## A virtual community for the Deaf and the Hearing

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#### **Abstract**

With this paper we introduce the idea of a virtual community that brings deaf and hearing people together, respecting the difference of the Deaf and addressing their needs. We show that Deaf constitute a community, one that is being approached by Greek Sign Language students and one that could use the opportunities of the web to communicate without barriers, once their standards are met. We capitalize on the idea of a virtual community, which is primarily designed to facilitate the deaf and hearing impaired, but which is also open to everyone who wants to participate, communicate, and learn about deaf culture.

#### Résumé

Avec cet article nous présentons l'idée d'une communauté virtuelle qui réunit les personnes sourdes et les pas sourdes, en respectant la différence du sourd et satisfaisant leurs besoins. Nous montrons que les Sourdes constituent une communauté, qui est approchée par les étudiants grecs du langage des signes et qui pourrait employer les occasions du Web afin de communiquer sans barrières, une fois que leurs normes sont rencontrées. Nous profitons de l' idée d'une communauté virtuelle, qui est principalement conçue pour faciliter le sourd et les personnes avec des problèmes d' audition, mais qui est également ouverte à chacun qui veut participer, communiquer, se renseigner sur la culture sourde.

## Keywords

deaf, deaf community, Sign Language, virtual community, portal

#### 1. Introduction

With this paper we want to support everyone's right to enjoy the benefits that the new medium – internet – has brought to the modern way of living, as well as to introduce a new outlook for the physical disability or mere difference.

We propose the development of a virtual community that is able to satisfy the needs of deaf people and offer opportunities for manifold expression for all.

The difference between a Deaf person and deaf lies in the living experience of the identity. Deaf persons are those who participate in the Deaf community and are not self-identified on the grounds of their hearing – no matter to the extend – disability, but on the grounds of their communion with all those things their culture comprises of. They participate as members of a cultural minority and not as people with a certain disability. Anyone who shares this culture can be part of this community, no matter whether Deaf, hearing or hard-of-hearing. Higgins says that the bonds connecting the members of the Deaf community are those created through shared experiences in education, work, friendships, marriages, organizations, activities, struggles, publications, Sign Language etc. (Lambropoulou, 1999). Sign Language is of utmost importance among the Deaf community. Pinker says that in order for a language to be functional, it has to be accessible, effective and expectable (Kourbetis, 1999). Greek Sign Language is by law (2817/2000, FEK A'78/14.03.2000) the language of deaf and hard-of-hearing students.

### 2. Existing approaches in supporting the Deaf community

Once we confirmed that the Deaf constitute a community for historical and cultural reasons, we studied their presence in the World Wide Web. Despite the possibilities, the presence of the Greek Deaf in the web is limited. Moreover, the decisive absence of formal agencies representing the Deaf from the web is important. The Federation of Greek Deaf (OMKE) has a web site (www.omke.gr) with limited content and services, providing mostly information on other web sites concerned with disability issues. There is also another site, www.disabled.gr, hosting a forum where people with all kinds of disabilities are welcomed to participate and communicate. The site also provides a chat-room for its members, whereas there is also plenty of information given throughout the site for disability issues. This is the only popular Greek forum where deaf Greeks are to a certain extend represented.

We have also encountered some attempts of web-based virtual communication, revolving around two axes: Sign Language and ICT training for deaf people. On the

other hand, throughout the World Wide Web, the most important sites, some of which could be deemed as Deaf communities are the following:

- www.deaf.com (MSM productions)
- http://www.deafspot.net
- http://www.deafspot.net/deafblogs/index.html
- http://www.slope.org/asl/ ASL (American Sign Language) poetry Vlog
- http://jarednevans.typepad.com/vlog/
- http://www.hamiltonrelay.com, http://www.signvrs.org.uk/index.html, Video
  Relay Services
- Center of Excellence for Deaf and Hard of Hearing of Northern Melbourne Institute of TAFE (NMIT), an intranet of Deaf Australia Online
- www.camfrog.com Camfrog program, with a SignLanguage chat-room

This last one offers a chat room named SignLanguage, set up and delivered by Camfrog Video Chat, a free teleconference service. The service proves extremely useful in the case of deaf people and since nothing but the medium gets in the middle of the mother language of deaf people, the communication flow is very interesting. The possibility of communicating in text form is always there, though.

### 3. Community needs

What is of high importance within a community for the deaf and the hearing is the provision of enhanced signs of social presence. Social presence theory (Short et al, 1976) suggests that the medium that people choose to communicate is the one that can best carry their message using all the necessary channels, so that the mediation of communication remains unnoticed. The absence of such signs is quite a common characteristic of many virtual communities like chat rooms, but its counter-balance is often impressive, with the use of emoticons or smileys and written terminology slang, developed deliberately for this exact purpose.

Yet, even this wouldn't be enough for our community. Written language is neither enough not recommended for the community in reference, at least not as a unique

communication channel, since it does not best convey the thoughts and the language of Deaf people. The enhanced use of visual channels is necessary for the diffusion of information and the efficiency and smoothness of communication, without saying that written expression won't be a possibility, since it will probably be useful to hearing people who don't comprehend sufficiently – or yet – Greek Sign Language.

Champion (2006) takes one step further, saying that social presence, that is the feeling that other people are also there in the community, isn't enough for a meaningful communication in a web community. On the contrary, she proposes the notion of cultural presence, as the one providing the members of virtual communities with the sense of belonging in a special interactive condition as contributors, not as mere attendants. This notion serves our community goals as well, since it gives a different meaning to acceptance and participation and entails different characteristics of non-verbal communication.

## 4. Building the basis for a successful community

Creating a virtual place able to host a community within cyberspace is not a safe case with regards to the outcome. The dynamics arising and interacting as soon as it is developed and assembled evolve constantly. There are many guidelines on how to build a good online community, but even its best development cannot guarantee for success (Preece, 2006).

Preece gives recommendations in her manual about how a community can achieve its goals, focusing on two factors: sociability and usability. The term sociability refers to the opportunity and the sustainability of a good level of communication between the members at all stages, starting from the initial acknowledgement of the reason for its existence and going all the way through to the actual and everyday interaction. Usability on the other side refers to the provision of the appropriate technological means for the facilitation and support of communication.

All the aforementioned researches point to the need for Greek Sign Language to be extensively present in our proposed community, since this is mother language to half of its intended for members.

Another determining factor for the success of the virtual space that will host the community is the inclusion of the potential users' needs. Researches by Puri et. al (2004), Merkel et al (2004) present a participative procedure of interaction, exchange of ideas, expertise provision, determination of needs and desires, cooperation between the interested parts/members for the design of a web-based community.

In order to find out what the desires and expectations might be from such a community by the people whom it is intended to, we approached them in their communities, let them know of our intentions and heard their own demands from one of the kind. We contacted a school for deaf children with both hearing and deaf/hard-of-hearing teachers, deaf people from the SignLanguage chat room of the camfrog community and the disabled.gr forum, as well as hearing friends of them at the latter and hearing students of the GSL. Deaf people were contacted in their mother, Sign, language or in written Greek when contacted through e-mails. We asked them about their level of GSL knowledge, their level of capacity in / understanding of the Greek language, their familiarity with computers and the web, as well as their stand on a virtual community for the deaf and the hearing and their expectations from such one. Our research shows that most of the adult teachers that took part in it have no experience with computers, slightly more than hearing teachers. Yet, the majority of the contacted population has a strong interest in such a community, mostly in possibilities offered for artistic expression, communication, support in Sign Language learning and information gaining on subjects related to deafness.

Taking the people's preferences into account and our experience of the current possibilities in services offered by the web, we came up with a list of services to be delivered through a portal. Those would be:

- registration form
- chat and video chat-room

- terminology chat-room
- introduction to the GSL
- video chat-room for SGL students
- blog (vlog, photo-log) and Arts
- FAQ's
- legislation library
- information on technology and aids for the deaf
- interpretation services notice board (between Greek and GSL)
- communication (with the administrator) form
- links
- netiquette and
- a service-role diagram

The community comprises of users of some of the services, authorized – registered member, among which moderators and an administrator. The members of the community have the additional benefit in comparison to the site visitors of knowing the passwords for entering the chat rooms, as well the pages where interpretation is being asked for and offered.

The different chat rooms serve the different needs of people using them. GSL students, for example are a group that isn't yet a fluent user of the language and we shouldn't allow for them to hinder the fluent communication of experienced users of the language, unless the latter want to help students practice, which could be done in the respective chat room. The need for video in chat rooms has already been explained, as the medium that allows the unobstructed communication of the Deaf mother language.

Among the registered members there are experts on scientific fields that schedule, according to their availability, the discussion in the respective chat room on terminology. Signs proposed during these discussions and accepted by the participants are being captured in video and stored at a special database of the server hosting the chat room, annotated with a name stating the term it signs for. Users later can retrieve the term. This service meets the need for scientific

terminology in GSL, the lack of which poses a severe barrier to higher degree studies.

Introduction to GSL would come in two different forms: a page displaying the Greek finger alphabet in pictures and some videos signing simple, everyday meanings, with captions beneath them or stored and retrieved through links. Alternatively, this could be animated pictures, activated on mouse over.

Blogs belonging to members of the community and all its close versions (v-logs, pholo-logs etc) can be provided as external links through the portal and instructions could also be given through that for members or visitors who are interested in making one of their own.

Everyone can contact the administrator of the community and send through the communication form material to be uploaded at several of its web pages (articles, links).

Interpretation service notice board is a particular service that takes the community offline, making it more complete and answering to real world, everyday needs of deaf people in their encounters with the state, services, banks or whatever other transactions of the kind.

As repeatedly stated, it is of vital importance that GSL is widely represented in the community and that goes for all the parts that are usually texts. In these cases text and video are equivalent and it is the responsibility of users to interpret from one to another form and contribute to the community, should it be alive, functional and supportive of its members' needs.

The administrator supervises the whole web site operation and updates the content. Moderators oversee chat rooms and make sure things work smoothly for the participants and the site server, reporting back to the administrator for abnormalities.

#### 5. Conclusions

The web is the medium that brings together most of the latest technical opportunities for communicating and fosters most – if not all – social movements towards difference, social change and social justice. A community built on the web, will enable deaf and hearing people come together, get to know one another, communicate with Sign or Written language, give and take support, co-operate. The community should serve as a medium for the exchange of ideas and everyday small talk, for offering the opportunity to Greek Sign Language students to practice their skills and introduce it to newcomers, for developing and promoting scientific terminology among the deaf, for providing the space so that members can express themselves through Art (poetry, literature, theatre, photography etc.), for disseminating information on deafness, legal, cultural, technical or otherwise matters.

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