# Societas Linguistica Europaea 2009

## Plenary speakers General sessions Workshops

9-12 September 2009

## Universidade de Lisboa

Workshops on Saturday 12 September 2009

#### 1. LISTENING TO SILENT LANGUAGES

- Convenors: Alina Villalva (Universidade de Lisboa), Ana Mineiro (Universidade Católica Portuguesa, Lisbon) and Paulo Vaz de Carvalho (Instituto Jacob Rodrigues Pereira, Lisbon)
- Alina Villalva (Universidade de Lisboa) and Ana Mineiro (Universidade Católica Portuguesa, Lisbon). Introduction.
- Carmela Bertone and Francesca Volpato (Università Ca' Foscari di Venezia). Which language for deaf people.
- Ronice Müller de Quadros (Universidade Federal de Santa Catarina, Brazil) & Diane Lillo-Martin (University of Connecticut, USA). Verbal morphology in sign languages and sign language acquisition: the imperative case.
- Deborah Chen Pichler (Gallaudet University). Second language acquisition of sign language: Handshape transfer from gesture
- Wendy Sandler (University of Haifa). The Kernels of Phonology in a New Sign Language.
- Adam Frost (Deaf Action Committee for SignWriting (DAC) and Center for Sutton Movement Writing) and Valerie Sutton. Writing Sign Languages.

Workshop on Saturday 12 September 2009

### 1. WORKSHOP. Listening to silent Languages:

#### Workshop description

Alina Villalva, Ana Mineiro Paulo Vaz de Carvalho Universidade de Lisboa and CLUL Universidade Católica Portuguesa Instituto Jacob Rodrigues Pereira

Deaf studies comprise a large number of subject matters, but it is not unlikely that language issues emerge when dealing with most of them. Linguistics, on the other hand, is by now a quite sophisticated scientific domain that could, nevertheless, profit from a wider knowledge of what we called 'silent languages'. Our workshop is at the crossroads of these two pathways.

Sign languages are spread all over the world (121 are mentioned at *The Ethnologue* website), but their paths, their status, their similarities and their differences have not yet been thoroughly unveiled. Similarly, education and the social integration of deaf children are differently pursued in different geographies. We intend to present a survey and a comparative assessment of some national stands, as a background for subsequent discussion.

Likewise, research on these languages is unevenly developed and sign language linguistics is at the dawn of its own history making. Seminal work, such as Stokoe (1960) has demonstrated that oral languages and sign languages share most of their linguistic foundations: language acquisition follows the same pattern (cf. Petitto & Marentette 1991, Petitto 2000), the language structure is similarly complex (cf. Stokoe 1960) and the way language is used also illustrates a high degree of resemblance (cf. Poizner, Bellugi & Klima 1987). We will also report the state of the art on sign language linguistics and on the importance of its findings to theoretical linguistics.

Finally, we will launch the discussion, ranging from social questions of major relevance to the deaf communities to theoretical issues that the analysis of sign languages may allow to reevaluate.

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#### Which language for deaf people?

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The importance attributed to Sign Languages has changed during the last 40 years and nowadays these languages are at the core of much linguistic investigation in many countries (Chamberlain et al. 2000). When deaf people interact with each other within their community, it is natural that they use the sign language as primary means of communication (Kegl et al. 1999). Sign languages are the most natural language of deaf communities and represent a local language overall, if we consider that they are spoken by a small group of individuals and that they differ cross-linguistically. Nevertheless, the deaf individual is surrounded by hearing people using the oral language, and consequently he/she has to use it as well in order to avoid isolation from the "world" around him/her.

Educationally, deaf people constitute a very heterogeneous group Every deaf individual seems to be unique as far as the level of competence in his/her mother tongue he/she manages to achieve.

Deaf people born to deaf parents acquire naturally the sign language as their first language and the oral language represents the L2. Some deaf individuals born to hearing parents (mainly immigrate families) are instead exposed to the sign language late, in some cases at adolescence. Consequently, both the oral language and the sign language are not acquired naturally, with strong consequences for the development of linguistic abilities. The only way for deaf people to approach their global (first) language is through the written modality. In most cases, profoundly deaf children born to hearing parents can access spoken language by means of a cochlear implant and are therefore trained to process language primarily by ear. Nonetheless, in both cases, the acquisition is often problematic and the development of linguistic abilities is often delayed.

The core of the problem is: "Which language for deaf people? Is it possible to learn an oral language without any mother tongue?" The aim of our research is to try to give an answer to these questions by comparing the linguistic competence in Italian of different groups of deaf people.

Data on the general linguistic competence in Italian were collected from six young deaf signers (age: 15;5-17;6) (Grosselle 2008) and six cochlear implanted hearing impaired children (age: 6;10-8;10) in order to determine their linguistic age. General linguistic abilities were assessed by using the TCGB (Test di Comprensione Grammaticale per Bambini (Chilosi et al. 2006)). The analysis of responses revealed that the linguistic age of deaf adolescents is between 5;6 and 7 and that of implanted hearing impaired children is between 5 and 6;6. This study wants also to explore the language of deaf children exposed both to the sign language and to the oral language too late to develop good linguistic skills in one of the two linguistic systems. In such cases, every child is led to invent "his/her own language", and the teaching of an oral language becomes a very difficult task. Our research wants to investigate the complexity of these aspects and to try to find an answer to guarantee a suitable level of education to deaf individuals.

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#### Verbal morphology in sign languages and sign language acquisition: the imperative case

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The study of verbal morphology of sign languages has received some attention, because of its peculiarity. There is a traditional classification of the verbs into three classes: plain verbs, agreement verbs and spatial verbs (Padden, 1983/1988). Quadros (1999) and Quadros and Quer (2008) discussed some of the problems of this classification and proposed a revision: verbs are plain or not plain and the border between them is not so strict. They observed that the differences between these two classes are related with the morphology and not exactly with the verbs.

The same can be said about language acquisition. We analyzed data from children in Brazilian Sign Language (LSB) and in American Sign Language (ASL) and we found evidence for early verbal morphology acquisition that substantiates Quadros and Quer's proposal. The results that we found are different from those of other studies on sign language acquisition, since they report late agreement acquisition (Meier, 1982; Casey, 2003; Morgan et al., 2006). This divergence may be due to the fact that these authors did not look at the morphology, since they oriented their survey along the lines of the traditional classification of verbs in sign languages. By looking at the morphology, we found a very productive use of imperatives, for example.

Our analysis is also compatible with the proposal of Salustri & Hyams (2003, 2006). They argue that there is a 'universal core' of the root infinitives (hence, RI) stage, that constrains all children similarly for the acquisition of mood. Furthermore, they show that RIs typically have a modal/irrealis interpretation and that they are eventive. These properties indicate that RIs are grammatically-based and might be expected to be found universally. They also argue that children learning a null subject language (hence, NSL) use the imperative form as an analogue to the RI. Although imperatives do not convey the full range of interpretations found in RIs, they are irrealis and eventive, and they are used much more frequently in the acquisition of non-NSLs than NSLs, even by children who are bilingual in one language of each type. We tested the Imperative Analogue Hypothesis (IAH) of Salustri & Hyams (2003, 2006) by looking at the acquisition of languages that have two verb types, one of which allows (agreement-licensed) null subjects and the other does not. American Sign Language (ASL) and Brazilian Sign Language (LSB) have both person- and location-agreeing verbs, that license null subjects, and non-agreeing 'plain' verbs, that do not license null subjects (Lillo-Martin 1986; Quadros 1997). The IAH contrasts with a non-analogous hypothesis (NAH) in predicting the distribution of imperatives in the acquisition of these two languages as follows (Lillo-Martin e Quadros, 2008):

IAH – imperatives with agreeing verbs > imperatives with plain verbs NAH – imperatives with agreeing verbs = imperatives with plain verbs

We analyzed data from children acquiring these languages and found that both ASL and LSB acquisition bring evidence for the prediction IAH. Children produce imperatives with agreeing verbs much more frequently than they do with plain verbs. This is very surprising because a large proportion of the verbs that children use are plain verbs. As expected, imperatives are irrealis and eventive. Plain verbs were used to express eventive and stative, realis and irrealis interpretations. (There is no infinitive/bare form of plain verbs.)

The data analyzed also provide additional evidence for the analysis of plain versus agreeing verbs presented in Quadros (1999). According to this analysis, agreeing verbs must raise to check an agreement feature. As Salustri & Hyams argue, such movement for checking an agreement feature is what makes the less economical imperative form to be used

rather than the RI form in non-NSLs. The same explanation applies to distinguish between the two forms used in one and the same language.

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#### Second language acquisition of sign language: Handshape transfer from gesture

Deborah Chen Pichler Gallaudet University

This presentation discusses transfer of handshape in M2 (second language plus second modality) acquisition of American Sign Language (ASL) by hearing, non-signing subjects. Phonological transfer from L1 to L2 has been documented extensively as a major contributing factor to non-target accent. However, it has been assumed that such transfer does not occur in cross-modality M2 acquisition, since signed and spoken languages do not share a common phonetic base (Rosen 2004). This study proposes that hearing non-signers nevertheless possess previous experience with formational parameters of ASL signs, including handshape, through their use of conventionalized gestures (emblems), and that this experience brings potential for transfer from L1 gesture to M2 sign.

Transfer errors are generally predicted to occur when the learner fails to notice the difference between an L2 target form and a very similar L1 form (Wode 1981; Flege 1987, 1995). The typical American non-signer's inventory of handshapes overlaps with that of ASL, including many configurations that are potentially similar but not identical to those used in ASL signs. For example, some non-signers produce the American gesture of raising one's fists in the air to signify victory with a handshape where the thumb is aligned with the closed fingers. This configuration differs minimally from the Sconfiguration used in ASL, where the thumb lays opposed across the closed fingers. Non-signers failing to notice this difference in thumb opposition are predicted to transfer their preferred fist configuration for ASL targets requiring the Sconfiguration.

Four non-signing subjects were instructed to reproduce 39 ASL signs and 9 conventionalized American gestures potentially involving handshapes found in ASL. All stimuli involved simple movements, unmarked locations, and a single handshape throughout the duration of the sign. They were produced by a native Deaf model and presented on a laptop, showing two different viewing angles for each sign. Stimuli were chosen to include both highly unmarked and highly marked handshapes, as determined by markedness hierarchies from the L1 ASL acquisition literature (Boyes-Braem 1990).

Subjects' production was coded for accuracy in thumb position, selected fingers and degree of finger splay. Subjects generally imitated most ASL signs accurately with respect to these three features, but several instances of transfer were observed: e.g. subjects who produced the fist gesture with unopposed thumbs substituted this handshape for the Sconfiguration in ASL signs such as SENATE and SYMBOL. Interestingly, transfer occurred less often for highly marked handshapes. For instance, one subject crossed his index over his middle finger for the gesture *keep your fingers crossed* in a matter identical to the R-configuration in ASL. When presented with an ASL sign employing the same configuration, this subject incorrectly crossed his middle finger over his index. While preliminary, these results suggest that non-signers are able to recognize and transfer unmarked handshapes from L1 gesture to M2 sign. The fact that recognition appears blocked for marked configurations indicates that complex interactions between universal and language-specific factors characterize crossmodal M2 phonology in much the same way as they do spoken L2 phonology.

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#### The Kernels of Phonology in a New Sign Language

Wendy Sandler University of Haifa

The property of duality of patterning – the existence of two levels of structure, a meaningful level of words and sentences alongside a meaningless level of sounds – has been characterized as a basic design feature of human language (Hockett 1960). Some have also argued that a meaningless level, i.e., phonology, must have existed prior to hierarchical syntactic structure in the evolution of language (Pinker & Jackendoff 2005). Sign languages were admitted to the 'bona fide language club' only after Stokoe (1960) demonstrated that they do exhibit duality. But is it possible for a conventionalized language to exist without a fully developed phonological system – without duality?

Using evidence from a sign language that has emerged over the past 75 years in a small, insular community, I will show that phonology cannot be taken for granted. The Al-Sayyid Bedouins have a conventionalized language with certain syntactic and morphological regularities (Sandler et al 2005, Aronoff et al 2008), but the language is apparently still in the process of developing a level of structure with discrete meaningless units that behave systematically. In other words, we don't find evidence for a full-blown phonological system in this language.

Can a language go on like this? Data from children and from families with several deaf people help to pinpoint emerging regularities and complexity at the level of meaningless formational elements in ABSL. While phonology in language cannot be taken for granted, then, its existence in all older languages, spoken and signed, suggests that it is inevitable. Rather than assume that phonology is somehow 'given' or hard-wired, this work leads us to ask, Why and how does it arise?

### Writing Sign Languages

Adam Frost
Deaf Action Committee for SignWriting (DAC) and Center for Sutton Movement Writing

Valerie Sutton, inventor of the signwriting system

#### Why SignWriting?

I was born Deaf, and I am native to American Sign Language. I personally use SignWriting to express my innermost thoughts and feelings. I don't have to take the focus of trying to express them into English to write them. Writing in SignWriting also gives me the ability to place ASL and English side by side and learn both languages better than without SignWriting. I strongly believe that all Sign Languages can and should be written. Many Deaf people throughout the world agree with me. Several of us form the DAC, Deaf Action Committee for SignWriting, who work everyday with SignWriting and spread the knowledge that Sign Languages are written languages.

#### What is SignWriting?

Because SignWriting is not based on any one Sign Language but on how the body moves, it can write any sign in any Sign Language even if the sign is something that has never been seen before. SignWriting is used to write as much detailed information about a sign as needed, for linguistic research. SignWriting is also used for everyday use, to write a quick note between two people.

SignWriting is not a language in of itself, just as any alphabet is not a language in of itself. It also does not change a Sign Language, but writes what the language is, at that moment in time, again just like alphabets do for many spoken languages. SignWriting is not any harder to learn than any other alphabet, even though it has more symbols than most alphabets. This is because, unlike most spoken language alphabets, the SignWriting symbols have a simple methodology behind how the symbols are created, thus making the symbols connected to one another, rather than random arbitrary symbols.

#### Where and How to use SignWriting?

SignWriting can be written on paper just like any other alphabet. However, since we live in an age of computers and many people may not be comfortable with constructing symbols when they don't know them all, there are many great computer programs out there. The one that I am most familiar with is SignPuddle because it is one of the most thorough programs and most accessible via the internet.

#### Conclusion

SignWriting is not that hard to learn. Most people can read and write signs within an hour if not mere minutes. Those that learn SignWriting the fastest are the ones that already know a Sign Language. I learned SignWriting just by finding

documents on the web with it and started reading it almost immediately. If there are those that would be interested in learning SignWriting, I would be more than willing to teach it during the workshop if time allows. If not and there are people who would like to learn SignWriting, I am willing to teach privately or show how SignWriting can be learned elsewhere. If Sign Language is used in any shape or form, SignWriting will be a great asset to have as a tool to record Sign Languages on paper and with SignPuddle.

Why SignWriting? Video & SignWriting in ASL

http://www.signbank.org/SignPuddle1.5/canvas.php?ui=1&sgn=5&sid=352

#### **ABSTRACT**

## Writing Sign Languages

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