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COMUNICACIÓN Y SOCIEDAD
Vol. XXV • Núm. 2 • 2012 • 255-278

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Research into the information referents of deaf signers¹

Exploración sobre los referentes informativos de las personas sordas signantes

Recibido: 31 de marzo de 2012

Aceptado: 6 de junio de 2012

ABSTRACT: The Information society is bringing about an increase in the number of information referents for deaf signers (those who use sign language). With the aim of exploring the ways most commonly used by deaf people to find out about current affairs, this paper summarizes some quantitative research that was carried out involving 138 deaf people: 69 in Spain and 69 in the US. The work is complemented qualitatively by a focus group in Gallaudet University, Washington, using American Sign Language (ASL), and by observations from three lecture/ news presentations which took place in Barcelona in Catalan Sign Language (LSC).

Key words: Accessibility, access to information, digital convergence, journalism, deaf people, sign languages.

Resumen: La sociedad de la información está ampliando los referentes informativos de las personas sordas signantes (usuarias de una lengua de signos). Con el objetivo de explorar las vías más utilizadas para acceder a la actualidad periodística por parte del colectivo mencionado, este artículo resume una investigación cuantitativa realizada con una encuesta a 138 personas Sordas: 69 en España y 69 en EE.UU. El trabajo se complementa cualitativamente con un focus group en la Gallaudet University de Washington, en American Sign Language (ASL), y con la observación de tres conferencias-magazines en Barcelona, para participantes sordos, en Lengua de Signos Catalana (LSC).

Palabras clave: accesibilidad, acceso a la información, convergencia digital, periodismo, personas sordas, lenguajes de signos.

¹ The authors would like to thank the APRELS (SGR 2009-830) group of the University of Barcelona.

1. Introduction

Mosaic narrative, a product of the digital age, brings about a false sense of the closeness between what is perceived and what is real. We see, hear and feel real things that are close in neither time nor space. This phenomenon, already present in electronic media, is becoming more extreme in the digital age².

There is no doubt that the “kaleidoscope effect” or “information chunking” described by the authors cited in the footnotes³ makes it difficult for people to think in an integrated way that would help to understand the biggest news stories. The proliferation of digital media is fragmenting audiences with messages superimposed on more messages that are received and fleetingly consumed. The information referents for interpreting reality are multiplying and becoming more complex in their interaction with the public. In this context of new audiovisual multimedia, some minorities –such as deaf people who use sign language (deaf signers)– are creating new television channels and websites that are more and more easily accessible.

Everything indicates *a priori* that television in sign language and news websites should improve communication by creating new circuits and fragmented networks of microaudiences in which information can flow freely. But what happens with the big information referents? When deaf signers want to find out about current affairs in general –international, national, local, political, economic, cultural, social and sports news– it is more than likely that they will have to look beyond their own media. What means do they use to get information? Society is mainly oral and self-sufficiency in information seems a utopian or impossible idea.

In order to find a more complete answer to the question, this article summarizes some research into how deaf signers access general current affairs journalism with the aim of improving our knowledge of this collective. Our aim is to gain a better understanding of the way in which deaf signers perceive current affairs information, and this may help suggest new ways of communication to break down some of the barriers that exist.

² MARTÍNEZ-SALANOVA, Enrique, PERALTA, Ilda, “Un análisis sobre los medios de comunicación y la solidaridad”, *Comunicar*, nº 15, September 2000, p. 75.

³ *Ibid.*, p. 74.

The article studies the information referents of deaf signers (who use sign language), since this is a group of people with particular communication characteristics. Within the heterogeneous world of people with disabilities, deaf signers are perhaps the only ones who have defined their difference as being a minority in terms of language and identity⁴ and even ethnic group⁵, which as a concept is a long way from medical definitions and those based on physical or sensory characteristics. Monolingual lipspeaking deaf people, who are not included in this research, are those that communicate only or almost always in one way –via oral communication using methods such as lipreading– and are not competent in sign language. Those who became deaf or hard of hearing in later life or old age (presbycusis) are also excluded from this study.

Sociological studies on deaf people often use the term *Deaf* –with a capital D– when referring to members of the collective who are sign language users and identify themselves with their linguistic-cultural community, whereas *deaf* –with a small d– is used generically to denote some kind of hearing impairment and has no other social connotations. In this article we prefer to describe people as *deaf signers* without capitals so as not to establish hierarchies. We believe it is useful to distinguish between “audiological deafness” and “social Deafness”, although the two concepts are separated by a “fuzzy line”⁶ which is sometimes arbitrary.

From an anthropological or sociocultural perspective of deafness⁷, the research team has chosen two microcosms in which a defence of deaf identity manifests itself clearly: on the one hand Gallaudet University in Washington, which is considered the top university in the world for deaf people, and on the other the deaf signer community in Catalonia, Spain, which has an extremely strong sense of identity reflected in the Lengua de Signos Catalana (LSC – Catalan Sign Language), acknowledged and distinct from the Lengua de Signos Española (LSE – Spanish Sign Language). LSC is recognized in the

⁴ Cfr. SACKS, Oliver, *Seeing Voices. A Journey into the World of the Deaf*, University of California Press, Berkeley, 1989.

⁵ Cfr. LANE, Harlan, “Ethnicity, Ethics, and the Deaf-World”, *Journal of Deaf Studies and Deaf Education*, vol. X, n° 3, May 2005, pp. 291-310.

⁶ MONAGHAN, Leila, SCHMALING, Constanze, “Preface”, in MONAGHAN, Leila, SCHMALING, Constanze, NAKAMURA, Karen & TURNER, Graham H. (eds.), *Many Ways to Be Deaf: International Variation in Deaf Communities*, Gallaudet University, Washington, 2003, pp. x-xi.

⁷ Cfr. FERNÁNDEZ-VIADER, María del Pilar, PERTUSA, Esther (coords.), *El valor de la mirada: sordera y educación*, Universitat de Barcelona, Barcelona, 2004.

Estatut d'Autonomia de Catalunya (Catalonia's Statute of Autonomy)⁸ and the *Llei de la llengua de signes catalana* (the Catalan Sign Language Act)⁹, a distinction legally and scientifically undisputed in Spain and the international deaf community¹⁰. The Catalan law is also unusual in that it is based on a linguistic perspective rather than a welfare policy.

The deaf people in both Catalonia and Washington (Gallaudet University) have their own media, which do an excellent job and stand as linguistic models that strengthen self-esteem and group identity. A good example is the Webvisual internet portal, promoted by the *Federació de Persones Sordes de Catalunya* (Fesoca – Catalan Deaf People's Association), conceived as an online television in LSC, winner of the Apansce award in 2011 among others and, according to Fesoca, the first sign language television in Europe. Another example is the media role played by Bison TV, a university channel in Gallaudet run by deaf students which started broadcasting by cable and currently operates on the internet using streaming technology.

Information specifically for deaf people on Webvisual is generated through internal sources, something that does not normally happen with general news programmes, which are transmitted in LSC once they have been translated and adapted from the Catalan press, mainly the *El Periódico* newspaper. Neither does most of the content broadcast on Bison TV focus on general current affairs journalism. And the resources at Gallaudet include a very extensive video library containing, for example, programmes from the Emmy award-winning *Deaf Mosaic* collection, historically one of the most well-known referents for information specifically for the deaf community.

In short, although deaf signers have their own constantly improving information networks with deaf presenters, in order for them to find out what is happening in the world they seem to have no choice but to resort to the general hearing society's media, either via the use of subtitles, television interpreters, written information on the internet and in published newspapers or other ways.

In a context of information fragmentation, the relationship between deaf signers and the general communication media coexists with the explosion in

⁸ DIARI OFICIAL DE LA GENERALITAT DE CATALUNYA, Decree 306/2006, of 20 July, whereby notice was given of Act 6/2006, of 19 July, reforming the Catalan Statute of Autonomy, DOGC, n° 4,680 (20 July 2006).

⁹ DIARI OFICIAL DE LA GENERALITAT DE CATALUNYA, Act 17/2010, of 3 June, on Catalan Sign Language. DOGC, n° 5,647 (10 June 2010).

¹⁰ Cfr. WHEATLEY, Mark, PABSCH, Annika, *Sign Language Legislation in the European Union*, European Union of the Deaf, Brussels, 2010.

information for deaf people that is filling more and more blogs, videoblogs and social networks of all types. The key is to find out –and hence the research– whether the new context of digital convergence favours the collective’s becoming emancipated as regards information or whether on the contrary there is a risk of media ghettoization. Another key is to research how the general explanation of the news the collective receives can be improved. And all this at a time when screens are oversaturated by a flood of unconnected messages that are becoming more and more difficult to interpret in an integrated way.

In order to understand the relationship deaf people have with journalistic media, it needs to be remembered that it has been many years since research into the subject began. One of the earliest pieces of research, a thesis by Gladys Forde Wood¹¹, is deposited in the library at Gallaudet. Since then, thanks to a high level of academic production, we can see the advances made in the perception of media content among the deaf community¹², advances that have been studied especially in the Anglo-Saxon world, where some of Lorna Allsop and Jim Kyle’s current work shows that deaf signers prefer deaf television presenters to hearing interpreters¹³.

However, the focus of our research is not the United Kingdom, which has an impressive record when it comes to sign language interpretation on television and is the home of the legendary BBC programme *See Hear*¹⁴. In Spain and the United States, countries with different traditions, television programmes and policies, deaf people have also historically been big consumers of both traditional television and digital media, despite the fact they have often come up against inaccessible content ever since the channels have existed. The reviewed bibliography agrees that television has been an important information referent for the collective even though the contents are not adapted.

¹¹ Cfr. WOOD, Gladys Forde, *A study of the acoustically handicapped in the field of journalism*, University of Tennessee, Knoxville, Master’s thesis, 1955.

¹² Cfr. SERRAT, Jordi, *La percepció que tenen les persones sordes signants de l’actualitat periodística (2005-2009). Exploració comparativa entre els estudiants de la Gallaudet University i la comunitat sorda catalana*, Universitat Autònoma de Barcelona, Barcelona, Doctoral thesis, 2011.

¹³ Cfr. ALLSOP, Lorna, KYLE, Jim, “Translating the News. A Deaf Translator’s Experience”, in KELLETT BIDOLI, Cynthia J., OCHSE, Elana (eds.), *English in International Deaf Communication*, vol. LXXII, Peter Lang, Bern, 2008, pp. 383-401.

¹⁴ Cfr. LADD, Paddy, “Signs of Change: Sign Language and Televisual Media in the UK”, in CORMACK, Mike & HOURIGAN, Niamh (eds.), *Minority Language Media: Concepts, Critiques and Case Studies*, Multilingual Matters, Clevedon, 2007, pp. 229-247.

Going back over forty years, another piece of research in the US¹⁵ –based on a survey of 398 students– revealed that 24.1% of deaf people watched more than 7 hours of television a week, while this level of viewing applied to only 8% of the hearing people studied. According to the same research, 21.1% of the hearing students never watched television, while only 3% of the deaf people were not viewers¹⁶.

As the years went by and television became massively popular, the viewing habit grew until almost everybody watched it. Between 1980 and 2000 television in Spain and the rest of the western world was an absolutely everyday medium. In Spain, for example, according to a survey of 367 profoundly prelingually deaf people, 98% of deaf people at that time watched television every day¹⁷. During these years almost 75% of deaf people watched between one and five hours of television a day, 49.9% watched between one and three hours a day, and 24.3% between three and five hours a day¹⁸.

In the US, television has been a deeply-rooted habit among deaf people for decades. In the early 1990s a study of the deaf community in Nebraska¹⁹ indicated that between 80% and 90% of deaf people used the technology and media adapted to their information needs. It pointed out that deaf people do not live in isolation from society as some people believe, but are more likely to be sophisticated media users because they know how to choose between different types of technology in order to access information, and this has great implications for the so-called deaf culture²⁰.

In the 21st century there have been a great many studies on accessibility, subtitling (or captioning) and digital culture, to the extent where it is impossible to summarize even the most representative of them. All we can do is point out that there is ever increasing scientific concern to think of accessibility from the perspective of deaf signers, incorporating the point of view of deaf translators and not only hearing professionals. Deaf translators, who sign

¹⁵ STERNBERG, Martin L.A., *A study of some factors influencing the use of mass communication media among deaf college students*, American University, Washington, Master's thesis, 1963, p. 61.

¹⁶ *Ibid.*

¹⁷ DÍAZ-ESTÉBANEZ, Esther et al., *Las personas sordas y su realidad social. Un estudio descriptivo*, Ministerio de Educación y Ciencia. Centro de Desarrollo Curricular, Madrid, 1996, p. 174.

¹⁸ *Ibid.*, p. 70.

¹⁹ ENGSTROM, Carla. R., *An exploratory study of Deaf Nebraskans' mass media usage*, University of Nebraska, Lincoln, Master's thesis, 1991, p. 70.

²⁰ *Ibid.*, p. 72.

a previously written text, optimize the prosodic resources of sign language²¹. In this respect “Deaf people are quite clear –they want Deaf models of sign language, not hearing interpreters”²².

In addition to this, deaf people who sign the news on television can reflect the linguistic identity of the deaf community with greater sensitivity. In this article we include these identity perspectives in order to study whether sign languages gain strength from the mass media. This approach may be controversial since, although there is plenty of literature on *deaf identity* –for instance the role taken on by educational experiences in the development of this identity²³– it is more and more frequent to speak of *deaf identities* (in the plural rather than the singular) and some authors even think that community identities do not exist beyond their “figurative, symbolic or accidental” value²⁴.

Finally we can add that research interest is not restricted to the academic field, especially since the Audiovisual Communication Act²⁵ in Spain established compulsory quotas for sign language, captioning and audio description for public and private television companies.

2. Material and methods

The research we present combines quantitative and qualitative methodology. Our approach is an exploratory one because of the conditioning factors that exist for selecting participants and gathering data, always carried out in person by the researchers and with interpreter support when necessary. Given the characteristics of the research and in accordance with Gallaudet’s *Institutional Review Board for the Protection of Human Subjects* (IRB) protocol, the

²¹ Cfr. STONE, Christopher, *Toward a Deaf Translation Norm*, Gallaudet University, Washington, 2009.

²² ALLSOP, Lorna, KYLE, Jim, “Translating the News. A Deaf Translator’s Experience”, in KELLETT BIDOLI, Cynthia J., OCHSE, Elana (eds.), *English in International Deaf Communication*, vol. LXXII, Peter Lang, Bern, 2008, p. 387.

²³ Cfr. NIKOLARAIZY, Magda & HADJIKAKOU, Kika, “The Role of Educational Experiences in the Development of Deaf Identity”, *Journal of Deaf Studies and Deaf Education*, vol. XI, n° 4, May, 2006, pp. 477-492.

²⁴ NUÑEZ LADEVÈZE, Luis & STORCH DE GRACIA, José Gabriel, “Comunicación, Derecho y Lenguaje: Cuestión acerca de un pretendido ‘derecho humano a la identidad lingüística’”, in STORCH DE GRACIA, José Gabriel (eds.), *Estatuto Jurídico de las Lenguas de Señas en el Derecho Español: aproximaciones*, Ramón Areces, Madrid, 2005, p. 237.

²⁵ Act 7/2010, of 31 March, on Audiovisual Communication, *Boletín Oficial del Estado*, number 79 (1 April 2010).

written consent of the American participants was required once the research had been explained to them, permits had been applied for and the initiative publicized on information posters on campus. In line with the same academic regulations, the participants in the focus group were given a cash payment. In Catalonia (Spain) the collaboration of various deaf people's associations was sought and preliminary meetings held with the presidents of each organization. The informed consent of the deaf volunteers who took part in the work was also given.

The Aprels (University of Barcelona) and Tracte (University of Vic, Barcelona) research groups²⁶ support the investigation, the main aim of which is to explore deaf signers' information referents in order to find areas for possible improvements in communication in the short and medium term. The intention was to fulfil the exploratory objective by using a deductive method based on hypotheses. In a context of information chunking, the initial hypothesis is that deaf signers find out about current affairs journalism in a superficial way from various different places using all sorts of fragmented paths and channels without any specific media consumption habits predominating to help them understand the facts. The basic idea is that this news dispersion, which also happens in speaking-hearing society, could become more acute in deaf signers because of their *hybrid culture*²⁷ (written and signed), although this dual character is an obvious source of intellectual richness in that it combines two codes (written language and sign language) rather than restricting itself to just one.

Verifying or rejecting the hypothesis should help us understand how deaf signers perceive the messages and could contribute to enriching new studies on accessibility by introducing more focused priorities and analysing whether or not this supposed dispersion in receiving news content presents a problem. The idea behind the work is based on the conviction that the strong deaf sense of identity should be respected as a legitimate right, but without forgetting that the way it fits into oral society inevitably also generates a *hybrid culture*, with the conviction that "a world that is increasingly becoming hybridized needs

²⁶ The research had funding of 2,155.80 euros from the University of Vic (Barcelona) as a mobility grant to cover some of the expenses of the stay in Washington. It also had funding from the University of Barcelona's ARCE (Agrupación de Investigación en Ciencias de la Educación - Educational Sciences Research Group) for the recognized and funded APRELS group (SGR 2009-830) in order to bring Dr. Barbara Gerner of Gallaudet University in Washington to Barcelona to participate in the panel that evaluated the project in May 2011.

²⁷ Cfr. GARCÍA CANCLINI, Néstor, *Culturas híbridas: estrategias para entrar y salir de la modernidad*, Grijalbo, México, 1989.

to be thought of not as a set of compact, homogeneous and radically different units but as intersections, transitions and transactions”²⁸.

In the next section we explain in greater detail the methodological instruments used to reach the proposed objective.

2.1. Survey

A survey of 138 deaf signers using non-probability sampling. Accidental or convenience sampling with an exploratory aim was used with volunteers. 69 deaf adults, all users of *American Sign Language*, took part in Gallaudet. The data were collected from individual personal interviews and a number of group meetings of up to 9 students on each occasion. The survey was carried out in Washington between 22 September and 12 October 2008 based on a questionnaire written in English and presented using basic ASL vocabulary under the guidance of the professor at the centre, Dr Barbara Gerner de Garcia. Of those taking part in the survey in the US, 38 were women and 31 were men. Deafness was detected in 37 of them at birth, in 22 of them before they were 3, in 6 of them before they were 5, in 3 of them before they were 16, and in only 1 case after their 16th birthday. The etiology of the deafness in 37 cases was congenital, in 14 cases a result of illness, in 17 cases due to other causes, and in 1 case unknown. The students were aged between 19 and 45.

69 deaf people, all users of Catalan Sign Language (LSC), took part in the survey in Catalonia. The data were collected in different places and on different dates: on 7 March 2009 in the *Caixa Manlleu* auditorium in the town of Vic (Barcelona); on 14 March 2009 in the headquarters of the *Associació Gironina de Sords* in Girona; on 16 April 2009 in the *Centre Recreatiu i Cultural de Persones Sordes* (Cerecuser) in Barcelona; on 17 October 2009 in the *Sant Jordi club* in the town of Olot (Girona); and on 29 December 2008 in the Faculty of Teacher Training at the University of Barcelona. On all but one of these dates a researcher on the team gave a talk which was interpreted into LSC to explain the project. Afterwards those present were invited to complete the written questionnaire. Most of those involved answered the questions on the same day in the same room with the help of an interpreter to answer any queries and explain each of the questions. However, some respondents took the questionnaire away with them and returned it a few days later.

²⁸ GARCÍA CANCLINI, Néstor, “Noticias recientes sobre hibridación”, *Trans: Revista Transcultural de Música*, nº 7, article 2, 2003.

Of those who took part in the survey in Catalonia, 39 were women and 30 were men. Deafness was detected in 34 of them at birth, in 31 of them before they were 3, in 3 of them before they were 5, and in 1 case is unknown. The etiology of the deafness in 25 cases was congenital, in 38 cases a result of illness, and in 6 cases due to other causes. The participants were aged between 21 and 78 when they answered the questions.

As we are dealing with two accidental or convenience subsets (Catalonia and Washington), the age ranges and sociocultural characteristics of the participants do not coincide 100%. The value of the choice of participants is to be found in its “strategic” character and lies in “the significativity of the individuals or groups of individuals selected”²⁹. In both cases, as already mentioned, the people involved are deaf signers (not oralists) with a very marked cultural identity and a shared sense of belonging. It should also be remembered that research with two subsets is not necessarily approached in comparative terms. Rather than discovering whether Catalan deaf people obtain more or less information than American deaf people, what we are interested in finding out is how the information reaches a group of people with such a particular idiosyncrasy (deaf signers), whatever their country of residence. For the same reason not all the instruments of analysis are the same in Gallaudet and Catalonia.

The questionnaire contained mainly closed questions (some dichotomous, some multiple choice and some with a Likert scale), but there were also a number of open questions to enable the respondents to add to, qualify or complement any of their answers, thereby letting us know the depth of the information they receive. As part of the project entitled *The perception of current events in sign language via television*³⁰, all the content revolved around deaf signers’ relationships with the media. Especially interesting for this article are the questions on the ways information is accessed. In this section there were 41 questions –21 in Spain and 20 in the US– most of them the same for both collectives but with a few differences due to cultural reasons. Half of these questions concerned current affairs journalism while the other half dealt with issues considered to be service information. With this distinction between *current affairs* questions (including international, political, society, financial, local and sports news, etc) and *service* questions, the intention was to explore whether the ways in which information is accessed change depending

²⁹ SORIANO, Jaume, *L’ofici de comunicòleg. Mètodes per investigar la comunicació*, Eumo Editorial, Vic, 2007, p.73.

³⁰ SERRAT, Jordi, *op. cit.*

on whether deaf signers are seeking to obtain news about current affairs or information on other more general or less newsworthy topics.

2.2. Focus group

The group interview or discussion took place on 6 October 2008 in 412 Fowler Hall, Gallaudet University, with the participation of three signing deaf students from the centre, all males: one from the US, one from the Democratic Republic of the Congo and one from Nigeria, all three resident in the US. In accordance with IRB protocol, the participants gave their consent using a *Videotape Release Form*. A video lasting 88 minutes and 22 seconds was recorded. The participants received a cash payment for their time. The meeting was conducted in Spanish by one of the researchers from the team, with a simultaneous translation into English and American Sign Language. The interviewees had at their disposal a computer and a large-screen projector that one of them used to show examples of what he considered to be the most accessible way to watch television when it came to seeking referents. Inspired methodologically by some of the classics³¹, the investigation came up against certain limitations because it was only able to recruit three participants due to the fact that the fieldwork coincided with the university exams and many students could not spare the time. The investigation was very careful to make sure that the three young men had similar profiles as regards social class, level of education and lifestyle. The idea of including women was rejected so as to avoid the *peacock effect*, which comes about when men express themselves with more authority and less naturalness due to the mere fact they are accompanied by females. The investigation was carried out in tandem with the quantitative research, this being why some of the questions in the questionnaire were repeated and a distinction made between categories –current affairs information and service information– so as to detect whether there were any variations in the referents.

In line with the working hypothesis, certain qualitative questions were examined in greater detail in order to explore whether the participants had a dispersed and superficial way of obtaining news.

³¹ Cfr. KRUEGER, Richard, *El grupo de discusión. Guía práctica para la investigación aplicada*, Ediciones Pirámide, Madrid, 1991.

2.3. *Direct observation*

One member of the team participated as an observer in the three lecture/news presentations in Catalan Sign Language undertaken by deaf journalist Guillem Carles, who is accredited by the *Col·legi de Periodistes de Catalunya* (Catalan Association of Journalists) and a very well-known journalist, highly respected by the Catalan deaf movement because of his excellent public relations abilities. Two of the events observed took place in the headquarters of Cerecutor in Barcelona (2 and 9 November 2006) while the third was held in the headquarters of the *Col·legi de Periodistes de Catalunya*, also in Barcelona (20 November 2009). The events were attended by 37, 34 and 53 deaf signers respectively. The average age of the public was around 50 to 55. The lectures were organized to inform the Catalan deaf community about current affairs news. The observation was arranged to discover the criteria used to select news, the sources used and the reactions of the public, the aim of this being to explore the information referents of the collective. The reactions of the public were most carefully observed as regards current affairs information and service information.

3. *Results*

In the survey 13,486 replies were processed, 5,397 of which were to questions about ways of accessing information. The research indicates that the main information referents for deaf signers are traditional television with subtitles (in first place) and the internet in general (in second place). Meanwhile the figure of the (hearing) television interpreter as a way of access is in last position adding together the replies on current affairs information and service information (Table 1).

The results lead us to make a qualified rejection of the initial working hypothesis. It seems clear that both traditional television with subtitles and the internet have become obvious referents for obtaining information, as seen in the accumulated total replies, and therefore it would not be accurate to maintain that deaf signers obtain information about current affairs journalism from dispersed sources using all sorts of media without there being a predominant path. Certainly subtitles and the internet together account for 43% of the replies processed regarding ways to access news, a long way ahead of the other categories (Table 1). It is also true that these ways are used much more than hearing interpreters. However, we do not completely reject the starting hypothesis because the internet is a type of medium that involves an

obvious risk of chaos, information dispersion and superficial news consumption depending how it is used.

Looking at the results in more detail, it is absolutely clear that subtitles are the most popular way to get information on current affairs and come top in the absolute total, although not in the accumulated total replies at Gallaudet, where the first position is taken by the internet (Table 1). Behaviour favouring subtitles can be illustrated with specific information, for example when deaf people were asked how they followed the presidential primaries fought between Democrat candidates Barack Obama and Hillary Clinton (Table 2).

A number of cultural differences can be seen between the two collectives, mainly as regards the use of the internet. Hence information on the web becomes the main referent for service information for the deaf students in Washington and also in the absolute total, with people admitting that they surf the internet more and more every day. However, this is not the top category in the Catalan survey.

Use of the internet is qualitatively different, too. While the American students state that they interact most on the web in written English, the Catalan replies show little difference (in the number of replies) between those communicating in cyberspace using writing and those using blogs in sign language or other resources to get information, with many indicating that they use both forms equally.

The younger average age of the American participants compared to the Catalans would explain their greater use of the internet. It should be remembered, however, that our investigation is not necessarily aimed at making comparisons because our intention is to explore how information reaches deaf signers whatever their country of residence. The Gallaudet data serve as a reference for intuiting and modestly illustrating the changes in digital habits that are appearing among younger generations and the more intellectually competent.

Despite the greater competence shown by the students in the US as readers in our investigation –in the surveys they did not need help from the interpreters to answer as many queries as the Catalan deaf people did, and neither were any of their replies deemed invalid as happened once or twice in Catalonia– the Catalan participants expressed greater confidence in the written press for obtaining information. It may be useful to remember that the premises of the Catalan associative deaf movement –which function as gathering points for the community– often have a cafe area also equipped for reading newspapers.

Table 1. Survey of 138 deaf signers. 41 specific questions were asked regarding how deaf people obtain information about different news stories (e.g. the 9/11 terrorist attacks and the Beijing Olympics) and also how they obtain general or service information (e.g. about whether there is a strike, AIDS and climate change). More than one answer per question was allowed.

Ways most used for getting information	Total replies	Gallaudet	Catalonia
Television with subtitles	1,211	715	496
Internet	1,104	786	318
Deaf community	862	624	238
Printed press (newspapers, magazines)	854	501	353
Family	584	436	148
Non-accessible television	291	127	164
Work	210	175	35
Other ways	152	108	44
Television interpreters (hearing)	129	56	73

Source: own.

It seems clear that sports newspapers are also an information referent, judging by the replies obtained in Catalonia. Specifically, when the deaf people in Catalonia were asked how they obtained information about any aspects involved in a big football match (pre-match statements, analysis, line-ups, assessments, etc.), most of them replied that they followed big sporting events through the newspapers (Table 4).

Table 2. Survey of 138 deaf signers. More than one reply allowed

Ways used to obtain news about the Obama-Clinton presidential primaries	Total replies	Gallaudet	Catalonia
Television with subtitles	87	50	37
Internet	58	43	15
Printed press (newspapers, magazines)	55	34	21
Deaf community	40	33	7

Ways used to obtain news about the Obama-Clinton presidential primaries	Total replies	Gallaudet	Catalonia
Family	18	14	4
Non-accessible television	17	10	7
Work	12	10	2
Television interpreters (hearing)	10	4	6
Other ways	5	3	2

Source: own.

At other times the Catalan participants find their reference point in the *Federació de Persones Sordes de Catalunya* (Catalan Deaf People's Federation) or other associations. The data show that the category most indicated by the deaf people in Catalonia as regards obtaining information about their annual tax return is the *deaf community*. The same thing happens when it comes to looking for information about leisure activities. In both Catalonia and Washington, deaf people state that they find their main information referent for accessing and discovering new leisure activities within the deaf community.

Table 3. Survey of 138 deaf signers

How much time do you spend every day surfing the internet?	Total	Gallaudet	Catalonia
None. I never surf the internet	10 replies	0 replies	10 replies
About 10 minutes	5 replies	2 replies	3 replies
Between 10 and 20 minutes	7 replies	4 replies	3 replies
Between 20 and 60 minutes	20 replies	11 replies	9 replies
Between 1 and 2 hours	37 replies	15 replies	22 replies
Over 2 hours	49 replies	37 replies	12 replies
Other	4 replies	0 replies	4 replies
No reply	6 replies	0 replies	6 replies
Did you use the internet yesterday?			
Yes	105 replies	63 replies	42 replies
No	24 replies	6 replies	18 replies
Don't remember	3 replies	0 replies	3 replies
No reply	6 replies	0 replies	6 replies

Source: own.

Table 4. Survey of 138 deaf signers. More than one answer allowed

Ways used to obtain information about a sporting event	Total	To find out about the Super Bowl: Gallaudet	To find out about a Barça-
Television with subtitles	62 replies	42 replies	20 replies
Printed press	44 replies	23 replies	21 replies
Internet	42 replies	28 replies	14 replies
Deaf community	37 replies	29 replies	8 replies
Non-accessible television	29 replies	10 replies	19 replies
Family	22 replies	17 replies	5 replies
Work	4 replies	3 replies	1 reply
Other ways	6 replies	5 replies	1 reply
Television interpreters (hearing)	2 replies	2 replies	0 replies

Source: own.

Apart from a few slight differences, it can be seen that when the subject considered is a news story with strong journalistic coverage –the death of the Pope, the war in Iraq, 9/11, the Beijing Olympics, etc.– and/or is prominent in news programmes on the general audiovisual channels or other competing media, traditional television subtitles are always the main access route. When the subject is more generic or timeless, behaviours change. In news stories the main access route is via subtitles, but when they want to find out about the controls for travelling by plane stemming from increased security due to international terrorism, deaf people are more likely to get their information from the internet.

To a large extent the greater use of subtitles can be explained by the fact that they are much more widely available than interpreters, which is also due to practical and financial reasons: technically it is easier to show written subtitles on the screen than have floating windows with sign language interpreters. However, the Gallaudet results indicate that there are more than just functional reasons for preferring subtitles. The deaf university students in the US admitted that they found subtitles much more exciting.

In order to be absolutely sure about information access preferences, the participants were asked some direct questions. Most had a more favourable opinion of subtitles than they had of interpreters, and some (a minority) surprisingly even said that they felt indifferent about interpreters or did not like them. In Catalonia the question *Do you like there to be interpreters on the*

television news? received 5 negative responses and 2 indifferent ones, while in Washington it received 15 indifferent replies and 13 negative ones (out of 69 in both cases). Extrapolating these data it can be deduced that 40.6% of the deaf people at Gallaudet University neither demand nor want a television interpretation service that uses hearing professionals.

Taking into account that in Gallaudet there exists a strong and undeniable willingness to defend sign language whatever it takes –in 1988 during the famous *Deaf President Now* strike, the students successfully mobilized behind their demand for a deaf rector competent in sign language– this article investigates on a qualitative level how this theoretical paradox comes about: why is it that television interpreters do not spark much enthusiasm among certain deaf people in Catalonia and the US?

The open questions collected more details about deaf people's opinions and showed that they were indeed in favour of television interpreters –naturally any accessibility measure is welcome and there is much respect for the high level of training of the interpreting professionals– but they would prefer to have a deaf journalist-presenter giving the news on television rather than a hearing interpreter. Running along similar lines is the opinion of the deaf Catalan journalist Guillem Carles, who led the lecture/news presentations observed in the investigation: *“There should be an ethical watchdog committee to ensure that television companies take on deaf journalists. It's a question of sensitivity, to do away with the need to borrow sign language”*.

In the focus group a clear defence of *deaf television* (in sign language with subtitles) was observed and the belief was expressed that accessibility resources are not exclusive. It all adds up. This is how Participant A expresses it:

“Deaf people can read subtitles ('closed captions') but we often only manage to get 70% of the content because they go so quickly. Hearing people hear 100% of it all. Therefore, in order to be equal, we also have to read the newspaper. With an interpreter we could perhaps grasp 100% of the information as long as the interpreter was skilled and capable of interpreting all the oral language”.

It all adds up but not in the same way. Participant B in the focus group warns that problems in deciphering the message arise when there are various images moving on the screen at the same time. According to B, the dysfunction is more acute if a signing presenter appears in the foreground while at the same time in the background there is a video in movement. During the group interview this same participant gave a number of examples to those attending and said he was in favour of having a static background so that deaf viewers would not have to focus on the signing figure's hands and at the same

time follow the news images being shown. He also recommended that the presenter should communicate in a natural way and not read the teleprompter because, without naturalness, the facial expression loses quality.

Some deaf people explained the problems of having simultaneous moving images and by extension television screens with too much content or an overelaborate style, which makes it impossible to concentrate on a single point. However, some of these same deaf people admit to being naturals in the digital environment and seem to be comfortable in a multimedia world of fragmented perceptions in mosaic, surroundings in which television and web consumption take place at the same time as other intellectual activities. In line with what B says, digital convergence not only favours the growth of internet consumption but also traditional television consumption:

“I spend five hours a day on the internet. I’m not mad... it’s just that I use the internet in different ways. I might spend four hours surfing and then an hour doing something else. I also watch a lot of television on the internet and new technologies enable me to download my favourite programmes. I can’t remember the last time I watched television because I’m always watching it. I’m a TV addict. When I haven’t got a class and I’m in the cafeteria having lunch, I’m watching television at the same time. I watch my favourite programmes: comedies... I watch eight hours of television a day; maybe not, maybe today it was only four hours. It’s because I watch television while I’m studying or doing other things. Last night I was doing my homework and I got an idea from the television”.

In contrast to the above –which would indeed show a certain amount of dispersion in news consumption– 7 of the 138 participants stated that they *never* watch television. Finally, in the lecture/news presentations in LSC held in Barcelona, it can be seen that the selection of topics more or less follows current affairs criteria. The items included the most important news stories of the moment (among others the Catalan elections and the composition of the regional government, cases of political corruption, the hijacking of the *Alakrana* and issues concerning Catalan sovereignty), but there were also some odd or entertaining news items that lightened the atmosphere of the talk with laughter and short asides, like for example during the story of an incident involving a local politician in Alcoy (Alicante), Spain, on a martial arts course. The audience watched the news items attentively and were very receptive. The lecture presenter skillfully tapped his own sources to comment on Catalan politics, the result of his many contacts –he has the accreditation to attend press conferences and sessions of the Catalan parliament– and information basically taken from the internet.

4. Discussion

The exploratory character of the investigation, based mainly on a survey using non-probability sampling, does not enable us to offer any categorical conclusions. Nevertheless, we believe that the data contributed may be useful for more empirical research in the future and for supplying an outline of certain aspects relating to television accessibility for deaf signers at a particular time in Spain. The data were collected before the Audiovisual Communication Act came into force in Spain in April 2010, which makes the work more useful and up-to-date given that it should enable comparisons to be carried out in the future. In order to find out whether or not advances are being made in television accessibility (in 2011, 2012, 2013 and later), it is important to contribute with studies that help give an understanding from the perspective of very recent history, from the situation in the preceding years (2006-2009). It is from this viewpoint that the article complements previous studies on accessibility³² with other scientific approaches, in our case closer to anthropology. In addition, the comparison between the true communication situations in the deaf communities of Catalonia and Gallaudet University, although not our main objective, may make it a little easier to intuit that some of the problems, situations and behaviours are repeated in different countries.

It is seen that, in both Catalonia and Gallaudet University, television subtitles are the main information referent for accessing current affairs information. In second place is the internet, which comes top of the list in the US if service information is included. The fact that traditional television with subtitles continues to be important is an indication, we believe, that the new situation of digital multimedia, so complex and fragmented with the creation of new channels in sign language, is not isolating deaf signers. Although many deaf signers may have a very strong linguistic awareness and sense of identity³³ and may even define themselves in terms of ethnic group³⁴, their *nationalistic* attitude appears to be neither prejudicial nor closed to the media in a situation of cultural hybridization. It can be deduced from the study that deaf people want to participate in the hearing culture and its explanations of the news through subtitles.

³² Cfr. UTRAY, Francisco, *Accesibilidad a la TDT en España para personas con discapacidad sensorial (2005-2007)*, Real Patronato sobre Discapacidad, Madrid, 2009.

³³ Cfr. SACKS, Oliver, *op. cit.*

³⁴ Cfr. LANE, Harlan, *op. cit.*

Although some believe that priority should be given to deaf journalists above hearing interpreters, this is not seen as a desire for the ghettoization of information. It is more likely that it shows an interest in overcoming existing anomalies³⁵ as regards the scant provision of sign language on television, with an on-screen appearance of the signer-presenter that leaves much room for improvement, as was reflected in the focus group. The defence of the figure of the deaf translator instead of the hearing interpreter coincides with previous research that stressed that this professional profile “is a Deaf job and should not be done by hearing people”³⁶.

The leading role played by the internet within deaf communities was already well-known before the start of our investigation. The use of webcams and the exchange of information via social networks and blogs have become more important because Web 2.0 tools enable geographical barriers to be overcome and make signing communication possible online without the need for meeting face to face. Although our research included questions on this subject, looking at these types of interpersonal communication links was not a priority. Instead our aim was to explore the general information referents of deaf signers as regards current affairs journalism. And it is in this area that subtitles continue to be basic and essential since most general information of importance arrives via the big television channels where there is still little signing, especially when compared to the volume of subtitled oral information. However, we should not lose sight of the fact that the collection of data from the surveys was carried out in 2008 and 2009, and since then the use of the internet has increased greatly.

In Catalonia, the fact that since 2011 *Televisió de Catalunya* has been providing an LSC interpretation of its complete evening news programme (*Telenotícies Vespre*) on Channel 3/24 is seen as a definite step in the right direction, even though the channel uses hearing rather than deaf interpreters. There have also been signs that signers’ behaviour towards the media is changing in younger generations. The American participants in the survey—generally younger and with better reading and writing skills than most of the Catalan participants—use the internet more. And also, during the years in

³⁵ Cfr. SERRAT, Jordi, *op. cit.*

³⁶ ALLSOP, Lorna, KYLE, Jim, “Translating the News. A Deaf Translator’s Experience”, in KELLETT BIDOLI, Cynthia J., OCHSE, Elana (eds.), *English in International Deaf Communication*, vol. LXXII, Peter Lang, Bern, 2008, p. 395.

which the data were collected, the medium most often to be found in Spanish homes was the television³⁷.

It should be noted that the results relating to newspaper reading should be studied in greater depth: although most of those who took part in the survey in Catalonia stated that they read the press, in our fieldwork we observed on a qualitative level that this reading is often superficial³⁸. This is corroborated by an ample bibliography that shows that even in the 21st century many people with hearing impairment have difficulty with reading comprehension. Thirty years ago Félix-Jesús Pinedo Peydró³⁹ was already showing the common mistakes made in writing by deaf children, who confused –to give some examples in Spanish– *rato* with *ratón*, *colina* with *colonia* and *Diego de León* with *león ciego*, an obstacle that turns learning to read into a “hopeless, monotonous and tedious” task⁴⁰.

More recently there have been warnings about the problems with written expression⁴¹, as regards both the discursive sentence level and the syntagmatic-propositional level of the text⁴². During the years of our research one author⁴³ calculated that the level of functional illiteracy among the deaf population was around 80%, while the Spanish Federation of Deaf People estimated that about 12% of deaf people were illiterate and around 35% had no educational qualifications⁴⁴. Deficiencies in this area are obviously a stumbling block when it come to reading the press. Subtitles, on the other hand, because they are backed up by images, become a linguistic learning resource and are not an impossible barrier.

Whether or not for reasons related to reading comprehension, middle-aged and retired Catalan deaf signers consider the information referent of sign language lecture/news presentations to be more valuable since they attend this type of event more than younger people. Because these are flexible

³⁷ Cfr. GARCÍA MATILLA, Agustín, MOLINA Juan Pedro, “Televisión y jóvenes en España”, *Comunicar*, vol. XVI, n° 31, October 2008, pp. 83-90.

³⁸ Cfr. SERRAT, Jordi, *op. cit.*

³⁹ PINEDO PEYDRÓ, Félix Jesús, *El sordo y su mundo*, CNSE Madrid, 1981, p. 39.

⁴⁰ *Ibíd.*

⁴¹ Cfr. FERNÁNDEZ-VIADER, María del Pilar, PERTUSA, Esther, *op. cit.*

⁴² Cfr. GUTIÉRREZ CÁCERES, Rafaela, *Cómo escriben los alumnos sordos*, Aljibe, Archidona (Málaga), 2004.

⁴³ RUIZ LINARES, Esther, “El aprendizaje de la lectoescritura en los niños y niñas sordos”, *Caleidoscopio*, n° 2, 2009, p. 5.

⁴⁴ ESTEBAN, Mari Luz (dir.), *Libro Blanco de la Lengua de Signos Española en el Sistema Educativo*, Confederación Estatal de Personas Sordas, Madrid, 2003, p. 20.

events where it is possible to interact with the speaker, these lectures may help develop integrated thinking so that the news around each story can be understood more easily.

The results show that hearing interpreters are not an important information referent for deaf people, and neither are they the most popular way of obtaining news information because the signing deaf audience prefers deaf journalists to hearing ones, who have to use a language that is not their own. This situation, which has already been observed in other countries such as the United Kingdom⁴⁵, should be taken into account by television companies and a study should be made of the possibility of covering the legally established signed programming quotas with deaf professionals, as happens in the programme *En lengua de signos* on TVE (the Spanish national television channel), for example, presented by the deaf actress Paloma Soroa. The desire to have more deaf journalists stands alongside the Catalan deaf community's demand for funding to finance a *Deaf television*, a channel of their own to increase the choice currently on offer.

However, all the points we have commented on make up an extremely complex polyhedral situation, which means we need to be very careful not to make any hasty judgments or come to any hasty conclusions as regards suggested improvements in accessible forms of communication, and neither should we scorn the figure of the hearing interpreter, who can often be essential in live connections and other support roles.

⁴⁵ Cfr. ALLSOP, Lorna, KYLE, Jim, *op. cit.*

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