

# Chapter 8

## Applications of mutual intelligibility studies

As mentioned in Chapter 1, there are various reasons to investigate the mutual intelligibility between languages and dialects. These range from theoretical and scientific interest to more practical issues such as language planning and policy and cover cultural, communicative, educational, and economic matters. This highlights the broad significance of mutual intelligibility across various domains of human interaction.

### 8.1 Fundamental knowledge

Intelligibility research bears on central questions of linguistics, and it adds to our fundamental knowledge of language. One of the main functions of language is communication (Crystal and Robins 2021). Human speech is a remarkably robust system of communication that generally succeeds even in difficult listening conditions. Yet, pinpointing exactly how and why people manage to communicate successfully, even in the face of communication barriers, remains an ongoing challenge for language researchers. Even in situations where the interactants have the same native language background, they often have to deal with speech in non-optimal situations, such as speech produced with background noise, competing speech input from other speakers, low amplitudes, hearing or speech disorders, and a bad internet or telephone connection. Another non-optimal situation where some level of communication can still be achieved is when listeners encounter a language that has only some partly overlap with their native language. Intelligibility research investigates such non-optimal situations and tries to understand what factors make mutual intelligibility more difficult, what factors are less obstructive to intelligibility, and how these factors interact. In doing so, we gain fundamental knowledge about the human language faculty and its limitations.

It is presently not possible to define a breakdown point where languages are so different that they are no longer mutually intelligible. Moreover, we do not know whether the relationship between the number and magnitude of deviations and intelligibility is linear or non-linear. It could be hypothesized that recognition of words in a closely related language remains good if they are similar to the corresponding words in the native language of the listener but abruptly breaks down when the differences become too large. However, at this point, it is not possible to define at which point this breakdown takes place and how various linguistic factors interact in different languages. The investigations summarized in

this book have made a beginning. However, it is complicated to develop a complete model of intelligibility since so many linguistic and extra-linguistic factors play a role, and each language and language combination represents a unique situation.

Intelligibility research is also fundamental to sociolinguistic theories. When different language varieties are in contact through interaction, they are likely to become more alike with time (linguistic leveling). Since there is a clear link between intelligibility and the amount of exposure (see Sections 4.1 and 7.1.1), intelligibility will likely play a crucial role in this process. Therefore, intelligibility is also critical for understanding mechanisms behind language shift. Trudgill (1986: 21–23) explains how mutual intelligibility plays a role in accommodation processes in addition to socio-psychological factors, such as the desire not to be different from other speakers in our social group. Misunderstandings may cause speakers to accommodate their pronunciation to the language of the listeners and eventually lead to language shift. An example of misunderstandings caused by pronunciation differences between British English and American English provided by Trudgill is the following:

*I can attest that one factor that without doubt precipitated the introduction of flaps (of intervocalic [t]) into my own speech in America was the number of people who thought, for example, if only for a second, that I wanted a pizza rather than that my name was Peter (Trudgill 1986: 23).*

This example shows how an outsider's deviant pronunciation can lead to miscommunication and as a consequence cause the outsider to adapt his speech to that of the locals.

## 8.2 Defining “language” versus “dialect”

Linguists are commonly asked how many languages there are worldwide (Anderson 2012). This may sound like a simple question, but it is not easy to answer. Ethnologue's classified list as of 2023 includes 7,168 distinct languages (Eberhard, Simons, and Fennig 2023). This number is constantly changing because many languages have only a few speakers and are, therefore, in danger of extinction. Linguists are also gaining an increased understanding of how many languages are actually spoken in areas that have previously not been described in detail. However, a significant challenge arises from the fact that the definition of “language” as opposed to “dialect” is not clear-cut. To be able to quantify the number of languages it is necessary to agree on a way to distinguish the two.

Also at the language planning and policy level, it may be crucial to establish criteria that define a language variety as either a language or a dialect. A language often represents a community and is tightly linked to standardization processes and the development of orthographies. The choice or development of a single shared standard variety and a single orthography for a number of closely related language varieties may save time and effort. It will make it possible to develop teaching resources and orthographies that can be used in a larger area with a larger number of people rather than creating the material for each variety independently. To decide on orthographic forms it is necessary to gain knowledge about which language varieties are similar enough to share an orthography. For example, during the fifties of the previous century, there was a strong interest in establishing the mutual intelligibility of American Indian languages (Hickerson, Turner, and Hickerton 1952; Pierce 1952; Voegelin and Harris 1951). The aim was to investigate the genetic relationship between language varieties and to develop or adopt a single orthography for multiple closely related language varieties within literacy programs. Similar projects are still being carried out worldwide, particularly by SIL International in the context of language development, language planning and education.<sup>25</sup> It is not entirely clear when differences between varieties become too great to be bridged with one and the same orthography. By means of recorded text testing (RTT, see Section 2.2.3.2), Brye and Brye (2002) tested the mutual intelligibility between speakers of the Eastern Beoid varieties Nooni, Ncane, and Nsari, spoken in Cameroon. They aimed to investigate the potential for extendibility of Nooni literature to the other speech varieties. For the choice of a threshold, they refer to Grimes (1992: 22), who states that a score of 85% is necessary to speak of a dialect cluster as a single language. In addition, the standard deviation should be below 15%, as a higher deviation would probably indicate that some individuals have had exposure to the variety. Grimes also notes that the final threshold depends on the importance of communicating well and on extra-linguistic criteria. For example, some of the participants in Brye and Brye’s investigation showed an unwillingness to pursue a written form based on other varieties than their own.

For individuals fighting for the rights of a specific language variety, it holds immense significance that the variety is acknowledged as a language rather than a dialect, as the official recognition can give the variety a stronger position. For instance, in Part 1 of the European Charter for Regional or Minority Languages (Council of Europe 1992), the entitlement to use one’s variety in public life (e.g., in educational, juridical, administrative, or media contexts) is contingent on the sta-

---

<sup>25</sup> <https://www.sil.org/language-development>

tus of this variety as an official, regional or minority language. Those who speak varieties classified as “dialects” do not have these rights under the Charter. Conversely, there are also instances where clearly distinct languages are labeled as dialects of a single language because it is desirable to maintain the perceived unity of the region. Often mentioned examples are Cantonese and Mandarin. These two Chinese varieties are not mutually intelligible but are still often referred to as dialects of the same language, probably because of the shared writing system and to stress the political, social, and cultural unity of the country (Kurpaska 2010; Wardhaugh and Fuller 2021).

In search of criteria for deciding whether a language variety should be considered a language or a dialect, Kloss (1967) introduced the terms *Ausbausprache* (language by development) and *Abstandsprache* (language by distance). *Abstand* languages (including dialects) are “intrinsically distant to others” (Kloss 1967: 29). One language is distinguished from another based on linguistic criteria, i.e., because they differ substantially in pronunciation, vocabulary, and grammar. There is “a definite break” between the two languages, and “the linguist would not hesitate for a single minute to list the two separately” (Kloss 1967: 30). Two dialects within one language are less different in structure than two dialects of different languages. Varieties from different language families, such as French (a Romance language) and German (Germanic), are two different *Abstand* languages. However, languages from the same family, such as German and Dutch (both Germanic), can also be considered *Abstand* languages. An *abstand* language is not necessarily required to have a standardized form. This circumstance frequently arises with minority languages, which are often only used in private life, while official functions are conducted in the majority language.

According to the *Ausbau* definition, languages and dialects are social constructs that depend on their socio-political and cultural status and breadth of use, and structural characteristics of the language varieties may be of less importance. An *Ausbausprache* generally refers to a language variety with its own standardized form taught in schools and used in various socio-political contexts. It is typically an official national language. The Scandinavian languages (Danish, Norwegian, and Swedish) are examples of *Ausbausprache* that are quite similar. In another context, they might therefore have been classified as dialects. However, they are still regarded as separate languages because they are spoken in separate nation-states and have distinct standardized forms with their own orthographies, grammar books, and literary works. A similar case can be observed in Czech and Slovak, which are closely related, possibly even closer than the Scandinavian languages. The linguistic distance measurements in the MICReLa project (see Appendix D) showed smaller distances at the phonetic and syntactic levels between Czech and Slovak (11.5 and 10.9%) than between Danish and Swedish (34.5 and 14.7%). The lex-

ical distances between Czech and Slovak are only slightly higher (mean 8.1%) than between Danish and Swedish (5.2%). However, despite the small distances, Czech and Slovak are still considered two different languages. Since the dissolution of Czechoslovakia in 1993, the Czech and Slovak written standards have been the official languages of the Czech and Slovak Republics, respectively, and standardized forms of the two languages are distinguishable and recognizable. There are numerous other situations where two varieties are considered different languages even though they are very similar and mutually intelligible, such as Serbian and Croatian (Bailyn 2010) and Hindi and Urdu (Tripathi 2016). For historical reasons, some language varieties that are not separated by state borders may be recognized as distinct regional languages, even if they are closely related to the state’s primary language or official language. An example is West Frisian, an official language in the Dutch province of Friesland. Like Dutch, it belongs to the West Germanic language family, and the two languages are mutually intelligible to some extent (see van Bezooijen and van den Berg 1999; Gooskens and Heeringa 2004b; van Bezooijen and Gooskens 2005b). Within the borders of the Province of Friesland, anyone has the right to address both the local and the national administration in Frisian. It has an official written form and is taught at primary and secondary schools in Friesland.

In terms of language rights, it may have large consequences for the vitality of a language variety, whether it is considered a language or a dialect. Tamburelli (2014) points out that the *Ausbau* definition may result in a circularity effect. As previously mentioned, according to the Council of Europe (1992; see also Tamburelli 2014), the use of a linguistic variety in official contexts is a right reserved for varieties with language status. However, for a variety to achieve the “language” label, it must have a certain socio-political status. This means that the endangered language varieties that language legislation is intended to protect may, in fact, be excluded from this protection a priori. Tamburelli (2021), therefore, warns that over-reliance on socio-political criteria (the *Ausbau* definition of languages) in the linguistic literature can lead to discrimination of speakers of contested languages at both the social and the institutional levels. He also argues that an approach based on *Ausbau* criteria leads to recognizing as few languages as possible because languages that exhibit considerable linguistic distance from each other are often still considered dialects of the same language. This is ultimately detrimental to the maintenance of linguistic diversity. Tamburelli advocates for a stronger reliance on *Abstand* criteria, which, for instance, would result in the classification of distinct Chinese dialects as separate languages.

When asked to define languages, linguists generally prefer to apply the *Abstand* criterion rather than the *Ausbau* criterion. Kloss (1967) did not specify precisely how the differences between two language varieties can be measured objectively, likely due to a lack of appropriate tools at the time. However, as dis-

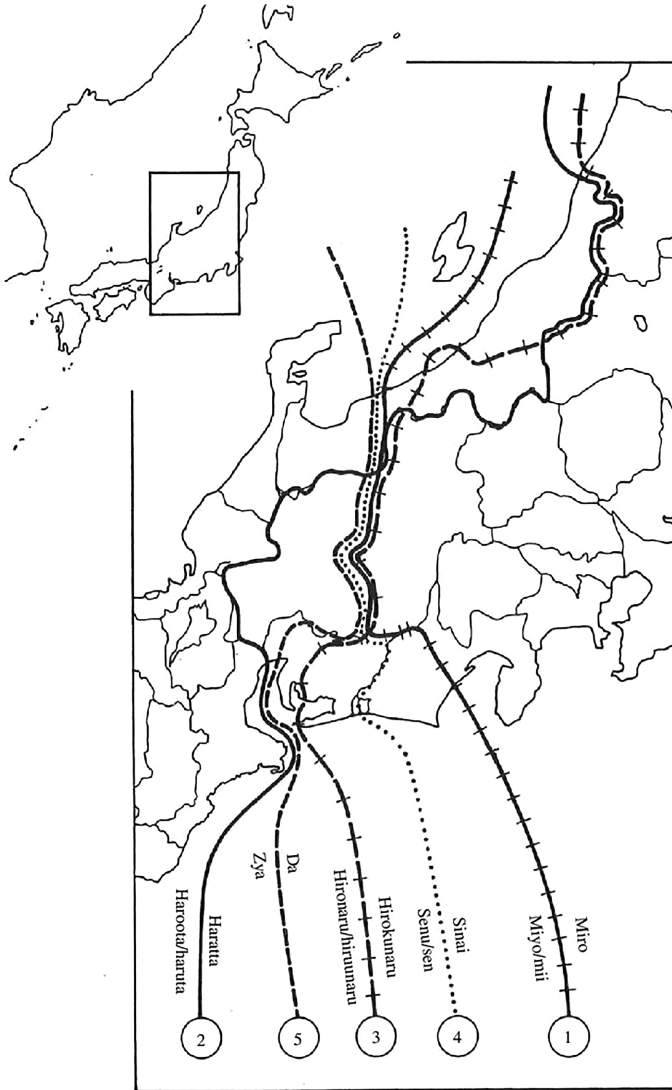
cussed in Chapter 5, dialectometrists have now developed methods for measuring linguistic distances objectively. Despite these advancements, a fundamental issue remains: languages vary across multiple dimensions, such as lexicon, phonetics, phonology, morphology, and syntax, and there is no straightforward way to assign weights to these dimensions *a priori* (van Heuven 2008).

Trudgill (2000) introduced the intelligibility criterion, which has since become the primary criterion among many linguists. According to this criterion, dialects are regarded as mutually intelligible varieties, whereas languages are distinguished by linguistic differences significant enough to hinder mutual comprehension among speakers. From this, it follows that a language can be defined as a collection of mutually intelligible dialects. Through an intelligibility experiment, Yang et al. (2020) demonstrated that Jejueo, the traditional variety of speech used on Jeju Island, long classified as a nonstandard dialect of Korean, is not comprehensible to monolingual speakers of Korean. The researchers, therefore, concluded that Jejueo should be treated as a distinct language rather than a dialect of Korean. Similarly, Özek, Sağlam, and Gooskens (2021) presented experimental evidence supporting the categorization of Kurmanji and Zazaki dialects spoken in Eastern Anatolia as separate languages rather than as dialects of Kurdish.

The compilers of Ethnologue also rely on intelligibility as the main criterion for distinguishing between languages (Lewis, Simons, and Fennig 2013). Ethnologue has been criticized for mixing linguistic factors with language-external factors, such as common literature and ethnolinguistic identity (van Rooy 2020: 258) and for dividing language varieties into too many distinct languages (Wichmann 2019: 829). However, Hammarström (2005) asserts that Ethnologue is generally consistent with expert opinions. Glottolog (Hammarström et al. 2023) provides a comprehensive list of languoids (language families, languages, and dialects) and uses mutual intelligibility as its sole criterion to distinguish languages from dialects. Glottolog's classified list as of 2024 includes 8,595 entries of languages, more than the list provided by Ethnologue (7,168, see above).

The intelligibility criterion for defining languages has been problematized by some linguists (e.g., Hammarström 2008). Intelligibility can be measured using functional tests or opinion tests (see Chapter 2). Intelligibility testing is often very labor intensive, and the diversity of tests, test conditions, and listener backgrounds makes it hard to compare results. Intelligibility measurements may be influenced by non-linguistic factors, such as attitude, exposure, and personal characteristics of the listeners (see Chapter 4). Therefore, great care should be taken to exclude such factors (see Section 4.7). In addition, both opinion testing and functional testing produce measurements that express how well subjects can understand a language (variety), implying that intelligibility is a matter of degree. This reflects the situation in many dialect areas. Traditional dialectologists draw isoglosses (lines on a map sepa-

rating features) to show the geographic distribution of dialectal features, such as a particular word form or pronunciation. A dialect boundary is considered major if several isoglosses coincide (isogloss bundles). An example of an isogloss bundle is presented in Figure 8.1. (Shibatani 1990: 197). It shows a bundle of isoglosses that



**Figure 8.1:** Isogloss bundle separating Western Japanese dialects from Eastern Japanese dialects.  
Source: Shibatani (1990: 197).



cut through the middle of Japan and divide it into Eastern and Western Japanese. The isoglosses show overlap but are spread over a larger area and only coincide approximately, resulting in different so-called dialect continua. This is a range of dialects spoken across a geographic area and differing only slightly between geographically close areas. They gradually decrease in mutual intelligibility and increase in linguistic differences as the distances become greater.

The Dutch-German dialect area known as the Rhenish fan provides another prominent instance of a dialect continuum. In the 19th century, it was possible to travel from the southernmost region of the German-speaking area to the westernmost part of the Dutch-speaking area without encountering any abrupt linguistic barrier that hindered mutual comprehension. Despite this gradual transition, the speech varieties at either end of this chain were so different from one another that they were not mutually intelligible. Today, the internal dialect continua of both Dutch and German remain largely intact. However, the continuum which historically connected the Dutch and German dialects has mostly disintegrated due to leveling towards their respective standard varieties, migration, education, and decreasing use of the dialects. Throughout Europe, various other dialect continua can be found. One example is the Romance continuum, which extends across the Iberian peninsula, parts of Belgium and France, and reaches as far east as the Black Sea, encompassing languages such as Portuguese, Spanish, Catalan, French, Italian, and Romanian. Similarly, many dialect continua outside of Europe are observed, such as in the Chinese, Arabic, Indic, Turkic, and Algonquian language areas.

The presence of dialect continua and their accompanying gradient intelligibility make it challenging to use the criterion of mutual intelligibility to determine the number of languages spoken in a particular region. To tackle this issue, Hammarström (2008) took an abstract approach to demonstrate that it might be feasible to compute such figures. In a scenario where there are three dialects, A, B, and C, in a language region, where the neighboring dialects (A and B, or B and C) are mutually intelligible, but the non-neighboring dialects (A and C) are not, Hammarström used the intelligibility principle to determine that we must be dealing with two languages (A/B and C, or A and B/C). However, although Hammarström shows how to count the number of languages in a continuum, he fails to define languages uniquely using this line of reasoning. Tamburelli (2014) suggests that a choice between the two possible options in the example above can be made by conducting intelligibility tests or measuring objective linguistic distances. The two language varieties that show the highest level of mutual intelligibility or are linguistically closest should be considered dialects of a single language.

From the above discussion, it becomes clear that it is not unproblematic to use intelligibility as a way of objectively substantiating the *Abstand* criterion for distinguishing languages and dialects. Further investigation is required before we



can determine when two varieties are so different that they are no longer mutually intelligible. As explained, the alternative *Ausbau* criterion also has drawbacks. So, for the time being, the most workable solution is to keep using a combination of the two criteria and to keep in mind that the definition is not straightforward as it is influenced by several objective and subjective criteria.

### 8.3 Intelligibility as a distance measurement

In Chapters 5 and 7, it was shown how (combinations of) distance measurements at different linguistic levels can predict and explain the results of intelligibility measurements. The results can provide a greater understanding of what linguistic factors play a role in intelligibility.

Intelligibility measurements can also serve as a means to validate linguistic distance measurements. Recently, dialectometry has advanced significantly in quantifying linguistic distances through diverse algorithms. These advancements have yielded various methods for distinguishing between language varieties. With advancements in such objective techniques for measuring linguistic distances, many researchers have recognized the growing importance of validating these methods by conducting functional tests (Heeringa et al. 2006). As mentioned in Section 8.2, intelligibility measurements can be an adequate way of establishing how different two languages or language varieties are (van Heuven 2008). Unless some extra-linguistic factor interferes (see Chapter 4), a high degree of intelligibility between two language varieties can be expected if the linguistic distance is small, whereas larger distances likely result in lower degrees of mutual intelligibility. The results of various investigations generally show that experimental intelligibility results reflect objective distance measures to a large extent (see Chapter 5).

So, on the one hand, linguistic distance measurements can serve as a shortcut to measuring intelligibility without having to carry out experiments, and objective distance measurements can help explain intelligibility results. On the other hand, intelligibility measurements can aid in validating and refining algorithms for measuring communicatively relevant linguistic distances.

### 8.4 Genetic relationship

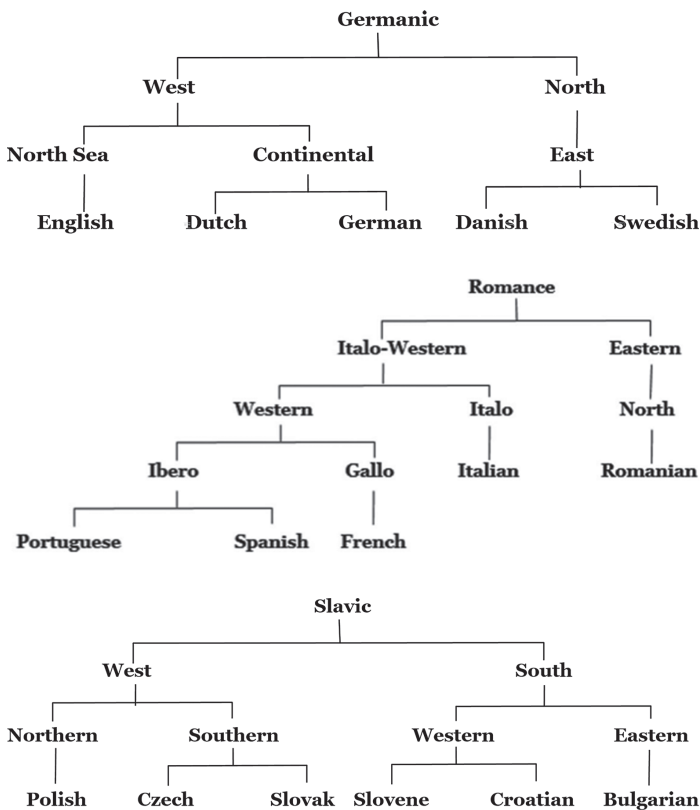
Language varieties change over time and diverge due to innovations in the varieties. Such innovations may be driven by internal linguistic forces (such as ease of pronunciation) or social factors (such as accommodation and speakers' use of

identity markers to show that they belong to a certain group). Over the centuries, languages that were originally homogeneous have diversified into many varieties. In historical linguistics, this process is often represented by language trees. A language tree represents a language family, and the different varieties are represented by branches. Generally, the closer the branches are the more recent the innovations and the more similar the varieties are. For example, in the Germanic language tree presented in Figure 8.2, the closely related Scandinavian languages Danish and Swedish belong to the same branch (North), while English, Dutch, and German are more distant from these two languages and belong to another branch (West). Within the West branch, Dutch and German are more closely related to each other than to English.

Distances between languages in the historical language trees can be quantified using so-called cophenetic distance measurements (Sokal and Rohlf 1962; Jain and Dubes 1988). The languages in a tree are terminal nodes, which are gathered hierarchically into higher-order nodes. The cophenetic distance between any two terminal nodes within such a tree is defined as the number of nodes needed to go up from language A to the lowest common node shared between the pair, and then down again to language B. In Figure 8.2, the tree distance between English and Dutch would be 4: (i) from English to North Sea, (ii) from North Sea to West (which is the lowest common node), (iii) from West down to Continental and then (iv) from Continental to Dutch.

Intelligibility measurements can be used as a criterion to determine the genetic relationship between language varieties. The tree distances between members of pairs of languages can be correlated straightforwardly with the mean intelligibility scores per language combination, averaging out any asymmetries that may exist within the language pairs AB and BA. Gooskens et al. (2018) used the inherent intelligibility measurements from the MICReLa project (see Appendix B) to determine how well intelligibility measures for the three language families fit proposals made by linguists concerning the closeness of the languages from a historical-linguistic perspective. The cophenetic tree distances were correlated with the data set, which was reduced to encompass only listeners with no schooling or minimal exposure to the target language (inherent intelligibility). As shown in Figure 3.2, certain cells remain empty when filtering for exposure. For instance, since all Germanic listeners have studied English in school, there are no outcomes available for combinations with English as the target language. In these cases, only the results of the English listeners taking the test in the other four languages were used, rather than averaging the distance for the two languages in a language combination. Regarding Czech and Slovak, both groups had to be omitted due to the exposure criterion, resulting in an empty cell.

The Germanic, Romance, and Slavic family trees in Figure 8.2 only include the languages in the MICReLa project. The correlation between the inherent intelligibility scores and the Germanic tree structure distances is  $r = -0.75$  ( $p < .05$ ), i.e., the smaller the cophenetic distance between two languages, the higher their mutual intelligibility (and vice versa). The Romance tree, structured according to Hall's categorization (Hall 1974), shows a non-significant and lower correlation with intelligibility ( $r = -0.41$ ) than the Germanic data, possibly reflecting the substantial disagreement among scholars on the sub-grouping of the Romance language family, see Posner (1996). The genealogic characterization of the Slavic area is straightforward (see, e.g., Sussex and Cubberley 2006), and results in the tree depicted in Figure 8.2. The tree distances exhibit a high correlation with scores from the intelligibility test ( $r = -0.86$ ,  $p < .01$ ), confirming the traditional genealogic characterization.

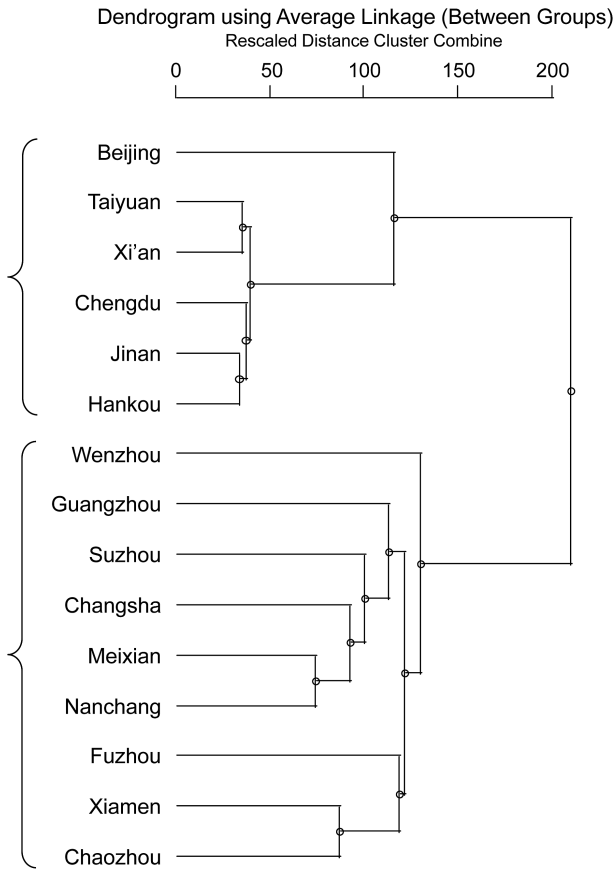


**Figure 8.2:** The traditional Germanic, Romance, and Slavic language trees showing the languages included in the MICReLa project. Source: Gooskens et al. (2018: 185 and 186).

It is also possible to create language trees on the basis of intelligibility scores, so-called dendrograms. Based on a matrix with intelligibility scores, language varieties can be classified using a hierarchical cluster analysis. The results are binary tree structures (dendrograms) in which the languages are the leaves, and the length of the branches reflects the distance between the leaves (Jain and Dubes 1988). The goal of a cluster analysis is to identify the main groups. The groups are called clusters. Clusters may consist of subclusters, which may, in turn, consist of subsubclusters, and so on. In an investigation by Tang and van Heuven (2008, 2009, 2015), the relationship between functional intelligibility rates and family relationships among Sinitic varieties was established. They generated dendrograms from the intelligibility matrices and compared these with the traditional linguistic taxonomy proposed by Chinese dialectologists. Figure 8.3 present the dendrogram resulting from the functional sentence-level intelligibility scores (SPIN test, see Example 2.7). This language tree corresponds well with the traditional classification by dialectologists. For instance, it shows the primary split in the trees between Mandarin dialects on the one hand and Southern (non-Mandarin) dialects on the other, and it also reflects the substructures of some clusters. The authors proposed to use the results to settle disputes among linguists concerning the characterization of the Taiyuan dialect. Some dialectologists classify this dialect as a (Northern) Mandarin variety, while others classify it as a Southern variety. The intelligibility measurements consistently yielded tree structures in which Taiyuan is grouped with Mandarin varieties.

Feleke, Gooskens, and Rabanus (2020) conducted intelligibility research to classify Ethiosemitic languages. To measure the degree of intelligibility, a word categorization test was adopted from Tang and van Heuven (2009). In addition, structural distances were determined by computing the lexical and phonetic differences. The results of cluster analyses on all measurements showed that the selected South Ethiosemitic languages can be classified into five groups (indicated by braces): {Chaha, Ezha, Gura, Gumer}, {Endegagn, Inor}, {Muher, Mesqan}, {Kis-tane} and {Silt'e}.

The various investigations discussed in this section thus showed how mutual intelligibility can be used as a unidimensional, experimentally grounded criterion based on communicative principles. This criterion makes it possible to classify related language varieties and establish relationships among them.



**Figure 8.3:** Dendrogram based on sentence-level intelligibility scores obtained for 225 combinations of 15 speaker and 15 listener dialects. Mandarin (upper brace) and non-Mandarin (lower brace) dialects are in different main branches of the tree. Source: Tang and van Heuven (2015: 292).

## 8.5 Improving communication

Language serves as a means of communication, not only between speakers of the same variety but also between people using different accents, dialects or closely related languages. Milliken and Milliken (1996: 17) note that, partly due to possible asymmetric intelligibility between dialects in an area (see Chapter 6), particular dialects in a group are more suitable as centers of communication than others. Simons (1979) showed how groups of dialects can be clustered into optimal communication networks based on intelligibility tests. He notes that such groupings

can, for instance, be used to match interpreters with immigrant clients from different dialect backgrounds in high-stakes, time-sensitive environments, such as court, school, and hospital systems.

As mentioned several times throughout this book, in situations where languages are closely related, speakers of different varieties often understand enough of each other's language to be able to communicate while using their own varieties. This kind of communication is often referred to as receptive multilingualism. Communication using receptive multilingualism typically involves closely related languages (inherent receptive multilingualism). It should be noted that this mode of communication involves more than just linguistic overlap between two languages. As discussed in Section 4.6, speakers and listeners can develop strategies to improve communication. For one thing, there is convincing evidence that listeners quickly adapt to non-native speakers (e.g., Cutler 2012), quickly discovering how perceptual categories should be adapted and which atypical features should be disregarded. Additionally, it is well-established that native speakers tend to change their speaking style to accommodate the needs of non-native recipients. Speakers using this so-called “foreigner talk” typically speak at a reduced pace, with greater loudness and expanded pitch range. They also tend to avoid the use of complex grammatical structures and contracted forms, choose easy (i.e., short and frequent) words, or circumscribe less frequent words (e.g., Ferguson 1971; Hatch 1983; Wessche 1994). The listeners also play an important role in reaching mutual understanding. They can signal to the speakers that something is unclear and provide feedback to show that they have understood the speaker.

In circumstances where languages are less closely related, receptive multilingualism can still be employed as long as the parties involved have attained a satisfactory level of passive proficiency in each other's languages (acquired receptive multilingualism, Kluge 2007). For example, an English and a French person may have learned to understand each other's languages at school but have not learned them well enough to speak them. They may then be able to communicate, each speaking their own native language.

Branets, Bahtina, and Verschik (2020) introduced the term mediated receptive multilingualism to describe situations where speakers use third language intervention to communicate. An example is Estonian native speakers who understand and speak Russian. They are able to communicate with Ukrainian speakers by means of receptive multilingualism, since Russian and Ukrainian are closely related. In educational contexts, the EuroCom method (Hufeisen and Marx 2007) centers on achieving comprehension through mediated receptive multilingualism, offering techniques to understand Germanic, Romance, or Slavic languages when the learner is already familiar with another closely related language acting as a bridge language.

One benefit of utilizing receptive multilingualism as a mode of communication is that, for many speakers, it is simpler and more effective to articulate their thoughts and ideas in their mother tongue rather than in English or any other foreign language. In addition, receptive language skills are much broader than productive skills. Language users understand many more words and have much more experience with infrequent or unusual structures than they actively use themselves. Receptive multilingualism's success stems from its receptive resources. The fact that both participants in a conversation can speak the language they know best, their native language, and both have to make an effort to understand the other language results in inherent fairness and equality between the speakers. Additionally, since language is an essential part of identity, many individuals place great importance on using their native language when interacting with others. The motivation for communicating using this mode may not necessarily stem from an inability to speak the other language but rather from socio-political factors that emphasize the affiliation with a particular cultural or ethnic group. Bilaniuk (2010) demonstrated how Ukrainian and Russian speakers show an attitude of purism and resistance to linguistic accommodation when talking to each other even when they speak both languages. They, therefore, tend to use their own language when communicating.

At the level of the individual language user, participating in receptive multilingualism can be viewed as a means of cultivating extensive communicative proficiency and cognitive linguistic adaptability (Doyé 2005; Melo-Pfeifer 2014). Even though there is some disagreement among scholars about the efficiency of learning a second language by first acquiring passive knowledge (Swain 2000), it seems that receptive multilingualism can also be a stepping stone to an active command of a second language. Once second language learners have achieved a passive command of a language, the step towards actively using it will perhaps be smaller than if they have to produce words and sentences themselves from the beginning (Ringbom 2007).

The use of receptive multilingualism often goes against the natural tendency to accommodate to the speaker (Giles and Ogay 2007), and therefore, for many speakers, it may feel rude or impolite at first to use receptive multilingualism. However, receptive multilingualism has been an important, and often the only, means of communication throughout history. During the late Middle Ages, receptive multilingualism served as a common mode of communication for trade and political consultations between speakers of Low German and Scandinavian languages (Braunmüller 2007) as well as in the Romance language area (Blanche-Benveniste 2008; Carlucci 2020). However, the emergence of nationalism, linguistic standardization, and the subsequent ideal of monolingualism, resulted in a more limited use of this form of communication. Little is known about the extent



of receptive multilingualism in other past contexts and we have little information about the number of languages or speakers involved in receptive multilingualism today. However, it is reasonable to assume that receptive multilingualism was often the only possible manner of communication in the past and still is today in situations where the speakers have not acquired any other language than their native language.

Scandinavia provides one of the best-documented examples of communication by means of receptive multilingualism and has received the most attention from linguists (e.g., Haugen 1966; Maurud 1976; Zeevaert 2004; Delsing and Lundin Åkeson 2005; Schüppert 2011). Many people from Denmark, Sweden, and Norway use receptive multilingualism rather than a *lingua franca* (e.g., English or German) when communicating with individuals from their neighboring countries. For instance, when Danes visit Sweden, they often speak Danish to the Swedes they meet, and the Swedes respond in Swedish. Nordic meetings generally take place in this mode, too (Börestam Uhlmann 1994). Receptive multilingualism in Scandinavia has been subject to official language planning and has become a fundamental part of inter-Nordic identity and cooperation. There is a special board, Nordplus, dealing with quality and innovation in the educational systems to strengthen the language comprehension between the Nordic languages, especially among children and youth.<sup>26</sup> However, in daily practice, inter-Scandinavian communication often fails, and many young people tend to prefer English to receptive multilingualism as a means of communication (Skjold Frøshaug and Stende 2021). Some research has been carried out on receptive multilingualism in the rest of the Germanic language area (e.g., Ház 2005; Beerkens 2010) and other Indo-European languages, particularly the Romance language area (Blanche-Benveniste 2008, Conti and Grin 2008) and the Slavic language area (Nábělková 2007; Rehbein and Romaniuk 2014). Other regions of the world have not received as much scholarly attention regarding receptive multilingualism. For a more extensive overview of the occurrence of receptive multilingualism, see ten Thije (2018).

A level of mutual intelligibility sufficient for successful communication does not automatically imply that speakers of the involved languages actually engage in receptive multilingualism. While research has been conducted to determine the extent of mutual intelligibility between specific language pairs, quantitative data regarding the utilization of receptive multilingualism is limited to only a few specific language combinations. For instance, the results of a survey among 252 Dutch and German professionals working in governmental or civil society organizations in the Dutch-German border area (Beerkens 2010) showed that 27% of the

---

26 <https://www.nordplisonline.org>

respondents reported using receptive multilingualism in at least some situations at work (e.g., e-mail, face-to-face, telephone, etc.). Receptive multilingualism was used less often than other modes of communication, such as one or both participants speaking Dutch or German as a foreign language or using English as a *lingua franca*.

The choice to use receptive multilingualism as a mode of communication often depends on the speakers involved and the specific context and domain in which it is used (Beerkens 2010). Receptive multilingualism is commonly used in families where parents have different language backgrounds and between younger and older generations in immigrant families. For instance, the children of Turkish immigrants in Germany may speak German to their parents, who then respond in Turkish (Herkenrath 2012). Such children often have a high level of fluency in two languages, and their language choice can vary depending on various factors, such as the content and context of the conversation and the presence of outsiders who may not understand one of the languages. Receptive multilingualism is also frequently encountered among adult immigrants to the U.S. who do not speak English as a native language but whose children speak fluent English, usually because their education has been conducted in English. The immigrant parents can often understand both their native language and English but only speak their native language to their children, while the children frequently prefer to speak English to their parents. The use of receptive multilingualism may also depend on the language policy of particular institutions, such as educational institutions (Vetter 2012), governmental organizations (Ribbert and ten Thije 2007), the army (Berthele and Wittlin 2013), or the work place (Lüdi 2013).

The European Commission promotes receptive multilingualism as a means to enhance the mobility of European citizens and maintain linguistic diversity (European Commission 2007). It is important to gain more knowledge about when it makes sense to focus on receptive multilingualism and when English as a *lingua franca* (ELF) should be promoted. Van Mulken and Hendriks (2015, 2017) used a find-the-differences task to compare the effectiveness of communication between native German and Dutch speakers by means of different communication modes (ELF, both speaking either Dutch or German, or receptive multilingualism). They found receptive multilingualism to be most effective while ELF was least effective. Bulatović, Schüppert, and Gooskens (2019) tested how well Slovene native speakers understand Croatian and English as produced by Croatian speakers. Overall, the level of comprehension was found to be high for both languages. The authors conclude that receptive multilingualism and English as a *lingua franca* are both likely to be successful modes of communication in interactions between Croatian and Slovene speakers.

If we want to introduce receptive multilingualism in a wider context, more knowledge should be gained about the factors that determine how well speakers with different language backgrounds understand each other. In cases where mutual intelligibility is inadequate, it is important to identify factors that are contributing to the communication difficulties. Based on this knowledge, advice can be given for improving mutual intelligibility in a receptive multilingualism situation. For instance, we saw in Section 5.4.1 that the Danish language is spoken faster and with more reduction than Swedish, and this may at least partly explain why Swedes have more difficulties understanding Danes than vice versa. Danes could be advised to speak more slowly, insert pauses at prosodic boundaries, and pronounce words more carefully when communicating with a Swede. Materials have been developed for inhabitants of the Nordic countries with advice on how to communicate (e.g., Grünbaum and Reuter 2013). This includes advice for the speaker to speak slowly, articulate well, avoid unnecessary phrases and words that can be expected to be unknown to the listener and explain them where necessary, and for the listener not to pay too much attention to unknown words but rather focus on the overall message and to ask for an explanation when needed.

It is also possible to set up teaching programs to introduce receptive multilingualism and help students overcome difficulties. Often minimal training is needed to improve intelligibility to such an extent that participants can communicate by means of receptive multilingualism. As mentioned in Section 4.1, a short course of a few hours focusing on the differences and similarities between the native and target language has resulted in a considerable improvement in intelligibility among Dutch students learning Swedish (Hedquist 1985) and among Czech students learning Croatian (Golubović 2016). Rehbein, ten Thije, and Verschik (2012: 252) refer to claims that within the family of Romance languages, sufficient comprehension could be established with 30 to 50 hours of explicit language training (Blanche-Benveniste 2008; Conti and Grin 2008; Janin 2008).

In various parts of Europe, educational programs have already been developed to teach receptive multilingualism, often in the written modality (e.g., Dylan;<sup>27</sup> EuroCom;<sup>28</sup> Europa IC;<sup>29</sup> GalaNet;<sup>30</sup> GalaPro;<sup>31</sup> Linee;<sup>32</sup> Magicc;<sup>33</sup> Miriadi<sup>34</sup>). They

---

<sup>27</sup> <http://www.dylan-project.org/>

<sup>28</sup> <http://www.eurocomprehension.eu/>; Hufeisen and Marx 2007; Klein and Stegmann 2000

<sup>29</sup> <https://www.europaic.eu/>

<sup>30</sup> <https://aulaintercultural.org/>

<sup>31</sup> <https://www.ua.pt/pt/cidttff/page/12042>

<sup>32</sup> <https://cordis.europa.eu/project/id/28388>

<sup>33</sup> <https://www.unil.ch/magicc/home.html>

<sup>34</sup> <https://www.miriadi.net/>; Benavente Ferrera et al. (2022)

teach learners to reflect on language differences and to develop strategic and meta-cognitive knowledge and competencies by raising their awareness of comprehension processes (Bonvino, Fiorenza, and Velásquez Diego 2018). Marx (2012) and ten Thije (2018) discuss some of these projects in more detail. However, they also note that more research needs to be conducted to investigate the effects and implementation of these programs. Didactic material can be improved if it is built on scientific findings, and more knowledge may also contribute to higher awareness among speakers of the possibility of using their own native language to communicate with speakers of closely related languages. To establish the potential for improved communication it is important to carry out intervention studies that test the effect of teaching material. Experimental studies should test the intelligibility models and establish whether it makes it easier to overcome language barriers if teaching programs focus on linguistic and extra-linguistic factors that have been shown to correlate best with intelligibility measures. Receptive multilingualism may form a stepping stone to productive skills in the target language, and therefore, intelligibility research is also valuable for language acquisition research in general.

## 8.6 Conclusion

This chapter has made clear that there are many practical and theoretical motivations for conducting intelligibility research. Accordingly, intelligibility research involves researchers and practitioners from many different backgrounds. The various purposes of an intelligibility investigation are linked to the many different approaches used to quantify intelligibility, as well as to the linguistic and extra-linguistic determinants of intelligibility discussed in this book.