

# History of Social-Haptic Communication

Russ Palmer, Music Therapist & Riitta Lahtinen, PhD, Communication researcher

Historically social-haptic communication originated when the authors first met during 1991 during the 10<sup>th</sup> Dbl World Conference in Örebro Sweden. The first social-haptic communication article was published in Proceedings of the 3<sup>rd</sup> IAEDB (Dbl) European Conference in Potsdam, 1993 (Palmer & Lahtinen, 1994). This haptic research gave people with acquired deafblindness the framework to develop the methods of holistic and interactive communication further, which later became identified as “social-haptic communication”. The whole process has taken 20 years to develop. Touch and haptics can be divided into two subgroups, *social-haptic communication* and *haptic communication*, which should not be confused with each other even though they sound similar. They both have different meanings and definitions.

The definition of social-haptic communication can be found in Lahtinen’s (2008) doctoral thesis and Lahtinen, Lahtinen and Palmer, 2010. Social-haptic communication includes haptics (touch messages), which are made of haptemes, also known as grammar elements. By definition social-haptic communication refers to touch messages between two or more people in a social context (person-to-person). Social-haptic communication methods are usually combined with linguistic information. This gives a greater in-depth quality of information to the deafblind user; while at the same time providing short cut methods and real time information flow.

Haptic communication by definition refers to information received from technical devices or objects using active touch. Examples of these devices include computer joysticks, mobile phones or other touch-related devices (See picture 1) which were demonstrated at international haptic research conferences (Lahtinen & Palmer, 2000; www.eurohaptic2012). Other examples of haptic communication, which is sometimes referred as haptic exploration, includes objects being felt or explored through the hands or feet. Examples of the objects that can be felt include raised letters, scale models and touch replicas (Hutchinson, 2012).



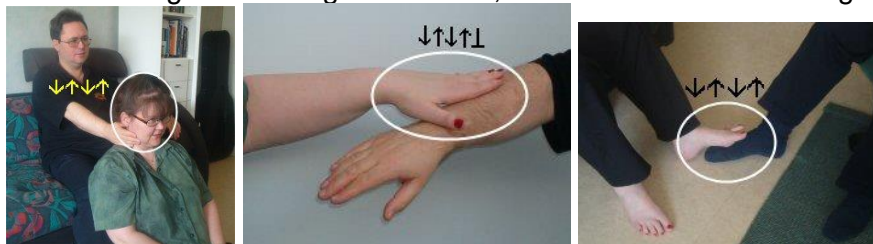
Picture 1. Computer joystick gives haptic feedback

## Historical development of social-haptic communication

### 1. Yes & No Haptics

Initially the first haptics identified were the yes and no messages, arriving and leaving a personal space. These initial ideas were published in Dbl’s (previously IAEDB) Deafblind Education (Palmer & Lahtinen, 1994). More thorough analyses on these early developmental stages were made for Lahtinen’s licentiate thesis (2003). Some elements were also published in Dbl Review (Palmer & Lahtinen, 2005) and presented at the 6<sup>th</sup> Dbl European Conference in Slovakia in 2005. Various courses on using these methods were given to Sense Scotland staff in 1993 and later in 1990’s in Denmark, Norway and Finland. The first academic publication was produced with Manchester

University for a special education module (Lahtinen & Palmer, 2000). The development continued over the years and at each step of the way new elements were added to the system. Lahtinen was also collecting data through interviews, diaries and courses during her travels in Europe.



Picture 2. Three examples of the Yes-feedback (head movement, hand-to-hand, foot-to-foot) (Lahtinen, 2003)

## 2. Social Quick Messages

Social quick messages are elements which are included in the social interaction between two or more people. The *social quick message* system includes the first identified elements and other interactive touch messages used in social contexts, such as coffee and tea breaks and with body language reactions from other people in the environment, such as laughing or crying. Let it be noted that the system of using bodyname was introduced at the same time to allow a deafblind person to identify the person coming into their personal space. This material has been translated into other European languages including Russian. (Lahtinen, 2007a & Lahtinen, 2007b; [www.kuurosokeat.fi](http://www.kuurosokeat.fi))

## 3. Emotional Response Hand (ERH)

The body language elements were later collated together and the Emotional Response Hand (ERH) (picture 3) system was introduced at conferences in 1996 (Lahtinen & Palmer, 1996 and 1997). The main purpose of ERH is to allow the deafblind person to identify the nonverbal visual elements of people around them, i.e. body language. These can be adapted if a deafblind person uses sign language, hands-on signing or fingerspelling and spoken language. The ERH can be used either on the back of the hand in terms of a person's face (Lahtinen, 2008; Lahtinen, Lahtinen & Palmer, 2010), on the shoulder, on the person's back or on the side of the leg when sitting side-by-side. This allows a deafblind person's interpreter to use the system flexibly in various situations.



Picture 3. Emotional Response Hand (ERH), Lahtinen 2008

## 4. Environmental Description and Body Mapping

Environmental description allows the deafblind person to gain information on the environment around him or her. For example if one is in a café with an interpreter/guide, the other person can explain the movements of people and what is happening around them when drinking coffee. This is produced through description methods either through the hands or the body. These methods

include mapping on the body, e.g. drawing out the positions of tables, chairs and obstacles so that the deafblind person can build a mental picture of their surroundings. This can be supported by describing further details if needed, for example if a table has an unusual shape or if objects need to be described from a safety viewpoint. This may also include showing directions onto the body so that the deafblind person can identify the location of an object or person more precisely. There are also specialised body mapping techniques for applying in specialised settings, such as sport activities (ten-pin bowling), exhibitions, shows or using the computer (mouse location) (Lahtinen, 2008).

## 5. Haptices and Haptemes

Definitions of haptices and haptemes refer to the combination of applying touch messages, words and grammar elements. Haptemes are the grammar elements of touch, such as pressure (light, heavy), speed (fast, slow), location (such as back of hand, back or shoulder), movement (circular, tapping, side-by-side etc.) and hand shape (such as fist or flat hand). Haptemes are like individual letters in a text. Example letter “y” on its own means nothing, but if one adds “e” and “s” then you have a proper word “yes”. In the same way, your palm as the location means nothing; you have to add the tapping movement of your right index finger to form haptice YES. (Lahtinen, 2008)

Haptices are the individual touch messages like words in the text such as yes, no, angry, tired, happy, in love, tea or coffee. These are different combinations of haptemes. You can express different emotions in haptices by changing the pressure or speed of haptemes. For example, the haptice YES can portrayed as “Oh, yes!” (an excited yes); here there is more pressure and faster speed. Similarly you can change YES to NO by changing the movement hapteme from tapping into a side-to-side movement. ([www.kuurosokeat.fi/en](http://www.kuurosokeat.fi/en)).

By using haptices and haptemes together we can portray messages, emotions, body language and gestures into a more meaningful and spontaneous real-time information.

## 6. Body Story

Body Story originated as a result of Russ Palmer attending a Guided Imagery music therapy course in 1995. At this course the tutor would play a piece of music and tell a story to get the students into a relaxed state of mind - example *“It’s a warm summer’s day, you are walking on the beach with sea lapping on the shore ...”* The lectures were all in a foreign language and it was not possible to have any translation because it would upset the atmosphere. In order to solve this problem, Riita Lahtinen, who was acting as the interpreter at that time, started to give individual movement elements onto Russ Palmer’s hand and arm as he was lying down.

For example *warmth, beach, walking, sea* etc., followed along the spoken storyline. As a result, the Body Story (Lahtinen & Palmer, 2005) evolved and was expanded to include many different elements. This allowed the interpreter or professional to create stories, non-verbally, through touch.

## Conclusion

Social-haptic communication approach makes the interaction easier and more efficient among deafblind people, family members and friends, interpreters and other professionals (Lahtinen 1999; [www.fsd.org](http://www.fsd.org)). Thus it improves the quality of information for the deafblind person and gives the person more real-time, spontaneous information about the environment around them. Social-haptic communication is now used by acquired and congenitally deafblind people in many countries and has been expanded to other groups such as those who are visually impaired, blind, people with learning disabilities, autistic and medical patients who are terminally ill. This approach is also used

by professionals in universities such as phoneticians, who use auditive information in their analyses and cannot concentrate on surrounding sound information at the same time.

In June 2012 the Dbl committee approved the formation of the Dbl Social-Haptic Communication Network, which will allow the professionals and individuals to exchange and share knowledge internationally through the support of Dbl. Furthermore the authors are now providing 1-6 day courses on social-haptic communication and are collaborating with various organisations throughout Europe.

## References

Hutchinson, D. (2012). A Sense of History. *Historic Scotland*, Spring 2012, 38-40.

Lahtinen, R. (1999) Holistic and Interactive Communication Methods. In Peckford, B. & Hawcroft, L. (Edit.) *Proceedings of an International Symposium in Interpreting for Deafblind People*. Prontaprint, Durham, UK, 64-65.

Lahtinen, R. (2003). Development of the Holistic Social-Haptic Confirmation System. A case study of the yes & no - feedback signals and how they become more commonly and frequently used in a family with an acquired deafblind person. *Licenciate Thesis, Department of Teacher Education, University of Helsinki*.

Lahtinen, R. (2007a). *Social-Haptisk Kommunikation*. <http://www.nud.dk/publikationer/49>.

Lahtinen, R. (2007b). *Sociala Snabbesked*. <http://www.nud.dk/publikationer/48>.

Lahtinen, R. (2008). *Haptices and Haptemes. A case study of developmental process in touch-based communication of acquired deafblind people*. Doctoral Thesis, University of Helsinki, Finland.

Lahtinen, R. & Palmer, R. (1996). *Holistic Family Communication, Spoken Language by Touch is more than just words*. The 4<sup>th</sup> European Deafblind Conference, Finland (Espoo), June 1996. (Note: Not a Dbl Conference)

Lahtinen, R. & Palmer, R. (1997). *Theoretical Basis of Holistic Communication for Dual-Sensory Impaired People & Family Members*. EUSSG & 4<sup>th</sup> IAEDB (Dbl) European Conference Proceedings, Madrid, Spain.

Lahtinen, R. & Palmer, R. (2000). *Holistic & Interactive Communication Methods with Acquired Deafblind People & Families - a Practical Approach*. Joint Training Initiative, Distance Learning Course (incl. video). Manchester University, UK.

Lahtinen, R. & Palmer, R. (2005). *The Body Story: Creating Musical Images Through Touch (CMIT)*. City-Offset, Tampere, Finland.

Lahtinen, R. & Palmer, R. (2008). *Haptices and Haptemes – Environmental Information Through Touch*. 3<sup>rd</sup> International Haptic and Auditory Interaction Design Workshop (HAID), Poster/demo, Jyväskylä, Finland.

Lahtinen, R., Lahtinen, M & Palmer, R. (2010). *Environmental Description for Visually and Dual Sensory Impaired People*. Art-Print, Helsinki, Finland.

Palmer, R. & Lahtinen, R. (1994). Communication with Usher People. Deafblind Education, July-December, 1994, p7-9.

Palmer, R. & Lahtinen, R. (2005) Social-Haptic Communication for Acquired Deafblind People and Family: Incorporating Touch and Environmental Information through Holistic Communication. Dbl Review January – June 2005, p6-8.

www.fsdb.org What is deafblind interpreting? The definition of deafblind interpreting was approved by the board of the Association of the Swedish Deafblind (FSDB) 2 April 2008.

www.kuurosokeat.fi/en/ (Social Quick Messages)

www.eurohaptic2012

Further information:

Dr Riitta Lahtinen [riitta.lahtinen@kolumbus.fi](mailto:riitta.lahtinen@kolumbus.fi)

Russ Palmer [rpalmer2@tiscali.co.uk](mailto:rpalmer2@tiscali.co.uk)

Website: <http://www.russpalmer.com>