoken forms. Just as in previous research, our study deals with related languages (both being West Germanic languages). However, in contrast to most other studies, contact between these two languages – albeit commonplace – tends to be unidirectional. Being a minoritized language spoken in the Netherlands, all speakers of West Frisian are also Dutch speakers, and the language is therefore in constant contact with Dutch. The same is not true the other way around, though, since most Frisians will not use the language with non-Frisians, automatically switching to Dutch. As a result, most Dutch speakers going on holiday to Fryslân may never hear a word in Frisian, let alone see it written.

In minoritized contexts, such as the West Frisian context, accommodation is by default a switch to the dominant language (see Belmar, 2019b; Belmar, Van Boven, & Pinho, 2019 on the West Frisian context), exhibiting a clear example of diglossia (Ferguson, 1959). This automatic switch to the dominant language is often done out of politeness (see Trosset, 1986), compliance to an unspoken rule of accommodation. This, in turn, also means that the minoritized language is hardly ever heard by those who do not speak it. Even when the Frisian survey of 2015 (Provinsje Fryslân, 2015) claimed that 95% of the inhabitants of the province reported to be able to at least understand Frisian ‘pretty comfortably’, the difficulty to understand Frisian was (and is still) used as a reason for the dominant use of Dutch in the public sphere.

Nevertheless, these two West Germanic languages are so closely related that a high level of mutual intelligibility can be expected. In this context, however, mutual intelligibility cannot be tested, since all speakers of Frisian are also Dutch speakers, and we are limited to studying how much Frisian native speakers of Dutch1 can understand.

Researchers have claimed that some features of spoken Frisian are undergoing a process of convergence to Standard Dutch (see, for instance, De Haan, 1997; Nerbonne, 2001) and a few previous studies have found a high degree of intelligibility for speakers of regional linguistic varieties in the Netherlands (Van

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1. Note that by ‘Dutch native speakers’ we are referring to speakers who acquired Dutch at home and have not acquired Frisian either at home or at school. The term is somewhat misleading, since one can easily be a native speaker of both languages, but it will be used for the sake of brevity in this paper.
Bezooijen & Van den Berg, 1999c; Van Bezooijen & Gooskens, 2005, 2007a; Gooskens, 2007; Gooskens & Van Bezooijen, 2006; Oldehinkel, 2017; De Vries, 2010) and also including, to a lesser extent, Flanders (Van Bezooijen & Van den Berg, 1999a, 1999b). These studies, however, focused on the structural linguistic aspects that may favor intelligibility between regional Germanic varieties spoken in the Netherlands and Flanders, and mainly aimed at measuring cognate recognition and reproduction. For the purpose of this paper, we will define intelligibility as the extent to which an utterance in the Frisian language is comprehensible by a Dutch native speaker who does not speak Frisian. In other words, we will not focus on how many words (cognates or not) the participants can recognize or can translate correctly, nor will we focus on the grammatical similarities between Dutch and Frisian (see, for instance, De Haan, 1997). Instead, we will focus on the effectiveness of a given communicative interaction in Frisian (see Blees, Mak, & Ten Thije, 2014 on receptive multilingualism), and we will include speakers of Standard Dutch who claim to not speak another regional linguistic variety.

2. The West Frisian context

West Frisian, with approximately 480,000 speakers, is spoken by 54% of the population of the province of Fryslân, in the Netherlands (Provincie Fryslân, 2015) as well as in some neighboring villages in the province of Groningen. Also known as simply Frisian, it is recognized as one of the two official languages of the Netherlands since its inclusion in the Dutch constitution in 2010, and it enjoys co-official status with Dutch in the province of Fryslân (Laanen, 2001).

However, Frisian and Dutch are not the only languages or linguistic varieties spoken in the region. In the eastern parts of Fryslân one can still find speakers of Low Saxon varieties such as Stellingwerfs or Westerkwartiers. Moreover, the province is also home to Hylpers (often classified as an archaic West Frisian dialect), City Frisian\(^{2}\) and Bildts,\(^{3}\) as well as the ever more visible English language and the many languages spoken by newcomers.

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2. The name City Frisian refers to the mixed varieties of Dutch and Frisian spoken in the cities of Leeuwarden, Sneek, Franeker, Harlinger, Bolsward, Dokkum and Stavoren, as well as in the villages of Heerenveen and Kollum. Some of these varieties are closer to Frisian, others to Dutch, but they are often referred to together as Stadfries or Stedsk.

3. Bildts is another mixed variety of Dutch and Frisian spoken in Het Bildt, in the Waadhoeke municipality of the province of Fryslân.
2.1 Attitudes and use

The general negative attitude towards the Frisian language, even among native speakers themselves (see Gorter & Jonkman, 1995; Hilton & Gooskens, 2013; Ytsma, 1995, 2007) has had a negative effect on the use of the language, especially in the city of Leeuwarden (Belmar, Eikens, De Jong, Miedema, & Pinho, 2018; see also Belmar, 2019a; Belmar et al., 2019). In general, negative attitudes have often been found to trigger the idea that the language is very difficult to learn, which in turn reinforces the negative attitudes of those who do not speak it (see Giles & Niedzielski, 1998; Wolff, 1959). Previous studies have actually shown that non-Frisian speakers in Fryslân often claim that Frisian is a very difficult language to learn (see Belmar, 2018, 2019b; Ytsma, 1995, 2007; Swarte, 2011). This, together with the perceived need to accommodate to Dutch whenever one’s interlocutor does not answer in Frisian (see Belmar, 2019a, 2019b; Belmar et al., 2019; Wolf, 2013), hinders the maintenance of Frisian and the other minoritized linguistic varieties of the province.

3. Mutual intelligibility of closely related languages: West Frisian and Dutch

The notion of intelligibility of closely related languages (see Van Bezooijen & Gooskens, 2007b; Gooskens, 2013; Gooskens, Van Heuven, Golubović, Schüppert, Swarte, & Voigt, 2018) has long been studied especially for majority languages within known continua of closely related linguistic varieties (see Gooskens & Van Heuven, 2017). In fact, much of the literature available on intelligibility studies focuses on the Scandinavian languages (e.g., Gooskens, 2011), the Slavic languages (e.g., Golubović & Gooskens, 2015), the Romance languages (e.g., Araújo, Hidalgo, Melo-Pfeifer, Séré, & Vela, 2009; Fonseca, 2012) and the West Germanic languages (e.g., Van Bezooijen & Van den Berg, 1999a, 1999b, 1999c; Van Bezooijen & Gooskens, 2005; Gooskens, Van Bezooijen & Van Heuven, 2015; Gooskens & Heeringa, 2004; Swarte, 2016). However, the factors that contribute to intelligibility are still not completely understood. It has been suggested that phonetic distance has a larger effect on intelligibility than lexical distance (Gooskens, 2007), but this may only be true for languages that do already share a large percentage of lexical items. In addition, previous studies have shown an impact of extra linguistic factors such as contact, instruction and attitude, albeit weak and difficult to prove (see Gooskens & Van Bezooijen, 2006; Gooskens, 2006).
Furthermore, the study of intelligibility, or the ease to understand, has always been linked to the study of communication in a plurilingual society. Semi-communication (or semi-understanding) (Haugen, 1966; see also Braunmüller & Zeevaert, 2001; Zeevaert, 2007) postulates that for communication to be successful participants do not need to share the exact same language. In fact, Haugen (1966) goes as far as to state that “despite the growing loss of efficiency in the communication process as language codes deviate, it is often astonishing how great a difference speakers can overcome if the will to understand is there” (p. 280). Indeed, the willingness to make an effort to successfully understand one’s interlocutor seems to be a key factor when determining intelligibility.

Other scholars have linked intelligibility to receptive competence. Writing on the Swiss context, Lüdi (2007), for instance, affirmed that “an asymmetry between productive and receptive competence” should foster plurilingual communication. Similarly, Berthele (2007) claimed that intercomprehension is a skill which needs practice (see, for instance, Bergsma, Swarte, & Gooskens, 2014), and that misunderstandings are normal and common in this kind of communicative interaction, but also that these are corrected as the conversation continues and the participants become aware of previous mistakes (see also Grin, 2008). Others have opted for taking advantage of intelligibility to the fullest, by suggesting receptive multilingualism, or the possibility of holding a conversation in which participants speak different languages, as a possible successful strategy for communication in multilingual settings (Blees et al., 2014; see also Beerkens & Ten Thije, 2011; Belmar, 2019b; Belmar & Pinho, 2020; Rehbein, Ten Thije, & Verschik, 2012; Ten Thije & Zeevaert, 2007).

West Frisian and Dutch

Van Bezooijen and Van den Berg (1999b) studied the intelligibility of four West Germanic linguistic varieties for speakers of Standard Dutch. They selected speech tokens from Grou (Frisian), Bedum (Gronings), Valkenburg (Limburgish) and Tiel (West Flemish), and had their participants perform some translation tasks. They found out that the Gronings variety used in the experiment was the easiest to understand for Dutch speakers (with about 90% correct answers), followed by Limburgish (about 80%). Interestingly, the Frisian and West Flemish varieties were both found equally difficult (at about 58%). The authors suggest that these results can be explained on the basis of the linguistic differences of these varieties from Standard Dutch, even though Frisian was found to be more difficult to understand than these differences would suggest.

Later studies, however, have found higher degrees of intelligibility of Frisian for Dutch speakers. In fact, Gooskens (2007) claimed that mutual intelligibility
between Dutch, Afrikaans and Frisian is higher than that between Danes and Swedes.\footnote{Among the Scandinavian languages, these are the least mutually intelligible. Nevertheless, intercomprehension is still fairly high and conversations where both languages are used are not uncommon.} This being said, Afrikaans has been found to be easier to understand than Frisian (Van Bezooijen & Gooskens, 2005; see also Van Bezooijen & Gooskens, 2007a; Gooskens & Van Bezooijen, 2006), although this difference was only significant in reading. Furthermore, it has been suggested that geographical distance may play a role (Gooskens, 2007) as Dutch speakers living close to Fryslân may have had more contact with the language. More recently, Oldehinkel (2017) conducted a six-test experiment to measure the intelligibility of Dutch native speakers, and her participants scored on average 71.4\%. This percentage is extremely high and would suggest that intelligibility between Dutch and Frisian would suffice for far more than simple conversations (Swarte, Hilton, & Gooskens, 2013 suggest that 38\% intelligibility may be enough to understand directions).

Bergsma et al. (2014) conducted an experiment with Dutch speakers to test whether instruction about phonological correspondences between the two languages could contribute to intelligibility. Participants completed two intelligibility tests: one before the instruction and one after. In both cases, intelligibility between these languages was quite high. In the instruction, participants were taught about the most frequent sound correspondences between Dutch and Frisian (such as the /sk/ cluster in Frisian corresponding to the /sx/ cluster in Dutch). The study did not find any significant improvement after the instruction, and the researchers suggest that a longer time span of intervention may be needed.

Finally, De Vries’ (2010) study factored in different linguistic varieties spoken in the Netherlands. In the study, which consisted of a series of word translation tasks, speakers of both Gronings and Limburgish performed to a high level of accuracy, with speakers of North Hollandish scoring the lowest. This is a surprising finding, since one would expect Gronings and North Hollandish speakers (both varieties have a strong Frisian substrate) to perform better than Limburgish – a variety that is further removed, both linguistically and geographically, from Frisian.

In this study, we expect to find a high degree of intelligibility, based on the numerous similarities of the languages (Swarte, 2016; see also Dijkstra, 2013; Dijkstra, Kuiken, Jorna, & Klinkenberg, 2015 on early Frisian-Dutch bilingualism development) and on the aforementioned studies which have found high success rates in cognate recognition between these languages. The regional linguistic varieties that participants claim to speak are hypothesized to have a positive impact on their ability to understand Frisian (based on the findings of Van Bezooijen &
Van den Berg, 1999b; and De Vries, 2010), with speakers of Gronings expected to outperform speakers of other varieties (see De Vries, 2010). We also expect geographical distance to have an effect on the participants’ ability to understand Frisian (based on the findings of Van Bezooijen & Van den Berg, 1999a; and Gooskens, 2007), and Dutch speakers from the Netherlands are hypothesized to outperform those from Belgium. Finally, after completing the intelligibility test, participants were instructed to report their impressions regarding the difficulty of the task. However, these are not expected to correlate with their actual performance in the tasks. Based on the language ideologies and attitudes found in the province of Fryslân (see Belmar, 2018, 2019a, 2019b; Belmar et al., 2018, 2019; Gorter & Jonkman, 1995; Hilton & Gooskens, 2013; Swarte, 2011; Wolf, 2013; Ytsma, 1995, 2007), as well as the ideas of ‘difficulty’ of a language (see Giles & Niedzielski, 1988; Wolff, 1959), we expect participants to over-report the difficulty of the tasks.

4. Methodology

4.1 Participants

An open call for participants was launched online through social media platforms, which resulted in a sample size of 220 participants (74.1% females, 25.5% males and one participant who identified as neither; mean age = 34.4, range: 16–79) once we discarded non-native speakers of Dutch and those participants who claimed fluency in a Frisian variety as well as City Frisian or Bildts, since it was considered that these speakers would have a much easier time performing the tasks. In fact, the two participants who claimed fluency in Bildts but not in Frisian received extraordinarily high scores in our test (99/100), which further confirmed our decision to exclude them from the sample. Of these participants, 80.5% were born in the Netherlands and 19.5% in Belgium, and only 33.7% claimed to speak a regional linguistic variety other than Frisian, City Frisian or Bildts (54.8% of the participants in Belgium, and 28.7% of the participants in the Netherlands) (see Table 1).

For the analysis of the data, participants were divided into four different groups based on their place of birth and their ability to speak a regional linguistic variety. Of the 126 participants born in the Netherlands who did not speak any other regional language/dialect (mean age = 33.38, range: 16–71), 77.78% were females, 21.43% males and one participant who identified as neither. For those participants born in the Netherlands who reportedly speak a regional variety (N = 51), 62.75% were females and 37.25% males, with a mean age of 39.69 and a
range between 18 and 79. As for the participants born in Belgium, those who do not speak a regional language/dialect (N=20) were between 19 and 73 years old (mean age = 30.84), and 80% were females and 20% males. Finally, of the 23 participants born in Belgium who claimed to speak a regional language/dialect (mean age = 31.23, range: 21–61), 73.91% were females and 26.09% were males.

Table 1. Participants by province and self-reported ability to speak a regional variety

<table>
<thead>
<tr>
<th>Province (Country)</th>
<th>Regional variety*</th>
<th>No regional variety**</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noord Holland (N)</td>
<td>1</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Zuid Holland (N)</td>
<td>0</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Gelderland (N)</td>
<td>6</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Fryslân (N)</td>
<td>0***</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Groningen (N)</td>
<td>4</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Overijssel (N)</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Noord Brabant (N)</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Antwerp (B)</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Drenthe (N)</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Limburg (N)</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Zeeland (N)</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>East Flanders (B)</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Flevoland (N)</td>
<td>0</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Utrecht (N)</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>West Flanders (B)</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Limburg (B)</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Flemish Brabant (B)</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Brussels (B)</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* Participants who claim to speak a regional linguistic variety. Regional linguistic variety reported: Limburgish (10), Antwerps (9), Noord-Brabants (9), Zeeuws (9), Drents (8), West-Vlaams (8), Gronings (5), Twents (5), Achterhoeks (3), Oost-Vlaams (2), Tussentaal (2), Salland (1), Tessel (1) and Veluws (1).

** Participants who reportedly do not speak a regional linguistic variety

*** Speakers of Bildts and the City Frisian varieties were discarded for this study

4.2 Material

To assess the intelligibility of Frisian for Dutch native speakers, an intelligibility test was developed on Google Forms following suggestions as well as designs from previous literature (particularly Gooskens, 2007; Gooskens, 2013; Gooskens & Van Heuven, 2017). The test consisted of two reading exercises, three listening
exercises and two translation exercises of 10 sentences each. For each type of exercise, a grade of up to 100 was calculated.

The test itself was preceded by personal questions about gender, age, place of birth, residence and self-reported ability to speak a regional linguistic variety. After completing the tests, participants were asked to rate the difficulty of the tasks (Reading; Listening; Translating) on a scale of 1 to 5 (with 1 being ‘very easy’ and 5 being ‘very difficult’), in order to compare their assessments with the findings claiming that Dutch speakers living in Fryslân tend to think of Frisian as a difficult language (see Belmar, 2018, 2019a; Swarte, 2011; Ytsma, 1995).

Reading exercises

The reading exercises (see Appendix A) were taken from the Lear mar Frysk textbook (Palstra & Van der Meer, 2015), designed as a tool to learn Frisian for Dutch speakers. Reading Exercise 1 consisted of a 225-word text that the participants had to read, followed by 4 questions with two possible answers each. The participants were asked to choose the correct answer and 1 point was given per correct answer. For Reading Exercise 2, the participants were asked to read a 156-word text and try to guess the meaning of the 10 highlighted words by context. Three degrees of correctness were distinguished: correct (1 point), partly correct (0.5 points, singular words translated as plural or verbs translated in the wrong tense) and incorrect (0). The maximum score for this exercise was, therefore, 10 points per reader, making the maximum total score of the Reading Exercises 14 points.

Listening exercises

The participants were asked to listen to (and watch) 3 videos from the YouTube channels Praat mar Frysk and Omrop Fryslân. 2 or 3 main points were identified for each video and the participants’ answers were assessed on whether these points had been understood (see Table 2). The maximum score for the listening exercise was 8 points.

Translation exercises

The twenty sentences for the translation exercises (see Appendix B) were also taken from the Lear mar Frysk textbook. The translations were corrected on the basis of the success in conveying the original meaning, rather than a literal translation. For instance, verb tenses were not taken into account, and only translations that changed the message of the original sentences were deemed incorrect.

5. Praat mar Frysk is a promotion campaign for the Frisian language started and coordinated by Afûk.
6. Omrop Fryslân is the Frisian regional radio and television broadcaster.
Table 2. Overview of the listening exercises

<table>
<thead>
<tr>
<th>Duration</th>
<th>Question</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video 1</td>
<td>0:15  Wat zegt de presentator? [What is the presenter saying?]</td>
<td>3</td>
</tr>
<tr>
<td>Video 2</td>
<td>0:17  Wat vraag hij u te doen? En waarom? [What is he asking you to do? And why?]</td>
<td>2</td>
</tr>
<tr>
<td>Video 3</td>
<td>0:52  Wat gebeurt er in de video? Vertel ons alles wat u hebt begrepen. [What is happening in the video? Tell us everything you understood]</td>
<td>3</td>
</tr>
</tbody>
</table>

* The video was longer, but participants were only asked to listen to the first 15 seconds.

Three degrees of correctness were distinguished: correct (1 point), partly correct (0.5 points, especially in more complex sentences when only half of the sentence was correctly translated) and incorrect (0). The maximum score for translation was, therefore, 20 points per participant.

4.3 Data analysis

Data was analyzed using R (R Core Team, 2012). Two-way analyses of variance (ANOVAs) were performed for the results of each of the different tasks, as well as for the total grades, with place of birth and the ability to speak a dialect or a regional language as independent variables. First, we tested to see whether there was an interaction between our variables with a Type I Sum of Squares, for all three types of exercises as well as the total results. Since no significant interaction was found in any of the contexts, we then refit our model and carried out Type II ANOVAs to test the main effects.

Furthermore, correlation tests were carried out to see whether participants’ ratings of the difficulty of each of the tasks correlated with their results in the intelligibility test. A different correlation test was carried out for each of the different tasks.

For all analysis, the $\alpha$-level was set at 0.05, since this is the standard error level set for statistical tests in the field of linguistics.

5. Results

This section details the results of the statistical analyses carried out. Firstly, descriptive statistics were performed to get an overview of the data. As can be seen in Table 3, when it comes to all participants, the reading exercises ($M = 84.74$)
showed the highest scores, while the listening exercises ($M=74.4$) had the lowest scores. Translation exercises ($M=80.8$) occupied an intermediate position.

As for the different variables, it can be seen that in all exercises, participants who were born in the Netherlands and spoke a regional linguistic variety ($M=83.39$) had the highest scores, followed by all the participants who were born in the Netherlands regardless of whether they spoke a regional linguistic variety ($M=81.96$). Next, we can see that people born in the Netherlands and who do not speak a regional linguistic variety performed almost as well ($M=81.37$), followed by all the participants who spoke a regional linguistic variety ($M=80.11$) regardless of their birthplace.

On the other end, participants who were born in Belgium and did not speak a regional linguistic variety ($M=68.79$) had the lowest score, followed by all the participants who were born in Belgium ($M=71.53$), which was then followed by the participants who were born in Belgium and spoke a regional linguistic variety ($M=73.90$) and finally by those who did not speak a regional linguistic variety, including both participants born in the Netherlands and those born in Belgium ($M=79.70$).

Next, a two-way ANOVA was performed to examine the effect of place of birth and the ability to speak a dialect or a regional language on the results of the reading tasks. As mentioned in the Data Analysis section, there was no statistically significant interaction between the effects on the results of this exercise of neither birthplace nor the participants’ ability to speak a dialect or a regional language. A main effects analysis showed that there was a significant effect of birthplace on the reading scores (see Figure 1), $F(1,217)=14.294$, at $p<0.001$, and the effect size was small ($r=0.249$). On average, participants born in Belgium had significantly lower results ($M=77.64$, $SD=15.21$) than those born in the Netherlands ($M=86.34$, $SD=11.66$). There was no overall difference in scores due to the participants’ ability to speak a regional variety, $F(1,217)=1.074$, at $p=0.301$.

Regarding the results of the listening exercises, a two-way ANOVA was carried out to test the effects of birthplace and the ability to speak a regional variety on these scores. Just like in the reading scores, no significant interaction between the two variables was found. A main effects analysis found a significant effect of place of birth on the listening results (see Figure 2), $F(1,217)=18.917$, at $p<0.001$, and the effect size was small ($r=0.289$). On average, participants born in Belgium had significantly lower results ($M=63.14$, $SD=22.11$) than those born in the Netherlands ($M=77.59$, $SD=21.31$). There was no overall difference in scores due to the ability to speak a dialect or regional language, $F(1,217)=0.0011$, at $p=0.974$.

Regarding the translation tasks, a two-way ANOVA was performed to examine the effect of the two variables – birthplace and ability to speak a regional language – on the results of these tasks. Once more, no significant interaction was
Table 3. Results of the intelligibility tasks

<table>
<thead>
<tr>
<th>Participants</th>
<th>Statistic</th>
<th>Reading</th>
<th>Listening</th>
<th>Translation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All participants</td>
<td>M</td>
<td>84.4</td>
<td>74.4</td>
<td>80.8</td>
<td>79.84</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>12.67</td>
<td>22.32</td>
<td>15.07</td>
<td>13.02</td>
</tr>
<tr>
<td>Speaks a regional variety</td>
<td>M</td>
<td>85.04</td>
<td>72.6</td>
<td>82.67</td>
<td>80.11</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>11.49</td>
<td>22.75</td>
<td>11.76</td>
<td>11.52</td>
</tr>
<tr>
<td>Does not speak a regional variety</td>
<td>M</td>
<td>84.59</td>
<td>75.32</td>
<td>78.77</td>
<td>79.7</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>13.26</td>
<td>22.11</td>
<td>16.39</td>
<td>13.75</td>
</tr>
<tr>
<td>Born in the Netherlands</td>
<td>M</td>
<td>86.34</td>
<td>77.59</td>
<td>81.57</td>
<td>81.96</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>11.66</td>
<td>21.31</td>
<td>15.31</td>
<td>12.64</td>
</tr>
<tr>
<td>Born in Belgium</td>
<td>M</td>
<td>77.64</td>
<td>63.14</td>
<td>73.84</td>
<td>71.53</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>15.21</td>
<td>22.11</td>
<td>13.84</td>
<td>12.19</td>
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<tr>
<td>Born in the Netherlands and speaks a regional</td>
<td>M</td>
<td>87.32</td>
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<td>85.56</td>
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<td>10.50</td>
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<td>10.63</td>
<td>11.24</td>
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<tr>
<td>Born in the Netherlands and does not speak a</td>
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<td>85.94</td>
<td>77.72</td>
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<td>regional variety</td>
<td>SD</td>
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<td>16.61</td>
<td>13.16</td>
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<tr>
<td>Born in Belgium and speaks a regional variety</td>
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<td>80.04</td>
<td>65.66</td>
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<tr>
<td></td>
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<td>12.19</td>
<td>9.21</td>
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<tr>
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<td>74.86</td>
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<td>71.32</td>
<td>68.79</td>
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<tr>
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<td>SD</td>
<td>17.58</td>
<td>23.21</td>
<td>15.40</td>
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</tbody>
</table>

found. A main effects analysis found a significant effect of birthplace on the translation scores (see Figure 3), $F(1,217)=9.754$, at $p<0.01$, as well as a significant effect of the ability to speak a dialect, $F(1,217)=6.082$, at $p<0.05$. The effect size was small ($r=0.24$). On average, participants born in Belgium had significantly lower results ($M=73.84$, $SD=13.84$) than those born in the Netherlands ($M=81.57$, $SD=15.31$). In addition, participants who spoke a dialect or regional language on average scored significantly higher ($M=82.67$, $SD=11.76$) than those who did not ($M=78.77$, $SD=16.39$).

In regard to the total scores, a two-way ANOVA was completed to analyze the effects on these results of both place of birth and ability to speak a dialect or a regional language. No significant interaction was found for this analysis either. A main effects analysis found a significant effect of birthplace on the total grades (see Figure 4), $F(1,217)=25.551$, at $p<0.001$, and the effect size was medium ($r=0.325$). On average, participants born in Belgium had significantly lower results ($M=73.84$, $SD=13.84$) than those born in the Netherlands ($M=81.57$, $SD=15.31$).
There was no overall difference in scores due to the ability to speak a dialect or a regional language, $F(1, 217) = 1.627$, at $p = 0.204$.

Next, for the reading results, a correlation analysis showed that the level of difficulty rating and the results for these exercises were significantly negatively related ($\tau = -0.289$, $p < 0.05$). This means that the higher a participant rated the level of difficulty of the reading task, the lower their results were (see Figure 4).
For the listening scores, a correlation analysis also showed that the level of difficulty rating and the results of these exercises were significantly negatively related ($\tau = -0.196$, $p < 0.05$). This means that the higher a participant rated the level of difficulty of the reading task, the lower their results were (see Figure 5).
Finally, for the translation scores, a correlation analysis also showed that the level of difficulty rating and the results of these exercises were significantly negatively related ($tau = -0.376, p < 0.05$). This means that the higher a participant rated the level of difficulty of the reading task, the lower their results were (see Figure 6).
Discussion and conclusion

The results of this study give us more insight into the possibilities of using intercomprehension between Frisian and Dutch speakers for revitalization purposes. As suggested by Van Bezooijen and Van den Berg (1999a) as well as Gooskens (2007), people born in the Netherlands seem to understand more Frisian than those born in Flanders, Belgium (see Table 3 and Figures 1, 2, 3 and 4). This may well be due to some exposure to the Frisian language plus more similarities between local forms of Dutch or other Germanic varieties the participants may have been exposed to. Along the same lines, De Vries (2010) found that participants from certain dialectal areas seemed to understand more Frisian, with those from Groningen (a neighboring province whose Low Saxon variety has a strong Frisian substrate) scoring the highest. However, in our experiment the ability to speak a dialect or a regional language did not have a significant impact on the overall ability of the participants to understand Frisian (contrary to what one might expect based on previous findings by Van Bezooijen & Van den Berg 1999b; and De Vries, 2010).

In addition, the results show a correlation between the perceived difficulty of the tasks in Frisian (reading, listening and translation) and the scores each participant received. For further iterations of this or similar studies, it would prove meaningful to investigate whether the post-test difficulty ratings match predictions of difficulty made before taking the test. These correlations indicate that after facing specific tasks, participants can accurately assess their performance. This, in turn, seems to contradict the common claim that Frisian is a difficult language.
for Dutch speakers (reported in, for example, Belmar, 2018, 2019a; Swarte, 2011; Ytsma, 1995). Nevertheless, it is worth noticing that participants tend to overestimate their ability to understand spoken Frisian while underestimating their ability to read it. This is likely due to the fact that everybody in Fryslân is much more likely to hear Frisian than to see it written (see Belmar, 2019a, pp. 81–82, on the low writing skills in Frisian among both native and new speakers of the language).

The high average scores in all three types of exercises and in all conditions seem to indicate that the intelligibility of Frisian for Dutch native speakers is extremely high (see Table 3) (as suggested by previous studies, such as for instance Gooskens, 2007; and De Vries, 2010 among others). Inter-participant variation, as suggested by Gooskens in multiple studies (see, for example, Gooskens, 2006), may be due to many extralinguistic factors, such as motivation, exposure, concentration, etc., and knowledge of other languages (even languages not closely related to the target variety) may also play a role.

This being said, taking Swarte et al.’s (2013) suggestion that a 38% level of intelligibility should be enough to understand direction in another language, we have reason to believe, at approximately 80% or the only slightly less impressive 74.4% in the listening tasks, that intercomprehension between Frisian and Dutch may actually exceed basic conversations and set the perfect stage for receptive multilingualism (see, for instance, Ten Thije & Zeevaert, 2007).

In fact, these results seem to suggest that the promotion of bilingual conversations may be the key to boost the use of Frisian in Fryslân, especially in the cities. If Dutch speakers can understand Frisian to such a high degree, one cannot help but wonder what is stopping the province from advocating a more widespread use of the language. We believe that increasing the number of tokens in Frisian visible in the streets of Fryslân, as well as the use of spoken Frisian in public events (be it alongside Dutch or exclusively) can in turn easily increase the prestige of the language all the while amplifying the knowledge of the language some Dutch speakers may have and also securing a safe space where both languages can be used on an equal footing (see Belmar, 2019b; Belmar & Pinho, 2020). In other words, we deem it necessary – and completely feasible – for the province to enact strategies to empower Frisian speakers to use their language, which includes its use in conversations with Dutch speakers (see Belmar, 2019b). Only by doing so will the province of Fryslân achieve societal bilingualism, rather than the diglossic situation it currently exhibits.
References


Annex A. Reading Exercises

Reading Exercise 1: Lees de volgende tekst in het Fries en kies het juiste antwoord

Wêr fiele wy ús thús
Keamers, huzen en gebouwen hawwe ynfloed op hoe’t we ús fiele. Yn guon romtes fiele we ús ferlern en ûngemaklik, oare romtes meitsje ús nijsjirrich, en wer oare jouwe ús in behaachlik thûsgefoel. Wa’t ea op huzejacht west hat, ken it fenomeen: by it iene Hûs hat men gelyk in dûdklik ja-gefoel, sûnder dat men miskien krek wit wêr’t dat aan leit; in oar hûs ‘fielt’ minder goed, wylst it rasjoneel sjoen just oantrekliker wêze moatte soe, omdat it bygelyks rommer is, of ljochter, of yn in betere buert stiet. Mar war makket no krekt dat we dat ja-gefoel krije, of ús ûngemaklik fiele?

Rôfdierhokken
Neffens de Amerikaanske omjouwingspsychologe Judith Heerwagen fiele we ús it noflikst yn romtes dy’t oanslute b y it natuerlik ferlet en de primitive ynstikten dy’t wy as minsken oerholden hawwe aan de tiid dat we noch jagers en samlers wienen. Foar ynichten grypt Heerwagen werom op bisteferbliuwen yn dieretunen: yn de âlderwetske, keale koaien fan in heale iuw bleaunen de bisten wol yn libben, mar dêr wie dan ek alles mei snein. Se gedroegen harren faak neutoatysk, rûnen oerenlang itselde rûntsje of plôken harsels keal fan kleare ellinde. Tsjin-
twurdich binne de bisteferbliuwen meur ôfstimd op harren oarspronklike habitat. Mei effekt. De bewenner kinne harren ynstinkten no better úlibje en hawwe meur kontrôle oer harren gedrach.

Dit word gezegd over de ruimtes:

a. Verloren en ongemakkelijk voelend, nieuwsgierig makend, een behaaglijk thuisgevoel gevend.

b. Prettig aanvoelend, saai ingericht, een onbehagelijk gevoel gevend.

We voelen ons het fijnst in ruimtes die...

a. Aansluiten bij de natuur om ons heen.

b. Aansluiten bij de natuurlijke behoeften en primitieve instincten.

Heerwangen baseert haar inzichten op...

a. De manier waarop mensen vroeger leefden.

b. De kooien waar dieren in dierentuinen in verblijven.

Heeft het effect dat de verblijven zijn afgestemd op de oorspronkelijke habitat?

a. Nee, de dieren hebben geen controle over hun gedrag.

b. Ja, de dieren kunnen hun instincten beter uitleven.

Reading Exercise 2: Wat denkt u dat deze woorden betekenen? Als u het niet kunt raden, schrijf dan “?”

Al wiken hie Mark hjier nei útsjoen. Wylde plannen makke mei syn freonen. As er op himsels wennen yn Amsterdam soenen se allegearre delkomme en dan makken se der ien grut feest fan. Earst by him thús wat ûte en yndrinke fansels en dan de kroech yn en noch letter nei de diskoteken. En wat it moaiste wie? Gjin mem dy’t de oarre deis seurde: ‘Hiest net e ven wat opromje kinne? Wat litte jimme altyd in binde achter nei in feestje!’

Fan ‘e middei hie er earst besocht om wat skjin te meitsjen yn de keuken. De flier moast er twa keer dweile, sa plakte it! Yn de kuolkast lei net safolle meur wat noch iten wurde koe. Dêrom hie er ek mar wat boadskippen ynslein. Maklik iten fansels, hy koe noch net safolle klearmeitsje. It like him ek wol ferstannich om wat plestik boarden en bestek mei te nimmen, dat skeelde wer yn it ôfwaskjen.

Appendix B. Translation Exercises

Exercise 1

1. Ik kin net mear op myn fuotten stean, sa wurc bin ik.
2. As ik in skoftke sitten haw, dan giet it wol wer.
3. Kom gau hjir, rôp de mem nei har dochter.
4. Kin ik bakte ierdappeltsjes by dit gerjocht krije?
5. Sille we in eintsje kuierje oer de seedyk?
6. Ik wie lilk doe’t ik hearde dat er my beduvele.
7. Pieter fan ús jan is in grutte dogeniet.
8. Ik gean nei it feest fan hinke
9. Hy heerde de wyn om it hûs
10. Hy is âlder as alle oaren

Exercise 2
1. Ik wol in tafel foar seis persoanen reservearje.
2. Do moatst net sa flústerje, ik hear dy hast net.
3. It waait hurd, it is hast in stoarm.
4. Ik harkje altyd goed nei master.
5. Do baltst sa ferskriklik, ik wurd der dôf fan.
6. Do moatst it gers noch meane en de meanmasine opromje
7. Sandra freget oan Marije oft se wat ôfprate wol.
8. Hasto foar my in glês molke?
9. Dochs yt ik leaver ierdappels mei griente
10. Ik sil de wask dwaan moatte

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Publication history

Date received: 12 August 2019
Date accepted: 9 June 2020
Published online: 16 October 2020