

# Sign Bilingualism or Language Deprivation

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## Abstract

This paper reports on the results of ethnographic research carried out in the Barcelona area (in 2018-19), on the situation of deaf education as a result of the continuous complaints from the families of deaf bilingual pupils about the Catalan educational administration's failure to respond to their demands. The data were collected during a recreational activity for deaf children, and consist of participant observation and field notes on the children's interactions, and recorded interviews with the families and other deaf adults. The qualitative analysis of these data shows the existence of children's and young people's language deprivation, and an ongoing conflict between families, and health professionals and speech therapists. A second part involving the data triangulation is added: the analysis of an interview with the representatives of educational interpreters, the official document that regulates this service in post-compulsory studies, and the legal framework for bimodal bilingualism. This leads us to an explanation for the reasons for this conflict within the context of a bimodal bilingual model which began at the turn of the twenty-first century, but has gradually deteriorated, despite the legal recognition of sign language.

## Keywords:

Language deprivation, semilingualism, bimodal bilingualism, sign bilingualism, deaf education, Catalan deaf education, oralism, sign language planning.

“One never regrets knowing several languages but one can certainly regret not knowing enough, especially if one’s own development is at stake. The deaf child should have the right to grow up bilingual and it is our responsibility to help him/her do so” (Grosjean 2001, 114).

## **1. Introduction**

This title of this paper takes its inspiration by copying the formal structure of the opinion of a former director of the institution that deals with deaf students in Catalonia, the CREDA, included in Sánchez Amat (2015, 453): “Do you want to make signs or do it orally?”. When this professional says this as part of a question to deaf children’s families, he is activating the classic conflict between oralism and sign language as a dichotomous space, appealing to the parents’ supposed right of freedom of choice in the education of their children. This professional is even using the traditional term “sign”, with a derogatory meaning, rather than “sign language”.

However, this dichotomy is misleading, because nobody in the deaf community is advocating education in sign language alone, but instead bimodal bilingualism, particularly before the Critical Period, which is widely accepted by the scientific community (Grosjean 2001; Emmorey 2002, 2018; Pallier 2007; Mayberry and Kluender 2018a, b; etc.). One of the first scientists to defend the Critical Period was Lenneberg (1967, 206), who believed that it is never too late in life to learn some cognitive capacities and knowledge; however, there are others, such as the acquisition of a native language, which are only acquired naturally and completely before the cognitive maturation of the brain’s language faculty, and this usually happens before adolescence. In Meisel’s review of current research on this topic (2013, p. 73), the author refers to age 8 as the threshold for native acquisition of an L1, which does not imply partial acquisition of the different levels of language.

A question posed by Lenneberg in the book mentioned above (1967, 206) is whether the functions of brain lateralization are achieved in the absence of language acquisition: “A total absence of linguistic development is only seen observed today in the worst cases of mental

weakness and in chronic child psychosis... However, in this population... a lack of a desire to communicate is not necessarily a sign of an absence of language”.

As shown below, extreme situations of a failure to develop a first language have been reported in the decades since this assessment in implanted deaf children who have been unable to develop oral language in the first years of life and who have also received no sign language input. This situation can lead to language deprivation or semilingualism, which may mean that they do not completely acquire any language (neither oral nor sign language) and lead to serious problems in their communicative, cognitive and psychosocial development as a result (Lane 1992, 207; Hintermain 2014, 152 and 160). The dichotomy is therefore not one of oral or (gestural) signs as argued by the deaf education professional mentioned above, but, as will be argued below, one of oralism versus bimodal bilingualism. This bilingualism must be a flexible and integral model in order to take into account the current diversity of students, most of whom use implants and/or hearing aids (Lane 1992, 207; Knoors, Tang and Marschark 2014, 15; Swanwick et al. 2014, 300; Morales-López 2019).

The specific objective of this paper is to present the conclusions of the ethnographic study carried out in the 2018-19 academic year, with the Volem signar i escoltar Association of Parents of Deaf Students, concerning their complaints about the situation of bilingual deaf education in Catalonia.<sup>1</sup> At the heart of this situation were the Catalan Government’s repeated failures to provide the sign bilingualism to an adequate extent, comparable to that of the hearing student body.

My first research project on the bilingual model in Barcelona took place in 2006 (published in Morales-López 2008b), when I reported on how this model had begun to be implemented in several schools in Barcelona (I also included a report of the bilingual model in Madrid). About five years ago, I again contacted several teachers involved in this model, and their overall opinion was that this bilingualism was deteriorating. These opinions were therefore consistent with those of the parents mentioned above.<sup>2</sup>

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<sup>1</sup> See a summary of their first complaints in newsletter 4, 14, 2018 [www.bilinsig.org/newsletter](http://www.bilinsig.org/newsletter). More information on this association is available at <http://volemsignariescoltar.blogspot.com/>

<sup>2</sup> This stay in Barcelona was possible thanks to a sabbatical year from my university in the 2018-19 academic year. My research with the Deaf community in Barcelona began in 2000, when, with other colleagues, I conducted sociolinguistic interviews on identity issues (Morales-López et al. 2002).

## 2. Methodology

For this research, focusing on the families' perspective, I collected the data at the *esplai* of the *Apansce* Association in Barcelona (another families' association which advocates bilingualism, which also includes *Volem signar i escoltar*), a recreational activity for deaf children that meets on Saturday mornings, while their parents learn sign language. This is a meeting point for families who are in favour of sign bilingualism or would like to know more about it. Young deaf people also work as monitors for the children, and sometimes their deaf friends and some interpreters stop by to say hello to them. Given the variety of people who attended this group and their willingness to exchange impressions, I decided to go there weekly, from November 2018 to the end of June 2019.

This research work consisted of adopting the role of participant observer, as is commonly accepted in ethnographic methodology (Duranti 1997; Blommaert and Jie 2010; Scollon and Wong Scollon 2001, etc.). I observed the children's interactions and talked to their parents and the other adults mentioned above, sometimes recording the talks and in other cases, taking notes on our conversation and passing them on to the relevant person in order to obtain his/her permission for their use in this research. The anonymity of those involved, and of the children in particular, has been preserved; the names are always pseudonyms, and some other sensitive details have been slightly changed so that they cannot be recognized.

I have used ethnographic methodology extensively in my research, both in the study of changes in the Deaf community (Morales-López et al. 2002; Morales-López 2008a) and in the development of sign bilingualism (Morales-López 2008b, 2010), as well as in the study of other social groups.<sup>3</sup> Today, ethnography is mainly based on recordings of participants' interactions, in dialectics with field notes and knowledge of the socio-cultural context (as in the fields of Interactional Sociolinguistics and Linguistic Anthropology, Gumperz 1982, Duranti 1997, etc.). However, in this case, which involves participant observation with data from very vulnerable children, recording the interactions did not seem to be a good solution on ethical grounds. Furthermore, not all the families interviewed gave their consent to recording our interaction, although almost all explained their situation informally (some of the authorized fragments are included in section 3.2). In this paper, I therefore use of the traditional method for data collection

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<sup>3</sup> For this research, see the website <http://cei.udc.es>

in ethnography: the notes from my fieldwork; see Mead's description of childhood in the Manus community as an excellent example (Mead 1030).

Another source of data, for improving my knowledge of the current context of the families' complaints, was the various events and meetings with institutional representatives, at which I accompanied the president of the association *Volem signar i escoltar*. All of them were attended by deaf people, young people, and/or families of deaf children. Interpreters were also present to provide a service at these events, and as such I was also able to find out about their employment situation. Everyone was aware of my role and knew I was asking questions for research purposes. Finally, in the last two sections, the field notes and answers I obtained from the interviewees will be compared with a formal interview with educational interpreters and the legal and administrative documents currently in force. This is the part that in ethnography is called "triangulation of data" or "cross-checking", and is used "to provide reliability... and validity" to the initial data (Scollon and Wong Scollon 2001, 18). In this paper, the analysis of these new data will show that the opinions of the families were justified.

### **3. Data Analysis**

After completing the fieldwork, I performed the analysis by means of the qualitative methodology, choosing the most relevant discursive excerpts from my notes, interviews and informal conversations. My objective was to present the framework for interpretation or narration of the facts that emerge from their discourses, in order to be able to evaluate what happened. The presentation of the analysis is divided into the following sub-sections: description of deaf students with language deprivation (3.1), and analysis of the families' interviews (3.2). Finally, in triangulation of data section, the employment status of the interpreters (3.3) and the institutional context (3.4) are discussed.

#### *3.1. Description of deaf students with language deprivation*

The most important finding in my observation of the troop of children and their interactions in the *esplai* was the presence of two deaf children aged seven and a half years old without any linguistic development (neither oral nor sign language). There was also a 6-year-old child with

speech impairment, although he was able to hear.<sup>4</sup> His parents said that he was very unhappy at being unable to speak. In two of these three cases, the CREDA professionals had offered them the sole alternative of communication by means of an alternative sign system, but not sign language. The professionals involved did not seek the solution of a bilingual primary school in any of these three cases (although there are two available in Barcelona).<sup>5</sup>

Of these three children, only the first two deaf children have begun to attend the *esplai* regularly since October 2019. From January onwards, only Alex began to react to sign language; the other boy, Javier, had not yet begun to sign in June, and was also not communicating with oral language, even though he had received an implant a year earlier.

Alex was not fluent in articulatory production in oral language, even though he has an implant. His therapists believe he may have another disability, but medical tests have been inconclusive. At the beginning of my observation, he always played alone and could not keep his eyes on the monitors when they addressed him in sign language. The change came when he began to fix his gaze on them and to realize that they were communicating with him. He gradually began to imitate what other deaf children were doing, and to produce the signs for objects related to play. The most striking development took place in May, when the group of deaf children of his age became aware of Alex's progress and began to accept him as part of the group: he was now a signer like them, although sometimes what he produced was not entirely appropriate. This led a radical change in him: he finished the course on a very happy note, and was more fully integrated with everyone. His family noticed this change immediately because they said he was eager to go to the *esplai*. The majority of this group of children attend the bilingual schools in Barcelona, and as such they could be his classmates in the next academic year, if his parents managed to overcome the bureaucratic barriers to the educational change that they wanted, and to which I will refer later in section 3.4.

Javier came to Spain with his family when he was 5 years old. The CREDA decided to send him to an ordinary school while he was waiting for an implant. This happened a year before my

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<sup>4</sup> The male gender and names are always used in this description, in order to better enhance the anonymity of the informants.

<sup>5</sup> According to the official information of the Catalan Ministry of Education, there are four bilingual public schools in Catalonia: Tres Pins (a mainstream primary school with a co-enrollment bilingual programme in Barcelona); two special schools, Josep Pla (in Barcelona) and Massana (in Gerona) for deaf students with other disabilities; and the fourth is the Consell de Cent High School (in Barcelona) (see more information in Morales-López 2008b; and Sánchez Amat 2015). There were 25 deaf students at Tres Pins and 8 at Consell de Cent 8 at the compulsory secondary level in 2019.

research, but he had not managed to recover any oral production. At the age of seven and a half, his parents, concerned about this lack of response, began the process of learning sign language; which is why he began to attend the *esplai* mentioned above in October 2019, However, unlike Alex, by June Javier had not yet managed to communicate by means of any sign or oral language. His parents obtained permission from the CREDA to change school to a bilingual school the next academic year. The question that arises is why the CREDA did not authorize this family to apply for a bilingual school when he arrived in Barcelona, given that at the age of 5 he had no oral production, and one of the bilingual schools was not very far from his home. I set aside the answer to this question for section 3.4, although serious problems from the educational administration could be anticipated.

For the moment, one possible concern is whether this linguistic delay could have repercussions on these children's cognitive and psychosocial development (as suggested in Hintermain, 2014). In January, during a visit I made to the Catalan Parliament to explain what sign bilingualism consists of, some parents with a deaf teenage son (assigned the pseudonym of José) also attended this event. The problem they raised was that he was attending high school without an interpreter (another serious case of language deprivation, as we will see in section 3.3); they also added that their son suffers from serious deprivation because of the very severe oralist education he had in his childhood. At present, he can sign, but has psychological and social problems.

How many children and young people are there in Catalonia in this situation? In addition to the cases mentioned here, some of my informants report that they know several young people who can barely communicate using oral language, and have not learned sign language either. Other parents from the two associations mentioned above also corroborate that there are many more cases. Education professionals hardly offer any information about this. Moreover, the term that these professionals used when I asked about this subject is "school failure", with which it seems that they are trying to equate the problem arising from the lack of an L1 with the problem of the deficiencies in literacy and the school curriculum among hearing pupils. In fact, they are two very different concepts, as the first is language deprivation, with the consequent risk for these subjects' psychosocial development (Hall 2017; Humphries et al. 2018; Emmorey 2018); the same does not necessarily apply in the second case. This problem was mentioned by Trovato (2013, 402): "I maintain that the right to sign language is not only as strong as the right to a minority language,

but is indeed even stronger, because it is the right to have normal social and cognitive development”.

History has provided us with cases of language deprivation in the "wild children" - children isolated from human society who when they were discovered, were no longer able to fully acquire a language in a complete way (see one case in Lane 1976). However, this phenomenon has hardly been studied apart from these cases of such severe deprivation, and apart from people displaced from remote and disadvantaged rural areas to developed areas, like the ones documented by Mayberry and Kluender (2018a, b). The examples mentioned in my observation are testimony to an even more serious problem - language deprivation in normal families' deaf pupils.

Spain is currently undertaking research on oral language competence acquired by children with a cochlear implant. Madrid Cánovas (2006, 155-156) presents results for the lexical competence of a group of implanted deaf children compared to a group of normal hearing children. Her conclusions indicate that the implanted children have a “linguistic delay” of at least three years compared to their normal hearing counterparts, although some of them have a linguistic level very close to this normal hearing group, and in some cases, some implanted children even exceed this control group. As for the time spent by these children on the activity, implanted children are slower than normal-hearing children, although again there are large individual differences.

In a later publication, Madrid Cánovas and Bleda García (2011) deal with the pragmatic difficulties of another group of eight implanted children. In specific terms, they analyze the variety of speech acts they use at the conversational level. The result is that although the cognitive development of these children is appropriate for their age, they usually present atypical features at all linguistic levels (phonological, morphological and lexical-semantic), including the pragmatic (or communicative) level. At this last level, their difficulties are related to the acquisition of social and cultural nuances because they have access to a more limited number of registers; they also use longer silences and more conversational breaks than normal-language speakers, which shows that their conversational fluency is still poor.

The results also show that most of the speech acts they perform are representative (including both acts of agreement or disagreement and evasive formulations such as “I don't know”, and even statements with full informative meaning); directive acts, when they appear, are aimed at asking for a repetition, reformulation or explanation of the statement (they therefore request a linguistic action); and expressive acts are almost non-existent, and as such there is no reflection of the child's

internal state or a concern on the part of the child for the state of his or her interlocutor. These characteristics lead the authors to the following conclusion:

The speech acts that these implanted deaf children construct are generally short and simple, because they lack solid linguistic structures. This difficulty in production is perhaps linked to [their] lack of communicative initiative: the understanding of the interlocutor is slower and more expensive, and requires more effort, which leads them to play a passive role in the communicative process... (2011, 103; my translation).

These research data reveal that we are also dealing with cases of language deprivation, albeit to a lesser degree than in the four children with severe deprivation mentioned at the beginning. Very few implanted children achieve the highest level of oral language acquisition. Most reach the morphosyntactic level, but this level is insufficient for communicative competence in an L1. This gap between hearing and deaf pupils has also been reported in countries such as United Kingdom, Norway and Sweden (Swanwick et al. 2014, 299). The problem increases if any sign language is acquired the in early years (Hall 2017).

If the results of Madrid Cánovas (2006), and Madrid Cánovas and Bleda García's (2011) research are extrapolated to the situation in the Barcelona area I am analyzing in this study, the level of language deprivation will be higher since only a minimal percentage of deaf students attend bilingual tuition (see note 5 above). Furthermore, if there is language deprivation, to whatever degree, there are certain to be problems in their acquisition of literacy and consequently academic failure in the post-compulsory stage.

### *3.2. The interviews with the families: an open conflict between the families, and those responsible for CREDA and the health institutions*

When parents were asked why there is so much opposition to sign language among the majority of CREDA speech therapists and most doctors in Barcelona's hospitals, as they reiterate in their complains, the answer was that some of these professionals are too closely linked with the hearing aid and implant companies. Furthermore, according to the parents, those who are not cannot speak freely on the subject.

One mother recalled a comment made to her a few years ago by an ear specialist: “Now I am not in a position of power and I can say this, but there is a lot of money behind every implant”. Some of my informants also quote the company WIDEX and a specific shop in Barcelona, recommended to parents by all professionals. I was therefore able to infer from these comments that this as a group who acts as an “oralist lobby” and is allegedly engaging in unethical practices.

Another mother reports aggressive practices when deciding on an implant procedure:

(1) It's not clear if [my son] is profoundly deaf, because the hearing tests have always been very varied ... I began to take him for treatment at the Sant Joan de Déu Hospital, but I thought they were very pushy for the implant; they wanted to do the surgery, even though my child had a serious problem with mucus in his ears. In the end, I told them that I didn't want to do the implant and we moved to another hospital. At the Vall Hebron Hospital, the ear specialist who has been in charge of him for years has been more respectful, and accepted that this is a difficult case to determine.

In this response, she openly mentions the names of the different hospitals. The one subject to most criticism by all parents is the Sant Joan de Déu Hospital, a pioneer in implants. Other parents mention that the team of ear specialists at this hospital who treated their children forbade them to use sign language while the implant process was taking place. Some parents openly expressed their disagreement with this and according to them, were moved down the waiting list for the surgery (they appear to prioritize families who do not use any signs). In the end, some of them decided to move their children to other hospitals. In the same vein, another mother explains that she told the doctor concerned that the ban on sign language was impossible in her family because she has relatives who know sign language. Despite this, this doctor reiterated to them the need not to use sign language.

At the international level, Ghesquière and Meurant (2019, 230) report on how otolaryngologists and audiologist services often consider sign language as an obstacle to the development of spoken language by implanted children. Plaza Pust (2016, 36-7) warns of the great power of this type of oralism, and the considerable pressure on families to contribute to improving their children's oral language.

The opinions collected from the families point in the same direction: the medical team is fully committed to the oralist framework, and considers sign language to be an impediment to the favourable process of implant rehabilitation.<sup>6</sup> However, no studies have satisfactorily demonstrated that sign language acquisition is a contraindication for cochlear implants (Campbell, MacSweeney and Woll 2014, 8; see also Humphries et al. 2018, 6). On the contrary, some researchers report that there are many implanted deaf children who do not acquire oral language as their first language through implants alone (Davidson, Lillo-Martin and Pichler 2013; see also Mayberry and Kluender 2018a, b).

A second aspect in my interviews was the issue of information on early care when the parents placed their deaf children in schools. The following testimony from a mother is very revealing:

(2) Our son is profoundly deaf... At the age of 3, CREDA advised us on a school for deaf children, but an oral one. As always, they say that they give freedom to families, but that isn't true; we were given no choice. This is also psychological harassment, now that the Department [Ministry of Education] is saying that it is going to pursue it [psychological harassment in schools] [...] (Newsletter 5, 17, 2019, [www.bilinsig.org/newsletter/](http://www.bilinsig.org/newsletter/)).

According to this mother, they were not offered freedom in their choice of school, but their child was compulsorily referred to an oralist school. Since they resisted (they were in fact already using sign language with their child), in the interview she does not hesitate to describe what happened as "psychological harassment", similar to other examples described in the same way (which were being discussed in the media at that time). In other cases, another mother explains that early care professionals never mentioned bilingual education to her:

(3.1) At CREDA... they never spoke to me about sign language... At home, I developed communication with my child using homesigns, but he was very isolated because I could not communicate with him very well. The nursery, which he started to attend when he was 9

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<sup>6</sup> We explained all these problems to the Education committee of the Catalan Parliament and raised the need for a thorough investigation of all these children's cases in May 2019. The recording of this session is available at [https://www.parlament.cat/web/canal-parlament/sequencia/videos/index.html?p\\_cp1=8394574&p\\_cp2=8395460&p\\_cp3=8395448](https://www.parlament.cat/web/canal-parlament/sequencia/videos/index.html?p_cp1=8394574&p_cp2=8395460&p_cp3=8395448). And in sign language on the already mentioned Facebook of Volem signar i escoltar.

months old, was totally oralist. During the nursery period, I often went with my son to the CREDA in my area, and they wasted my time there with workshops in which they made noises with drums and other activities, and hid the most important thing for a deaf child from me: sign language.

Unlike the previous mother, who had signed with her son since the age of two, this mother explains that she never had this opportunity. The lexical term she uses to describe CREDA's early care service is "concealment" (*ocultación*) of everything related to sign language. When she found out about it, she chose the bilingual education model and today she uses sign language with her son. In our conversation, she still provides other important information:

(3.2) Once a week, we go to a private speech therapist, who is also a sign language interpreter, and she is trying to make progress orally, and with sign language with him, so that everything is a process integrating both "signs" and "oral". In reading and writing, he is slower: he is a child who had no language until he was almost 6 years old; that's what you said in the Parliament about language deprivation... In the school report, advised by CREDA, they say that he has "other problems", apart from deafness... It is very clear: they are problems due to his language deprivation. Why don't they say it openly?

The interview took place after my appearance in the Parliament to report on the language deprivation identified in the Barcelona area (see note 6), so this mother has interpreted what happened to her son as another case of deprivation. According to her, what is striking is the silence of the speech therapists on her son's problems: nobody accepts responsibilities and the school itself has no other choice but to toe the official CREDA line ("they are advised by CREDA", she says explicitly).

Another mother mentioned an aspect of early care that seems relevant. She said that CREDA denied her son sign language, because it seemed to them that he might have another pathology associated with deafness, and the implant would therefore not work. Finally, given the lack of oral production, she adds, they had to deal with these professionals when they told them they were starting the process involved in his bilingual education. From the interpretative point of view, there was a clear lack of concern by these professionals regarding the negative consequences of language

deprivation, as they only considered the possibility that the delay in this child's oral language could be the result of other pathologies.

Readers can compare these testimonies about the CREDA professionals' performance with those in the BilinSig newsletter 3, 10, 2017 (<http://bilinsig.org/newsletter/>). An open conflict between the deaf children's families and these professionals is apparent in all of them. The testimony below, from the director of a sign bilingual school in Madrid, provides further evidence of this traditional conflict with oralism, experienced by them a decade earlier:

(4) The war over oralism ended in Madrid when the pedagogical team for deaf people decided that the solution for deaf students was bilingualism. Parents who don't want signs go to oralist schools, which also exist, but the team makes sure they are well aware of both options, and decide freely.

This testimony can be corroborated by the assessment of this Madrid bilingual model and its benefits by Pérez et al. (2019). The data analyzed from my informants interviewed in the Barcelona area show that the freedom to choose a bilingual school in Madrid does not currently seem to be available in Catalonia. Some even explicitly stated that what families expect is the dissolution of CREDA as an educational institution for the deaf pupils, because it is failing to fulfil its role with signing deaf students.

### *3.3. The triangulation of data: the employment status of the interpreters*

The second recurring topic in my talks with the families, and particularly with the deaf signing secondary students, was their continuous complaints about the interpretation service for post-compulsory degrees. This service does not cover all school curricula, and sometimes several interpreters are assigned to them; some of them are not always sufficiently trained for this service. They also confirm that this also happens in the university services. However training for sign language interpretation is available in Catalonia as high school and university degrees.

The family associations' spokesperson commented that they had been asking the educational administration for transparency on the criteria for assigning educational interpreters for years, in order to find out why not all the subjects were covered. The official answer was that the interpretation services were assigned based on "educational criteria", but these were never made

explicit. The change came when they discovered that if this request was made from a political group in the Catalan Parliament, the educational administration had to provide a written response. They looked for a political party willing to help them and, on February 2019, one of the associations, Volem signar i escoltar, received a copy of the official document outlining these criteria.

This document explains the following criteria used by the Catalan Ministry of Education for the assignment of interpreters:

*“The specific needs of the students according to the [interpreters’] resources.*

The indicators of needs to be evaluated are:

- Ability to access the Catalan language curriculum.
- Comorbidity [coexistence of several disabilities].
- Ability to access the curriculum using LSC [Catalan Sign Language].
- Degree of hearing loss.
- Bilingual/oral mode of origin.

Each indicator is rated from 1 to 5 on a scale from less to more need”.

The excerpt highlights two important aspects for this paper: for the assignment of interpreters, the degree of hearing loss (and the consequent ability to obtain access to the Catalan curriculum or otherwise), and the bilingual/oral schooling are crucial. These are therefore prior criteria, considered regardless a particular student’s specific needs. It is not true that they are based on strictly educational criteria, as the families had always been told.

In view of this apparent lack of specifically educational criteria, this document can be interpreted on the basis of possible discrimination against deaf pupils compared to hearing pupils.

First, according to the Catalan law of 2010, the bilingual learning is recognized in deaf education in Catalonia, as well as the interpretation service (or in its absence, a service with support teachers or speech therapists). No subject can be excluded from this legal mandate. If a pupil is recognized as "deaf" because of his or her disability, he or she is entitled to a bilingual education. The criteria of his/her ability in another oral language or his/her degree of hearing loss are not valid, because they would be discriminatory against hearing pupils. In other words, the educational system prevents deaf students from acquiring a native level and sufficient prior knowledge to

continue their studies, e.g. Vocational Training of Linguistic Mediation and/or the University Degree in Sign Language and Interpretation in their natural language, sign language.

Other criteria made explicit in the document are the ability to access the sign language curriculum and the model of previous schooling. Given that there are so few bilingual schools in Catalonia (only four), there will be very few deaf primary school pupils who know Catalan Sign Language (LSC) (this document states that there are 76, a small percentage of the total number of deaf pupils). It is therefore unfair to deny the interpretation service in secondary education to these students because they do not have this knowledge, a situation created by the policy of the Ministry of Education itself. These two reasons constitute what in Rhetoric is known as a "circular argument".

The third aspect is the criterion that dispenses with the interpretation service in foreign language classes. Again, this a discriminatory decision with regard to hearing students, contrary to the instructions on multilingualism from the Council of Europe for the education of the European population (Council of Europe 2001; see also Morales-López 2019). Why can't a deaf pupil learn a language like English (or any other language taught in his or her school)? He/she could even do so orally, after learning the phonetic transcription, which would help him/her compare this second language with the phonetic transcription of Catalan and Spanish. Finally, this service is restricted to other activities such as lab practice, reinforcement classes, etc., which are also fundamental to any person's overall education, whether or not they are deaf.

Consideration of these different criteria provides a better understanding of the opinions of some deaf users and their families about this interpretation service:

First, there is the case of the parents of the teenager José, who was mentioned in section 3.1. They asked for interpretation services for their son because he did not understand anything in oral language classes, even though his education had always been oral (he had learned sign language privately). According to the document's criteria, he was not legally entitled to it. It did not matter what educational and personal reasons his parents gave - he was bored in class because he did not understand anything, and he suffered from disorders resulting from his language deprivation (an obvious case of "comorbidity").

The comment by another young deaf man in his early twenties, as the following excerpt shows, is revealing as regards my second point, concerning the fact that it is not possible to provide interpreting services to students coming from oral education:

(5) I became deaf at the age of 9. I was able to do well in ESO [compulsory secondary education] at an oralist school. Now I work, but I want to change my job... I can't continue studying because I have to pay for the interpreter with my own money... They won't pay for me, I don't know why. And without an interpreter I can't. When the teachers turn around, I can't hear them. But my education has not been bad, I have a deaf friend who doesn't speak or sign. Imagine! I have learned sign language [on my own] and I also speak well because I did it before I became deaf. Now I have hearing friends and deaf friends, but I prefer the deaf signers. When I'm with a group of hearing people, I don't understand them, only in one-on-one conversation.

The criteria discussed above clearly explain what this young person did not know at the time: he was unable to access the free interpretation service because he had received an oral education. However, his oral comprehension was insufficient, so he believed it was useless to make an effort to continue his studies, even though he was unhappy in his job. Compared to hearing students, his case is an example of discrimination, because he is now a bilingual deaf person in an environment of deaf signing friends, with whom he can continue to improve his sign language proficiency. Despite this discrimination, he considered himself lucky compared to a friend of his: another obvious example of language deprivation in youth.

Third, I focus on complaints about the quality of the educational interpretation service. Some young people said that sometimes they had more than one interpreter in an academic year, and it was up to them to explain the signs agreed with the previous interpreter to the new person. Besides, the new interpreters did not always have a good level of sign language in these specific contexts. This shows possible shortcomings in this service, which led us to search for specific information on this point in an interview with several representatives of these professionals (the full text is available in newsletter 4, 16, 2018, <http://bilinsig.org/newsletter/>). I will only consider the most relevant aspects for the topic that concerns us here:

(6.1) [The contracting service is external, the Pere Tarrés Foundation won the tender]. [Working] conditions have been deteriorating because we have been reducing hours from one day to the next, if a student leaves a subject; some people have had their hours reduced.

Despite our complaints, the subject has consistently been shelved. We have no agreement, no regulation, nothing; the company takes advantage of clauses that they have signed with the government, so if there is no work... But the company has the money that the Ministry [of Education] gives it, it is a public budget, why are there these continuous reductions?

(6.2) The Ministry says that it grants hours to deaf students with educational criteria; we have tried to find out what these criteria are, but we cannot find them. It is clear that these criteria are economic, they are not for educational reasons.

(6.3) So, in view of all this, this is not the way to improve the quality of the service. If we were told in advance which classes we had to interpret and we were paid in the summer, it would give us time to prepare them well, to look for the signs in a more long-lasting way, etc. Now we often interpret in an impromptu fashion. They call you from one day to the next or on the same day to interpret on a welding course. If you don't know about the subject, in the end you have to improvise, agree on provisional signs with the students, etc. You have no choice.

These excerpts reveal the precarious nature of the service, which was outsourced to an institution outside the educational administration with quality that was completely detached from it, according to the interpreters' own opinion. The assignment of this service is government by financial rather than educational reasons. Furthermore, the budget allocated was rendered opaque by private clauses that were beyond the scope of public oversight, and led to the unstable working conditions that they mention: no clearly defined working hours, no holiday pay, no prior training for the various curriculum subjects, etc.

The final comment of the interpreters in the interview effectively summarizes the situation of both the young deaf people and these interpreters' opinions:

(6.4) The bilingual model is dying, and the interpretation service with it. It is one more way of killing sign language - making the interpreters' jobs more precarious, the end result being that there is not a good service of well trained professionals.

If I recapitulate what has been discussed in this section, the data show that many deaf youths in the bilingual model and their parents are unhappy with this service because it does not cover all

the subjects in their studies and when it does, it is not always with the highest quality of the interpretation service. Educational interpreters also acknowledge that they do not always do their job well because of the continuous improvisation involved, their lack of specific training for the different subjects and their unstable employment situation. The metaphor they use of the "death" of the model seems to be a good summary of what my informants have reported: more than two decades after its implementation, the model has been declining in quality, instead of gradually improving.

In the next section of my analysis, I will examine why this deterioration has taken place. It has led to legal action against the Catalan educational administration by one of the Family associations (which began in December 2018).

#### *3.4. The triangulation of data: The institutional context that explains the current situation of the bilingual model*

As detailed in Morales-López (2019), the laws of both the Spanish Parliament and of the Parliament of Catalonia recognize the right of deaf students to bilingual education. As a result, when I carried out this ethnographical study in the Barcelona area a decade after my initial research (published in Morales-López 2008b), I was therefore surprised to see the great divergence between the legal framework and the ethnographic data collected. This has not been the case in the Madrid area (also the object of my research in Morales-López 2008b, for which the development and current situation are discussed in Pérez Martín et al. 2014, and Pérez et al. 2019; from a sociolinguistic perspective, see Morales-López 2020).

According to my informants, the first reason lies in the lack of further development of the Catalan law. No regulations were drawn up specifying the measures for the implementation of the bilingual model. At the time, this law had many important advocates, due to its explicit recognition of bilingualism (Quer 2012). However, no one in the government seems to have worked on this subject. Even in my two appearances before the Catalan Parliament during my ethnographic period and in interviews with representatives of various political parties, several parliamentarians representing the parties in power during this decade wondered with surprise how it was possible that this law had not been implemented ten years later. For this reason, the bottom up initiatives from the bilingual schools themselves, as several professionals also told us, have always been resisted by an administration that has always been, and remains, profoundly oralist.

The most serious case is the parents' lack of freedom to send their deaf children to the bilingual model: they need approval from their CREDA. The CREDA is not a unified institution - there are various CREDA in Catalonia and each one has its own director. All of them are affiliated to the Catalan Ministry of Education. Despite the diverse nature of its centers, the families say that all of them are strongly oralist, and place many obstacles to transfers to a bilingual school. They say that at the main bilingual school in Barcelona, Tres Pins, the number of students has fallen considerably in recent years for this reason.

The Spanish law was also not deployed with any regulations elsewhere in Spain, but this was not an obstacle to progress in some regions, such as in Madrid, where sign bilingualism has been positively implemented (Pérez et al. 2019). In Galicia, based on the opinions collected in the 2019-20 academic year, interpreters' hiring has been quite positive from the employment perspective, although no progress has been made in other equally fundamental educational aspects.

The second reason lies in the Catalan administration itself. The Catalan law (Chapter III, art. 9 and 10) assigns the role of coordinating the planning of sign language and its interdepartmental collaboration to the Department of Linguistic Policy, and research on the variety known as Catalan sign language (LSC) to the Institute of Catalan Studies. However, throughout this decade, in my opinion these institutions have lacked a holistic perspective on the problem (see also Morales-López 2010, 182).

The work done by these institutions in these years, at the same time as a very negative context due to the severe economic crisis of 2008, has focused exclusively on sign language as an autonomous entity, and separated it from its users and from the highly complex context of deaf students. Likewise, those in charge of sign language policy have not been warned about the open conflict with "neo-oralism", which has been enhanced in recent years with implants, from both healthcare and speech therapy professionals. There is nothing inherently negative about implants, but the prohibition to use sign language with deaf children by ear specialists in some of Barcelona's hospitals has proven to be highly negative, and led many of them to suffer from language deprivation. In addition, as reported by Humphries et al. (2018), current research on the results of implants shows that complete recovery of hearing is only achieved in a limited number of cases, but not in all. Speech therapy in Catalonia is also strongly oralist and as indicated by the families interviewed, people with an exclusively oralist background and training from their university

degrees, who are unfamiliar with the world of signing deafness, have been placed in administrative positions at the various CREDA.

Furthermore, nobody in the Catalan administration has asked about the functions of sign language for deaf people, and this language has been equated to the problem of a territorial minority language. However, sign language is not territorial, even if it is a minority language (on this subject, see Trovato 2013). It is a language that has emerged and has been developed mainly in traditional schools for the deaf, and research on it should be linked primarily to existing bilingual schools, since in most cases it is a language that is not passed on from one generation to the next. The Catalan administration has overlooked this crucial function, which has prevented it from analyzing and prioritizing the main problem: the education of their users, children and young people, and the connection between the different schools in order to improve the bilingual model and the psychosocial development of this group. Instead, they have focused exclusively on the linguistic description in the context of the last decade in Catalonia and Spain, with a considerable lack of resources for public research and education. The highly negative results described in the previous sections are clear evidence of failings in recent decades.

It is then necessary to redirect deaf signing education, because a serious attack on deaf children's and adolescents' rights is taking place. On the one hand, the educational administration (at both the regional and municipal level) should take control of this issue, perhaps with new actors capable of providing a comprehensive vision of the problem who can work within the various educational administrations to resolve the so-called "war of oralism". This is what happened in Madrid, with the highly positive initiative in favor of bilingual education undertaken by the pedagogical team for deaf people, which even avoided the negative consequences of the 2008 economic crisis (Pérez Martín et al. 2014). In the same way, the adult deaf community in Catalonia would need to adopt this issue very much as "their own," and work more closely on the demands of the family associations. According to a former leader (personal communication), the Catalan Deaf Association has to date been more oriented towards deaf adults' needs, but it should reorient its goal now towards this problem of language deprivation. The current generations of deaf people seem to be having fewer opportunities than those who were educated in traditional deaf schools. At least there they learned sign language as their L1, in the playground and/or boarding school. Now it seems this is not secure.

#### **4. Interpretation**

This paper began with a quote from Grosjean, and his warning that we should never regret learning a language, especially when that language may be crucial to an individual's personal development. Like few others, Grosjean has been the great advocate of the mother tongue as a tool supporting bilingual processes, particularly in disadvantaged social situations. Bilingualism and multilingualism are phenomena that we as linguists have fully accepted because of their positive value for the hearing population. From there, I also extend this position to the deaf population, as many other sign language researchers do. An example is Wilbur:

The focus should be on the child's education, which requires communication in a natural language, on which all advanced learning is built. Early knowledge of ASL is a critical part of the solution, not part of the problem (2000, 100).

According to this author, sign language is not a problem in deaf children and young people's education, but instead a crucial part of the solution because everyone needs a natural language to develop fully (see also Plaza Pust 2016; Massone, Simón and Duretta 2003); above all, they need to develop this L1 naturally before the neuronal process of lateralization is completed (Lenneberg 1967; Hall 2017). This has also been evidenced extensively by Mayberry and Kluender (2018a, b) in their study updating research on the Critical Period Hypothesis.

Similarly, other recent neuronal studies have shown differences in brain activation depending on whether the acquired language is oral or visual, but they also show the imprint when the acquisition has not occurred naturally since childhood. Mineiro et al. (2014, 198) consider differences in the brain of deaf and hearing individuals, in terms of the timing of first language acquisition. Hall (2017) confirms how deaf individuals' language delay affects the development of neuro-linguistic structures in the brain, and especially those related to developing grammar.

Finally, the following conclusion from Campbell, MacSweeney and Woll (2014, 8) offers an interesting solution to the eternal issue of oralism and its current expression of "new-oralism". They point out that the problem would be "ignoring the overall picture of language development in the deaf child... [T]he evidence suggests that good first language acquisition within the early years... may be the best predictor of successful language outcome for the child born deaf". The

important thing is therefore not only to recover hearing, but also to obtain a comprehensive development of deaf subjects, having fully developed the communicative and cognitive functions that foster an L1 acquired in a natural way and the maximum acquisition of oral language at the same time. From the biolinguistic point of view, there is no empirical evidence that the Language Acquisition Device could not be active in deaf subjects in the same way as is it present in hearing subjects. This device enables not only the development of one language, but also multilingualism in human beings, as reported by Meisel (2013, 70-71).

## **5. Conclusion**

The ethnographic research described above, carried out in a leisure activity for deaf children in the Barcelona area has shown how from the point of view of health and speech therapy, the majority of deaf students are in the hands of professionals who reject sign language, even though this may mean they suffer from some degree of language deprivation. Section 3.1 describes what I consider to be the most important finding in my participant observation, which is the case of several children with severe language deprivation. In all these cases, the professionals of their CREDA did not consider sign bilingualism a solution to their lack of oral production. These professionals have been labeled as the "oralist lobby", thereby interpreting the feelings and negative opinions expressed by most of the families interviewed. Each one offered their own particular vision of these professionals (in section 3.2), but a common denominator among all of them was their opinion that an "open conflict" is taking place, which they have to face if at some point in the process, they decide that oralism is not the most appropriate path for their children. In addition to accepting their children's disability, and the effort involved in learning such a different language, they have to deal with struggling and confrontation with these professionals.

This struggle has been also been reported recently by other researchers (see Hall 2017). However, its negative effects were already pointed out by Lane (1992, 187) as implant surgery began to become widespread in the United States. It made the transition from being something controlled by the authorities and applied with caution in some children to a "generalized market". These effects can be seen several decades later in the severe cases of language deprivation reported in this research.

For the families, the problem does not end with compulsory primary and secondary education in the bilingual format. The triangulation of data in section 3.3 shows how a second problem of interpretation in post-compulsory secondary education arises because this service does not cover the full timetable. The interpreters themselves report on their unstable employment situation and lack of continuous training. Moreover, young students from oral education have no access to this service in either compulsory or post-compulsory secondary education. Their language deprivation may continue even at this stage.

Finally, the second part of the triangulation of data in section 3.4 attempted to highlight the institutional reasons for all these problems. The law for recognition of sign language in Catalonia has not led to any real improvement for deaf pupils, because it has not been implemented with specific regulations. The institutions in charge of language policy have also failed to take into account the crucial need in relation to sign language: deaf education in bilingual programs. Deaf schools have played a crucial role in deaf students' interpersonal and informal communication since the beginning of deaf schools in the nineteenth century and the early twentieth century, as a way to counteract oralist ideology (Lane 1992). However, in the context of the last twenty years, which has been dominated by the belief in the complete success of implants, overlooking this crucial aspect has had considerable negative consequences for this group.

## **References**

- Blommaert, J. and Jie, D. 2010. *Ethnographic Fieldwork. A Beginner's Guide*. Bristol: Multilingual Matters.
- Campbell, R., MacSweeney, M. and Woll, B. 2014. Cochlear Implantation (CI) for Prelingual Deafness. The Relevance of Studies of Brain Organization and the Role of First Language Acquisition in Considering Outcome Success. *Frontiers in Human Neuroscience* 8 (834). Doi: 10.3389/fnhum.2014.00834.
- Council of Europe. 2001. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Cambridge: Cambridge University Press.
- Davidson, K., Lillo-Martin, D. and Pichler, Ch. 2013. Spoken English Language Development Among Native Signing Children With Cochlear Implants. *Journal of Deaf Studies and Deaf Education* October 21. Doi:10.1093/deafed/ent045
- Duranti, A. 1997. *Antropología lingüística*. Madrid: Cambridge, 2000.

- Emmorey, K. 2002. *Language, Cognition, and the Brain. Insights from Sign Language Research*. Mahwah, NJ: Erlbaum.
- Emmorey, K. 2018. Variation in Late L1 Acquisition. *Bilingualism. Language and Cognition* 21 (5): 917-918. Doi: 10.1017/S1366728918000196.
- Ghesquière, M. and Meurant, L. 2019. Conditions for Effective Co-Enrollment of Deaf and Hearing Students: What May Be Learned from Experiences in Belgium. In *Co-enrollment in Deaf Education*, eds. M. Marschark, A. Shirin and H. Knoors, 211-233. Oxford: Oxford University Press.
- Grosjean, F. 2001. The right of the Deaf Child to Grow up Bilingual. *Sign Language Studies* 1 (2): 110-114.
- Gumperz, J. J. 1982. *Discourse Strategies*. Cambridge: Cambridge University Press.
- Hall, W. C. 2017. What You Don't Know Can Hurt You: The Risk of Language Deprivation by Impairing Sign Language Development in Deaf Children. *Matern Child Health J.* Doi: 10.1007/s10995-017-2287-y
- Hintermain, M. 2014. Psychosocial Development in Deaf and Hard-of-Hearing Children in the Twenty-first Century. In *Bilingualism and Bilingual Deaf Education*, eds. M. Marschark, T. Gladys and H. Knoors, 152-186. Oxford: Oxford University Press.
- Humphries, T., Kushalnagar, P., Mathur, G., Napoli, D. J., Rathmann, Chr. y Smith, S. 2018. Support for Parents of Deaf children: Common Questions and Informed, Evidence based Answers. *International Journal of Pediatric Otorhinolaryngology*. Doi: <https://doi.org/10.1016/j.ijporl.2018.12.036>.
- Knoors, H., Tang, G. and Marschark, M. 2014. Bilingualism and Bilingual Deaf Education. Time to Take Stock. In *Bilingualism and Bilingual Deaf Education*, eds. M. Marschark, T. Gladys and H. Knoors, 1-20. Oxford: Oxford University Press.
- Lane, H. 1976. *El niño salvaje de Aveyron*. Madrid: Alianza Universidad, 1984.
- Lane, H. 1992. *A mascara da benevolencia. A comunidade surda amordaçada*. Lisboa: Instituto Piaget.
- Lenneberg, E. H. 1967. *Fundamentos biológicos del lenguaje*. Madrid: Alianza Editorial, 1975.
- Madrid Cánovas, S. 2006. Tareas de denominación y tiempo de latencia en niños con implante coclear prelocutivo. In *Lingüística clínica y neuropsicología cognitiva. Actas del Primer Congreso Nacional de Lingüística Clínica. Vol. 2. Lingüística y evaluación del lenguaje*,

- eds. B. Gallardo, C. Hernández and V. Moreno, 154-169. Downloaded from <http://www.uv.es/perla/2%5B13%5D.MadridCanovas.pdf> (20 July 2013).
- Madrid Cánovas, S. and Bleda García, I. 2011. Dificultades pragmáticas de niño sordo con implante coclear. *Revista de Investigación Lingüística* 14: 87-107.
- Massone, M. I., Simón, M. and Druetta, J. C. 2003. *Arquitectura de la Escuela de Sordos*. Buenos Aires: Editorial Libros en red ([www.librosenred.com](http://www.librosenred.com)).
- Mayberry, Rachel I. and Kluender, Robert. 2018a. Rethinking Critical Period for language: New insights into an old question from American Sign Language. *Bilingualism: Language and Cognition* 21 (5): 886-905. Doi: 10.1017/S1366728917000724.
- Mayberry, R. I. and Kluender, R. 2018b. Rethinking Critical Period for Language: New Insights into an Old Question from American Sign Language. *Bilingualism: Language and Cognition* 21 (5): 938-944. Doi: 10.1017/S1366728918000585.
- Mead, M. 1930. *Educación y Cultura en Nueva Guinea*. Barcelona: Paidós 1985.
- Meisel, J. M. 2013. Sensitive Phases in Successive Acquisition: The Critical Period Hypothesis Revisited. In *The Cambridge Handbook of Bilingualism*, eds. C. Boeckx, and K. K. Grohmann, 69-85. Cambridge: Cambridge University Press.
- Mineiro, A., Nunes, M. V. S., Moita, M., Silva, S. and Castro-Caldas, A. 2014. Bilingualism and Bimodal Bilingualism in Deaf People: A Neurolinguistic Approach. In *Bilingualism and Bilingual Deaf Education*, eds. M. Marschark, G. Tang and H. Knoors, 187-212. New York/Oxford: Oxford University Press.
- Morales-López, E., Aliaga-Demetrio, D., Amador Alonso-Rodríguez, J., Boldú-Menasanch, R. M., Garrusta-Ribes, J. and Gras-Ferrer, V. 2002. Deaf People in Bilingual Speaking Communities: The Case of Deaf People in Barcelona. In *Turn-taking, Fingerspelling, and Contact in Signed Languages*, ed. C. Lucas, 107-155, Gallaudet University Press, Washington, DC (Spanish version, by permission: <http://hdl.handle.net/2183/670>).
- Morales-López, E. 2008a. La llengua de signes com a vehicle de comunicació i de capital simbòlic". In *Llengua i Identitat*, ed. À. Massip, 29-36. Barcelona: Universitat de Barcelona.
- Morales-López, E. 2008b. Sign Bilingualism in Spanish Deaf Education. In C. Plaza Pust and E. Morales-López (2008, 223-276).

- Morales-López, E. 2010. Característiques generals del bilingüisme intermodal (llengua de signes / llengua oral). In *Les llengües de signes com a llengües minoritàries: perspectives lingüístiques, socials i polítiques*, eds. J. Martí i Castells and J. Mestres i Serra, 175-188. Barcelona: Institut d'Estudis Catalans.
- Morales-López, E. 2016. De la perspectiva etnogràfica al anàlisi crític del discurs: investigació en un grup de dones ecuatorianes. In *Queering Women's and Gender Studies*, eds. B. Crespo, I. Moskowich and C. Núñez-Puente, 45-66. Newcastle: Cambridge Scholar Publishing.
- Morales-López, E. 2019. Bilingüisme intermodal (llengua de signes / llengua oral). *Revista de Estudios de Lenguas de Signos (REVLES)* 1: 340-365. [www.revles.es/index.php/revles/issue/view/9](http://www.revles.es/index.php/revles/issue/view/9)
- Morales-López, E. 2020. Dos dècades de bilingüisme intermodal (llengua de signes/llengua oral) en la educació de l'alumnat sord en Espanya. In preparation.
- Pallier, Ch. 2007. Critical Periods in Language Acquisition and Language Attrition. In *Language attrition. Theoretical Perspectives*, eds. Köpcke, B., Schmidt, M. S., Keijzer, M. and Dostert, S., 155-168. Amsterdam: John Benjamins. Downloaded from [https://www.researchgate.net/publication/290062835\\_Critical\\_periods\\_in\\_language\\_acquisition\\_and\\_language\\_attrition](https://www.researchgate.net/publication/290062835_Critical_periods_in_language_acquisition_and_language_attrition) (4 March 2019).
- Pérez Martín, M., Valmaseda Balanzategui, M. y Morgan, G. 2014. Sign bilingual Co-enrollment Education for Children with Cochlear Implants in Madrid, Spain. In *Bilingualism and Bilingual Deaf Education*, eds. M. Marschark, T. Gladys and H. Knoors, 368-395. Oxford: Oxford University Press.
- Pérez, M., de la Fuente, B., Alonso, P. and Echeita, G. 2019. Four Co-enrollment Programs in Madrid: Differences and Similarities. In *Co-enrollment in Deaf Education*, eds. M. Marschark, A. Shirin and H. Knoors, 235-256. Oxford: Oxford University Press.
- Plaza Pust, C. 2016. *Sign Bilingualism in Education: Challenges and Perspectives along the Research, Policy, Practice Axis*. Lancaster: Ishara Press.
- Plaza Pust, C. and Morales-López, E. (eds.) 2008. *Sign Bilingualism: Language Development, Interaction, and Maintenance in Sign Language Contact Situations*. Amsterdam: John Benjamins.

- Quer, J. 2012. Legal Pathways to the Recognition of Sign Languages. A Comparison of the Catalan and Spanish Sign Language Acts. *Sign Language Studies* 2 (4): 565-582.
- Sánchez Amat, J. 2015. Llengua de signes i llengua escrita en la modalitat educativa bilingüe i en la intervenció amb l'infant sord. Doctoral Thesis. Universitat Autònoma de Barcelona.
- Scollon, R. and Wong Scollon, S. 2001. *Intercultural Communication*. Malden, Mass.: Blackwell.
- Swanwick, R., Hendar, O., Dammeyer, J., Kristoffersen A.-E., Salter, J. and Simonsen, E. 2014. Shifting Contexts and Practices in Sign Bilingual Education in Northern Europe. In *Bilingualism and Bilingual Deaf Education*, eds. M. Marschark, T. Gladys and H. Knoors, 292-310. Oxford: Oxford University Press.
- Trovato, S. 2013. A stronger Reason for the Right to Sign Languages. *Sign Languages* 13 (3): 401-422.
- Wilbur, R. B. 2000. The Use of ASL to Support the Development of English and Literacy. *Journal of Deaf Studies and Deaf Education* 5(1): 81-104.