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## Czech Sign Language in contemporary Czech society

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**Abstract:** Czech Sign Language (CzSL) is a vital means of communication used in the Czech Deaf community; it constitutes an essential communication tool for a minority population in the Czech sociolinguistic space. The aim of the article is to provide an overview of the usage of CzSL in contemporary Czech society, to sketch a brief history of its formative stages and to list the challenges the Czech Deaf face nowadays. An emphasis is placed on the question of bilingualism of the CzSL users. Our special focus is on the questions of language socialization and social-cognitive development, as the early years set the stage for a Deaf child's and the Deaf community's subsequent advancement. Real world implications for the healthy and uncompromised development resonate throughout the discussion of the Czech education system and the place of the Deaf in it. CzSL represents an irrefutable part of the identity of the Czech Deaf population and, as such, merits a critical consideration in the context of the minority languages in the present day Czech society.

**Keywords:** Czech sign language, deaf culture, bilingualism, ontogeny, schooling

### 1 Introduction and goals

Throughout the ages, the deaf<sup>1</sup> have elicited various reactions in their social milieu, including but not limited to fascination, awe, allure, charm, respect, empathy, but also fear, pity, sadness, apprehension, uneasiness, hesitation, concern or ambivalence. Current positions of modern societies towards the deaf across the world reflect the state of an acceptance of the human biological

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<sup>1</sup> Throughout the article, we distinguish between the concepts *deaf* and *Deaf*. In accordance with the terminology distinction by Padden and Humphries (1988), we restrain the use of the lowercase *deaf* to the medical concept denoting the measurable audiological and clinical condition of the loss of hearing, while we use the uppercase *Deaf* to denote a social concept referring to those sharing a sign language and, consequently, a culture.

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diversity. As a consequence, the societies' attitudes resurface in the way the deaf view themselves and this, in turn, influences how the rest of the population considers this minority's needs in all the spheres of social life. Deafness can be viewed as a degree of impediment in the realm of sound perception. From a clinical point of view, there is a continuum of the hearing impairment, the degree of which varies across individuals, ranging from a degree of somewhat compromised hearing all the way to its complete absence. Yet, an exact measurement of the degree of the hearing deficit does not determine the individual's choice of using sign language or his or her membership in the Deaf community. It is the social and cognitive aspect of one's functioning in the society, his or her attitude towards the Deaf culture that governs the degree of one's involvement in the life of the Deaf community. By the same token, the attitudes and opinions of the majority population towards the Deaf minority influence the mindset both within and without the Czech Deaf population.

Our goal is to provide an overview of the usage of Czech Sign Language (CzSL) in the context of contemporary Czech society, to sketch a brief history of its formative stages and to list the challenges the Czech Deaf face in today's social and cultural world. As any child can acquire a sign language through his or her interaction with competent signers from very early on, language socialization and subsequent education will determine the quality of life of the Deaf and his or her status in the larger context of the Czech society. Therefore, much emphasis of this article will be placed on the issues of socialization and social-cognitive development and on the Czech education system and the place of the deaf in it.

We start by introducing the terminology used throughout the article and describe the incidence of deafness in the Czech Republic (Section 1). As many Deaf in the country use CzSL as their primary means of communication, we justify our viewing this subgroup as a linguistic minority on the Czech social and linguistic scene. Then, we characterize the nature of the sign language and describe the Czech Deaf culture (Section 2). Subsequently, we address the question of bilingualism in the case of Czech Deaf signers (Section 3), which inevitably leads to the discussion of the issues of language socialization. By briefly describing the formative stages of the standing of the Deaf in the Czech population (Section 4), we lay the ground for an argument of the significance of the sign communication in the formative years of a child's development. With the support of research findings from international studies, we contend that the introduction of sign language into the lives of deaf children is a question of their developing social competence (Section 5). Recent research attests that the sooner a deaf child is introduced to a full-fledged sign language, i.e., the communication in the single accessible modality for them, the better his or her chances are at having an intact development of social-cognitive abilities

and, consequently, the faster he or she is ready for a rich and unconstrained schooling process. It will become evident in the ensuing section that this is the exact opposite view the Czech medical community maintains (Section 6). We argue, however, that a full competency of deaf children in sign language opens the same range of opportunities for them as their hearing peers enjoy. Finally, we list some of the present-day challenges of the usage of sign language in the contemporary Czech society (Section 7), closely tied to the attitudes of the larger Czech community of professionals towards the practice of CzSL.

## 2 Deafness and its incidence in the Czech population

*Deafness* is a medical (i.e., audiological) term denoting measurable degrees of individuals' functional hearing. The World Health Organization (WHO) defines the degree of hearing impairment by the following criteria of the audiometric ISO values: *no impairment* corresponds to the audiometric ISO value of 25 dB or better, *slight impairment* is defined by the values between 26 and 40 dB, *moderate impairment* between 41 and 60 dB, *severe impairment* between 61 and 80 dB, and *profound impairment including deafness* exceeds the value of 80 dB (WHO Grades 2014). WHO also classifies the hearing impairment beyond the value of 40 dB as *disabling hearing impairment* and estimates over 5% of the world population to fit this criterion (i.e., 328 million adults with hearing loss greater than 40 dB in the better ear and 32 million children with hearing loss greater than 30 dB in the better ear) (WHO Deafness 2014).

However, different literature sources may also differentiate between the terms *deaf* and the term *hard of hearing*. The term *deaf* often refers to a hearing loss so severe that there is very little or no functional hearing (e.g., University of Washington 2014), that is, a hearing loss greater than 80 dB (Hrubý 1999). The term *hard of hearing* refers to a hearing loss where there may be enough residual hearing (e.g., University of Washington 2014) that is being used for designating persons with slight, moderate, or severe impairment who may benefit from the support of various of hearing devices, most often hearing aids (Hrubý 1999). Overall, there were up to a million individuals living in the Czech Republic with hearing loss in 2009 (Hrubý 2009). The vast majority of these were the elderly whose perceptual skills tend to progressively deteriorate. According to WHO Deafness (2014), about a third of the population beyond the age of 65 years possesses a disabling hearing loss due to the age-related degeneration of

sensory cells in the ears. Hrubý (2009) further estimated around 50,000 people living on the Czech territory with prelingual or postlingual moderate or severe hearing loss (between 41 and 70 dB), roughly 20,000 postlingually deaf (i.e., hearing loss greater than 71 dB) and approximately 7,500 prelingually deaf. He also estimated around 7,500 CzSL users in the Czech Republic in 2009.

While the incidence of severe hearing loss (including deafness; authors' note) is 1:1,000 in newborns and 20–40:1,000 in newborns at risk, the incidence of moderately severe hearing loss is 6–12:1,000 in newborns (Komínek 2009). Thus, about 700–1,300 children are born yearly in the Czech Republic with hearing impairment (see the WHO classification above). According to the Czech statistical sources (Český statistický úřad 2014b), there were 86,476 individuals with impaired hearing in the Czech Republic in 2013. The 2011 census registered 1,429 people identifying sign language as their maternal language and 5,787 as one of their maternal languages with the total of 7,216 people using sign language as one of their primary means of communication (Český statistický úřad 2014a). Interestingly, the numbers from the 2011 census (the first ever in the Czech Republic that included the option of identifying sign-language users) correlate with Hrubý's (2009) estimate (see above). One of the authors, working closely with the Czech Deaf community, has proposed that the census numbers may underestimate the realistic number of actual Czech Sign Language first-language users.<sup>2</sup> One of the reasons is that many CzSL users may have refrained from identifying with signing as a behavior because they identify with the usage of CzSL as a systematic and rule-governed means of communication rather than with signing per se (wording in the census question itself is rather imprecise).

While the history has witnessed the conceptualization of the deafness coming out of a "paradigm of deficit," according to which the deaf have been considered to be deficient due to their hearing predicament, the contemporary scholarly usage of the concept Deaf emphasizes the fruitfulness and productivity of the subculture of the Deaf individuals, sharing culture, history and, importantly, a common means of communication, i.e., the sign language. According to the latter view, the Deaf are not people with an incapacity but members of specific cultural and linguistic minority circumscribed within the visual rather than the acoustic mode of functioning (e.g., Lane 1999). It follows then that the Czech Deaf use the CzSL as their primary means of communication and share a set of constrained

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<sup>2</sup> In spite of learning the CzSL outside of their homes, the majority of the CzSL first-language users are deaf children of hearing parents (about 90–95% of deaf children are born to hearing parents). The second most numerous group is that of deaf children whose hearing parents mastered some kind of communication in signs. The least frequent are children of deaf adults using sign language proficiently from the child's birth.

beliefs about themselves and their attitudes towards themselves as well as towards the larger society (Hudáková and Myslivečková 2005; Mrzilková 1996).

### 3 Czech Sign Language

In the first linguistic analysis of American Sign Language (ASL), Stokoe (1960) characterized ASL as a full-fledged, natural language equal to spoken languages. This statement has revolutionized the contemporary linguistics, as language usage was no longer equated with speaking. Correspondingly, the status of the Deaf sign-language users rose, as ASL was no longer equated with just nonverbal communication (such as gesture, facial mimicry or pantomime). These arguments laid the foundation for a couple of new concepts: (i) the concept of the Deaf as a linguistic and cultural community (discussed further in this section), and (ii) the concept of bilingualism of the Deaf (discussed in Section 3). Soon after, *sign linguistics* spread out to other countries across the world as a new scientific discipline. Based on the evidence from most researched, mapped and described sign languages such as the American Sign Language, the British Sign Language and sign languages of the northern Europe (Battison 2000; Kyle and Woll 1985) firm parallels between the sign and spoken languages were drawn in terms of their structure, function, the processes of acquisition and language processing in both operational and long-term memory (Macurová 2002).

In spite of both being full-fledged languages with complex and rule-governed structures, sign languages and spoken languages are distinct in a number of features. Their *three-dimensional existence* and *simultaneity* are the main attributes of sign languages, from which the specific structures of a sign language are derived. While spoken languages are acoustic (audio-oral) by nature, i.e., produced through articulatory muscles, carried by vocal cords and perceived via hearing, sign languages are visual-motoric in nature, i.e., produced through the motion of hands, the head, shoulders and the upper part of the body and are, along with accompanying facial expressions, carried by movements in space and perceived via sight. The content of the message in sign languages is formed by both manual and non-manual components. The manual components are primarily the places of articulation, shape and movement of the hand(s) and are predominantly carriers of the lexical meaning. In contrast to that, the non-manual components are facial expression, the position and movement of the head, shoulders and the upper part of the body, and are mainly carriers of grammatical meaning (Deuchar 1984; Klima and Bellugi 1979; Macurová 2002; Stokoe 1960). Consequently, as spoken languages produce language units linearly, sign languages code the manual and/or non-manual components simultaneously.

Nevertheless, the Czech language and the CzSL are independent of each other and have their own lexicon, morphology and syntax. Importantly, the two languages cannot be produced in a parallel fashion by a single user. Still, efforts are occasionally made to combine the two languages in the same instance through the use of “isolation signs” borrowed from CzSL “under” the isolated Czech words, resulting in a degradation of both the CzSL and the Czech language (Hudáková 2009). What is more, a written form of sign languages is completely absent (if we don’t consider the variety of notation systems used for recording the sign language into a written form). To be able to read and write, however, the sign-language users generally need to acquire a written form of the main spoken language in its sociolinguistic context (Hudáková 2009). Thus, CzSL is independent of the Czech language, or any other spoken language, for that matter. The adjective *Czech* refers strictly to the area of the Czech Republic and not to the Czech spoken language. Yet, while the majority of the Czech population doesn’t have much use for learning CzSL, the competence of the Czech Deaf in the Czech language is imminent. In the Czech educational system, those Deaf communicating in CzSL have a crucial need for learning the Czech language to become competent in reading and writing. Therefore, literacy skills of the signing Deaf necessitate their proficiency in Czech writing.

## 4 Bilingualism of the CzSL users

The Czech Deaf signers use the Czech Sign Language in face-to-face communication; yet, they use the conventional written form of Czech spoken language to read and write. Thus, in order to live an unconstrained life and receive information from all possible sources, the Czech Deaf need to fully master both the Czech Sign Language, i.e., the language of the Czech Deaf minority with its *visual instantiation of the concepts* and Czech of the linguistic majority with the sounds the Deaf do not hear, as only this one has a standardized written form. Literate Deaf are, therefore, necessarily bilingual (see also Macurová 1994). Bilingualism, or multilingualism, in fact, characterizes the overwhelming majority of the world population. By itself, bilingualism is the norm rather than an exception in today’s world and is fostered and encouraged globally. The situation of the usage and promotion of the CzSL has, unfortunately, not been as straightforward in the recent history of the Czech society. What is more, the role of the CzSL has been marginalized in both the Czech lay and expert sociolinguistic space until this day. There are no educational curricula for the students using CzSL as their first language and no assessment tools

for examining degrees of competence in CzSL. There are no curricula for CzSL teaching either. There are no reference points of CzSL according to the European language reference framework, and neither is there a corpus of authentic communication in CzSL. In contrast to the sociolinguistic space of a number of western societies, in which sign languages have their own legitimate status, the role of the CzSL has been largely demoted to an alternative or augmentative (i.e., supplementary) mode of communication.

## 5 Historical heritage of the CzSL

The historical discourse on the Deaf strongly resonates even in the contemporary Czech society. Shortly after the establishment of the first institutes for the Deaf in Europe, the Prague Institute for the Deaf-Mute was founded in 1786. It was joined by three additional institutes for the Deaf-Mute on the territory of today's Czech Republic by 1880 (Hrubý 1999). In the same year, Milan Congress, i.e., the Second International Congress on Education of the Deaf, declared the “oral method” superior to the “sign method” as a method of communication (Sturley 2014). Subsequently in 1881 the Austrian-Hungarian administration instructed an integration of the deaf children (by that point mostly unschooled) into the mainstream schools and to provide them with at least some basic education. Concomitantly, new institutes for the Deaf-Mute were established in the region, totaling in eleven at the end of World War I. They made use of the combined method using both the sign and spoken languages in spite of the lack of consistent language-policy rules.<sup>3</sup> After the World War I, in the framework of establishing an education strategy of the newly founded Republic of Czechoslovakia, an 8-year-long primary education was made available for the Deaf on an optional basis. This institutionalization was accompanied by great material and financial benefits for teachers not using the sign language. Not surprisingly then, by 1925 only limited remnants of sign language lingered in one of the Deaf-Mute institutes and from 1932 onwards, only the “oral method” was used for the instruction of the Deaf. The surplus of Deaf teachers was eradicated by 1941 (Hrubý 1999).

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<sup>3</sup> The combined method was not a single specific method. Its usage may have varied across the schools or classrooms: it may have combined the spoken and written Czech (or even German) with a sign language (Czech or German), or just the spoken and written Czech (or German). The exact features of the “combination” in the combined method remain unknown.

After the World War II, a compulsory school attendance for the Czech hearing-impaired children was finally introduced and the former institutes for the Deaf-Mute were transformed to primary schools for those with a severe degree of hearing loss, the hard-of-hearing and the deaf. Sign language was forbidden in both types of schools (Hrubý 1999). In the schools for the hard-of-hearing, knowledge was transferred by the means of oral communication and an emphasis was placed on speech training and speech therapy, while maintaining conventional mainstream schooling curriculum. The primary goal of the schools was “demutisation” of their deaf students (Poul 1987). In the minds of the educators, the demutisation and mastery of a minimal level of spoken Czech was the only way to the salvation of the deaf children from a presumed social isolation and their surrender into silence that supposedly eradicated any potential knowledge since thinking was believed to be closely tied to speaking. Thus, a prominence was placed on extensive training of auditory drills, lip-reading, children’s articulation and pronunciation. As such, the deaf students were tiringly engaged, but not educated. The level of their literacy skills and the overall quality of education were poor. The graduates of the schools for the deaf could continue their education only in apprentice schools for the deaf and be employed as manual workers (Hudáková 2009).

While the education of the Deaf in Western Europe and in the North America was undergoing a considerable transformation during the second half of the twentieth century (e.g., Lane 1999), the situation in Czechoslovakia was mostly unaffected. A marked change took place after the Velvet revolution in 1989. Suddenly, an open access to information from abroad made the reform in the education of the Deaf eminent. The split between the schooling of the hard-of-hearing and that of the deaf was revoked and the schools were transformed into the “schools for hearing impaired.” The integration of the hard-of-hearing and the deaf into the mainstream education became possible. What is more, new avenues for the secondary education have opened for the deaf students, who nowadays qualify for university studies in a pursuit of university degrees (Hrubý 1999; Hudáková 2009). Despite these revolutionary changes in the opportunities for the hard-of-hearing and deaf individuals, the state of the communication, language codification, linguistic attitudes and approaches, as well as the state policies lag beyond. It wasn’t until rather recently, that some Czech deaf children were given an opportunity to be schooled in the CzSL. The overall uneasiness about the use of the sign language rather than the oral method from the early infancy is, unfortunately, still pervasive in today’s Czech society. Yet, research findings abroad document advantages of the introduction of sign language to the infants’ early lives. The next section discusses the actual and measurable social-cognitive skills children are able to grasp if



they receive sufficient conversational input in whatever modality early in ontogeny.

## 6 Real-world implications of the conversational input in deaf children

Deaf children of normal intelligence with no disability other than hearing loss, exhibiting otherwise optimal social skills, can still display profound delays in their understanding and representation of the actions of others in their social surrounding if they were brought up in an oral community by hearing non-signing parents (e.g., Courtin and Melot 1998; Meristo et al. 2007; Peterson 2002; Peterson and Siegal 1995, 1999; Schick et al. 2007). In a review of over twenty studies, Peterson (2009) demonstrated that only a small number of eleven-year-old severely deaf children raised by hearing parents passed standard tasks assessing social understanding that would normally be mastered by five year olds. Moreover, such delays in prelingual deaf individuals occur in both children with cochlear implants and those who communicate with their caregivers in sign language.<sup>4</sup> These marked delays come in contrast with little or no delay documented in deaf children of Deaf signing parents. This may be due to the richness of their conversational input during their early ontogeny (Harris 2005, 2006). Only about 5–10% of deaf children are born to a deaf parent, by the virtue of which they acquire sign language as their first language. The remaining 95–90% are, however, born to hearing parents. These families usually face the challenge of communicating with their deaf children. While the native deaf signers follow the milestones of social understanding on the same schedule as their typically developing peers (e.g., Courtin and Melot 1998; Peterson, Wellman, and Liu 2005; Schick et al. 2007), the deaf children lacking rich conversational input from their infancy exhibit considerable delays in their social-representational skills despite their otherwise intact mental competencies.

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<sup>4</sup> A cochlear implant is an electronic medical device that replaces the function of the damaged inner ear. Unlike hearing aids, which make the sounds louder, cochlear implants substitute the damaged parts of the inner ear (cochlea) to transfer sound signals to the brain (Cochlear undated). The first cochlear device was surgically implanted to a Czech seven year old child in 1992 in Hannover, after having lost his hearing due to meningitis. A program of cochlear implants for children was initiated in 1993 in the Czech Republic (Medisport 2013) and there were 535 cochlear implants registered among the Czech children in June 2014 (Centrum kochleárních implantací u dětí 2014).

Growing up in hearing families, deaf children do not usually get proficient in sign language prior to entering school. Vaccari and Marschark (1997) observe that there is typically no one in their immediate surroundings with whom they could spontaneously talk about unobservable mental states, such as beliefs, desires, emotions or intentions. Moeller and Schick (2006) further demonstrate that hearing mothers tend to converse less about mental states with deaf children in comparison to their hearing children; notwithstanding the fact, they use an equal amount of talking about topics devoid of mental-state content. As complex and rich exposure to mental-state talk within families correlates with speedy development in social-cognitive understanding in typically developing children (Dunn and Brophy 2005; Ruffman, Slade, and Crowe 2002), the limited experience of deaf children of hearing parents may be a key restraining factor in their acquisition of social-cognitive (and likely other) competencies. As a consequence, these children's entry to school may be accompanied by challenges stemming from their less than expected social-cognitive insight, potentially reflected in their performance at school.

Children's social-representational competencies acquired early in ontogeny predict, among others, skilled interactions with peers (Dunn, Cutting, and Demetriou 2000), their popularity with peers (Peterson and Siegal 2002; Slaughter, Dennis, and Pritchard 2002), or teacher-rated social competencies (Astington 2003). Being able to properly represent the content of others' minds corresponds strongly to the timely development of linguistic competencies (e.g., Astington and Filippova 2005) and constitutes, therefore, a critical social-cognitive achievement in preschool and early school years, as well as beyond (Filippova and Astington 2008, 2010). Research conducted abroad, thus, supports the view that the development in the social-cognitive realm may be severely delayed, in spite of children's otherwise optimal mental abilities and intact biological dispositions. Prelingual deaf children of hearing parents represent one such group of atypically developing individuals. It is primarily these children whose future may be upheld by addressing the challenges in the social realm of contemporary life in the Czech Republic.

## 7 Situating the CzSL in the Czech linguistic space

There is a general lack of studies describing the attitudes of the Czech linguistic majority towards the usage of the sign language in the Czech sociolinguistic context. Notwithstanding this deficiency, we summarize some formally expressed opinions in an attempt to construct mainstream opinions. To limit

the scope, we draw on the sources of medical and didactic instructions relevant to the treatment of the deaf population. The medical field maintains that if a prelingual, profoundly deaf child cannot develop speech or learn to read and write, such a child, then, is unable to integrate into the hearing population (Stříteská 2010). Komínek (2009) claims that normal hearing is a prerequisite for the development of acoustic speech and of abstract thinking. It follows then that deafness (uncompensated with hearing aids) results in delayed speech development and consequently also mental development. Deafness, thus, alters the development of cognitive abilities (Komínek 2009).

For that reason, physicians' efforts are directed towards an early diagnosis of the hearing loss (preferably via nation-wide screening in neonates) and choice of the most effective "treatment" (Stříteská 2010). Recently, the Ministry of Health issued methodological guidelines for the screening of the hearing in neonates specifying the ways to perform the screening test as well as the guidelines for the follow-up steps in the event the tests uncover a hearing loss greater than 40 dB (Věstník 2012). The corrective procedure involves giving the child a hearing aid within the first six months of life and directing children with severe hearing loss to special phoniatic clinics for an assessment of cochlear implantation (Věstník 2012). Provided with hearing aids or cochlear implants the children undergo rigorous long-term speech therapy and have a chance to live a "normal life" (Fakultní nemocnice Brno 2013; Stříteská 2010).

According to Lane (1999), the medical deficit model is based on an "extrapolative mislead." The model represents a monolingual and monocultural standpoint of the majority population and is in a sharp contrast to the bilingual and bicultural perspective espousing the diversity (also referred to as a social or humanistic model in the literature). Equating the medical view of the normal development with that of the typical development, parents of young deaf children often follow the medical advice to fix whatever is fixable. Similarly, the Czech Deaf education system is based on the medical view of the typical development of hearing children. As there is a general lack of an awareness of other modes of communication for the deaf in the Czech society, the "deficit model of deafness" prevails and affects attitudes in the Czech sociolinguistic context (e.g., Holmanová 2002; Janotová 1996, 1999; Krahulcová 2002; Křupalová 2000, 2001; Poul 1996; Pulda 1992a, 1992b, 1999; Sovák 1987). It follows that professional views suggesting a remedy for deafness with an attempt to fix the deficit by engaging the Deaf children into the mainstream practices of communication as soon as possible represent the much sought expert opinions for the lay person, eventually contributing to the majority position of the need to socialize the Deaf into the mainstream world. As the contemporary attitudes in countries where research findings uphold the stance of supplying the Deaf with

alternative means of communication, the CzSL users face numerous challenges in their everyday lives.

## 8 Challenges of the Deaf in contemporary Czech society

In the Czech Republic, the education of Deaf children fits into the category of “special education,” established and defined after World War II. Schooling of the Czech Deaf has been a part of special education and speech therapy for a long time (Janotová 1990); yet, it is still based on medical views of the deafness as a deficiency. Czech Sign Language research was initiated only about twenty years ago, which is a short time for it to be thriving (Hudáková 2009). There is a general lack of research studies of the deaf population and sign linguistics in the context of Czech society. Even more alarmingly, little is known about the actual competencies children master if there is a limited scope of communication skills they possess. There are three main categories of the hearing-impaired children’s language competency upon their entry to school: (i) children (mostly the hard of hearing) whose maternal language (i.e., their first language or L1) is spoken Czech; (ii) Deaf children whose L1 is the CzSL and (iii) Deaf (mostly the prelingual deaf) children who lack competence in either of the two communication systems (Hudáková 1998, 2004, 2009; Macurová 1998). Many prelingual Deaf children in the Czech schooling system lack either form of an appropriate L1, i.e., a proficiency in CzSL if raised by poorly proficient caregivers, or a proficiency in spoken Czech language due to the nature of their hearing impairment. Thus, the conditions for Czech Deaf children to thrive in the Czech educational system are less than ideal. But these data reflect only the reality of Deaf children educated in schools for the hearing impaired.<sup>5</sup>

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<sup>5</sup> Presently, there are eleven kindergartens, ten primary schools and eight secondary schools (six of them offer education culminating in a graduation exam qualifying for post-secondary studies) in the Czech Republic specialized in the instruction of hearing impaired children. They are mostly integrated to complexes of kindergartens, primary schools, secondary schools and specialized consulting centers focusing on the hearing-impaired children educated in the mainstream schools. Regardless of the labels, along with the hearing impaired children, these schools encompass hearing children with ADHD, speech disorders, autism, cognitive disabilities and other diagnoses. They are usually deaf children (signing), hard of hearing children (who prefer speaking) and hearing children mixed with children disabled in other ways in a single classroom.

Based on the statistics presented earlier, we can estimate that at least 700–1,300 children with some sort of prelingual hearing impairment (100 with severe hearing loss or deafness, 600–1,200 with a moderately severe hearing loss) and others with other less serious types of hearing impairment are born each year. If each attends three years of kindergarten, nine years of primary and four years of secondary education, up to 20,000 children with hearing impairment will participate in the Czech education system at any point in time. However, Czech school statistics for the school year 2013–2014 register only 1,886 children with hearing impairment in preschools, primary and secondary schools, and more than half attending mainstream schools (Hudáková 2014). Thus, we seem to lack information on the education of the vast majority of children with hearing impairment in the Czech Republic. However, we understand that the majority of children with atypical hearing, including the prelingually deaf, are educated in mainstream schools, devoid of adequate educational support or contact with CzSL and the Deaf culture. Education lacking unconstrained and clear means of communication is bound to fail the Deaf children in development of social, communicative and cognitive skills.

The schools for the hearing impaired, in some situations, permit the use of “signing” (as a kind of alternative and augmentative communication system). Notwithstanding, only about a quarter of them use it systematically in the education process. Only one complex of schools in Hradec Králové and a secondary school in Prague consider CzSL a full-fledged language and incorporate bilingual (CzSL and Czech language) and bicultural (Czech Deaf culture and Czech culture) education. What is more, a shortage of Deaf adult models in the schooling system may be a source of problems with communication in CzSL. In this context, 72 deaf or hard-of-hearing educators worked in the schools in January 2012 in the Czech Republic, mostly in the three schools for hearing impaired and, sadly, a lot of them having worked only as assistants to hearing teachers (Hudáková 2012). Hudáková (2009) claims that the general stance of the Czech special educational system focused on Deaf children is that deafness is a sort of a deviation from the norm, which is to hear and speak (Chmelíř 2010; Sovák 1987). Accordingly, the goal of the schools targeting Deaf children is to assimilate them to the mainstream society through communication in spoken language. It follows then that speech therapy takes precedence over language learning, or any kind of learning, for that matter.

Hudáková (2009) further argues that all the existing textbooks for Deaf beginner readers and writers are based on analytic-synthetic method of sound perception that is closely tied to the practice of proper pronunciation. In a parallel fashion, children are reported to be drilled to memorize progressively more words and phrases. According to some reports though, this approach to

reading and writing has little or no success. The shockingly low literacy competence of deaf children in the presently set-up educational system is highly surpassed by their skills beyond the realm of literacy. Findings from studies focused on the assessment of reading and literacy skills in Czech schools for the hearing impaired (Makovská 2013; Poláková 2001) correspond to those by Conrad (1979) in Great Britain in that the Czech Deaf students graduating from high school read at the level of a nine year old hearing child on average. These alarming facts about the irrelevance of approaches to teaching Deaf children set out a stage for a timely research of competencies enabling the children to learn spontaneously from the basics they might have already mastered but that have not been traced in the context of Czech schooling. Moreover, as deaf and hard-of-hearing children's education resides under the umbrella of special education, the teachers need to be instructed in special education; yet, they need not know Czech Sign Language or possess any knowledge about Deaf minority, its culture, history, etc. The lack of fluent communication stemming from this condition is one of the reasons for designing "special textbooks," the only specificity of which is reducing the content of knowledge. Consequently, the deaf or hard-of-hearing children are taught a simplified curriculum, even though they may be perfectly competent in grasping a curriculum of much higher standards.

One of the hallmark malpractices in the present-day education system is how it deals with deaf and hard-of-hearing students so that they pass the national test and graduate from the secondary school (also a prerequisite for post-secondary education). The consensus from 15 years ago was to reduce the exigencies on the deaf and hard-of-hearing students, corresponding to the degree of their hearing loss (Nová maturita undated). Thus, hearing-impaired students are divided into three performance groups: (i) spoken Czech language users, (ii) spoken Czech language users, with lip-reading support and (iii) CzSL users. While exams for groups (i) and (ii) overlap in their design with the exams for the rest of the students (with exemptions granted for listening subtests and the use of a chat during the oral part of the exams), the exams for students in group (iii) are built on an entirely different basis. For the third group, exams in Czech language are designed as exams for the users of Czech as a foreign language. Each student has his or her computer, where they can play and replay the instructions and the individual assignments from a centralized translation into the CzSL at their convenience from a DVD, parallel to the reading students having a chance to come back to each question and reread the instructions as often as they need.

This model of national secondary examination has been in effect since 2011. We can slowly witness that some secondary schools for hearing impaired have started to distinguish between the use of Czech spoken language and that of

CzSL. We hope that this is the onset of a long-term process aiming at a paradigm shift from a deficit model to the bilingual and bicultural educational model of the Czech Deaf. Yet, a paradigm shift calls for a number of adjustments, including changes in the mindset of both the lay and professional public, along with changes in the system and state legislature. In contrast to twenty five years ago though, the Czech society is no longer isolated from the rest of the world. Proud members of the Czech Deaf community, many of whom being university graduates, are inspired by changes taking place abroad. Scientists draw from studies confirming uncompromised development of deaf children with a rich conversational input in any modality. With a secured influx of research findings and relevant information on the life of the Deaf communities abroad, the initiative of the Czech Deaf and the local scientific community starting to undertake new research initiatives in the area of deaf studies warrants a better quality of life for those using CzSL as their first language in the contemporary Czech society.

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