

From Telephone to *Dial-tone*: A look at real- time interpretation



Julie C. Weisenberg, Dept. of Linguistics
Stony Brook University, Adaptive Spoken Language Mini-conference, May 07, 2007

What is a video-call?

Using a webcam (a video-camera for web interfaces) (or Microsoft NetMeeting, Sorenson EnVision SL software) with a desktop computer, deaf and hard-of-hearing people are able to make calls over a high-speed or broadband Internet connection (i.e. DSL, cable, or T1 line) to other deaf or hearing people.

→ This means deaf people can communicate long distance

(<http://www.sorensonvrs.com/what/index.php>) and
(<http://www.nad.org/site/pp.asp?c=foINKQMBF&b=104291>)

What is video-relay?

Video Relay Service (VRS) allows a deaf or hard of hearing person to make a telephone call via an Internet video connection between the user and the relay center which is staffed with sign language interpreters. VRS thus allows conversations to occur at approximately normal speed with the benefit of being visually based, typically in sign language, for deaf and hard of hearing consumers.

<http://www.nad.org/site/pp.asp?c=foINKQMBF&b=104291>

How is video-relay funded?

VRS is funded through mandated contributions from all common carriers that go into a national fund administered by the National Exchange Carrier Association, Inc. (“NECA”). The FCC is charged with determining the rate that ensures appropriate compensation to VRS providers.

Who offers it?

AT&T VRS
Sorenson VRS
Sprint VRS
Federal VRS

How does VRS work?



VRS Equipment



<http://www.sorenson.com/press/images/VP100.jpg>

Videophone



<http://www.deafed.net/PageText.asp?hdnPageId=145>

Web Cam

VRS Equipment



Videophone Booth

VRS Equipment



View on TV screen



View on computer

Video Mail



Hearing User

Dial
1-866-410-5787
ext # 00000



New User



Video Interpreter



Video Mail

"This is Sprint VRS leaving a message from John Doe. I have your report. Please call me back."

The users

Deaf persons and contact-varieties

A signer's choice of language reflects their membership in the community and their attitude about it (Lucas and Valli 1989). It has been reported that deaf people tend to utilize more English-based varieties when interacting with the mainstream (Markowicz and Woodward 1975; Johnson and Erting 1989).

Knowing when to use ASL and when not to, is a natural expected behavior in Deaf life. Language choice signals whether a deaf person holds values that are closer to hearing American society or to the core Deaf community. Keeping ASL in the core community and using contact varieties with outsiders maintains the ethnic boundaries (Johnson & Erting 1989).

Sign Language Video - Interpreters

Interpreters are users of American Sign Language (ASL) and spoken English. They also utilize cross-linguistic strategies in interpretation including English mouthing, fingerspelling, and borrowing (Weisenberg 2002; Davis 2003) Based on preliminary observations, it appears that language mixing is now an expected behavior of computer-mediated interpretation due to constraints of the equipment and regulations.

Effects on the interpretation process

1. **policies of virtual space** - controlled by a removed entity: the corporation or the FCC. Business/Government has an effect on a laborer, who by regulation, is mandated to function as a “dial-tone”, an invisible conduit.

Effects on the interpretation process (continued)

2. **equipment constraints** - interpreter is also adjusting his/her language production because message must be transmitted through a webcam. It's not a perfect medium.

Summary of effects on interpretation

- **Industrial Revolution of interpreting** – *mechanization* Artisans in the community moving to machine-based work.
- **Routinization** - Interpreters facilitate calls following specific routines based on the software and equipment, hour after hour.
- **functional equivalence** – FCC regulations → *dial-tone* model → scripting → mixing
- **Surveillance** – *connected* minutes = \$ Interpreters' productivity levels can potentially be retrieved and stored; effects on length of interpretation time.

Language Effects

Adjustments for video-phone communication

- manipulating desktop tools – remote control, paper, objects, camera
 - manipulation of language features – syntax, fingerspelling, mouthing, dropping wh-word/Y-N question facial gestures
 - image transmission & body positioning – hand fingerspelling close to camera, standing up, sign location changed
 - creation of different sign space – real placement or virtual placement
 - signing speed – interpreters=slower; Deaf callers=faster increased repetition, checking for understanding, use of DID, KNOW
 - language mixing – English mouth patterns, fingerspelling
 - adjusting deictic references – *me, you*, person's image on screen, in camera, behind the person?

Mixing & Reductions

Code Mixing/ Increased English Mouthing

- Evidence of increased English mouthing once connected to hearing party. Caller produces ASL with interpreter prior to call being placed. **If interpreter flips head-set mouth-piece away from mouth, signals a disconnection from the hearing world and hence triggers switch back to ASL.*

- EXAMPLES:

- “ME CALL CONNECT TO MY B-I-L-L”

(I’m calling about my bill.)

- Caller immediately gives name, account number, last-4 digits of SS#, address, etc.
- “HI THIS IS...” English based signing (remember demo)
- “PUT ON HOLD” (“hold” vs. “on-hold”)

Conduit for increased use of technological signs

New lexical items

- live-person (real person, non-automated system)
 - E-X-T, X(CL-1's), X(shaking), E-X (live representative)
 - live representative (operator) or (video-interpreter)
 - headset O(circular)
 - click-on-remote (hang-up)

Older technological signs

- “call-to” (place a call, formerly meant call through a TTY)
- “audio-tape” (message, answering machine, automated system, formerly meant audio-tape)

Recent Data

SUMMON MOTHER

(Call my mother.)

WAIT... L+HEAR
minute]...listen...)

(Wait [a

PHONE AUDIOTAPE HIT ZERO
recording, hit '0')
Fs- Eric TO fs-KIM

(When you get

(This is Eric calling for Kim.)

A+COUNT
billing)

(account; *automated

WHERE YOU fs-at

(Where are you?)

NEW+s

([I've got] news.)

Linguistic and Cultural Adaptations

- **Knowledge of 'automated' systems**

- "IF AUDIOTAPE HANG-UP" (Hang up if voice-mail picks up.)
- "D-I-A-L AGAIN" (Try that number again.)
- "Call ownership" (FCC term) - (just go to billing)
- Caller directs interpreter to press a certain option and/or ignore automated system so it will transfer them to a live representative.

- **Use of phone jargon**

- "GIVE-ME RING #BACK" (Give me a ring)

- **Phone etiquette**

- Considered rude to interrupt hearing caller during introduction, (verification process) but Deaf callers want to get right to point of call.

Further Study

- Create experimental design & get a PI!
- simulated calls using three users (deaf, interpreter, hearing person)
- Effects of webcam communication: culturally deaf –to- interpreters, culturally deaf –to-culturally deaf vs. face to face communication
- Designs with intentional delays

References

- Brennan, S. E., & Clark, H. H. (1996). Conceptual pacts and lexical choice in conversation. *JEP: LMC, 11*, 1482-1493.
- Bowles, P. (2007). *Capitalism*. New York: Pearson Longman.
- Cerney, B. (2005). *The Interpreting Handbook Part 1*. Colorado Springs, CO: Hand and Mind Publishing
- Davis, J. (2003). Cross Linguistic Strategies Used By Interpreters. *Registry of Interpreters for the Deaf Journal of Interpretation*. Alexandria, VA: RID Publications, p.95-128
- Devonish, H. (1986) *Language and Liberation: Creole Language Politics in the Caribbean*. London: Karia Press
- Fasold, Ralph. (1984). *The sociolinguistics of society*. Oxford: Basil Blackwell.
- Frisberg, N. (1990). *Interpreting: An Introduction*. Maryland: RID Publications.
- Galati, A. & Brennan, S. (in prep). Given-New attenuation effects in speech and gesture production: For the speaker, or for the addressee?
- Garrod, S. C., & Anderson, A. (1987). Saying what you mean in dialogue: A study in conceptual and semantic co-ordination. *Cognition, 27*, 181-218.
- Gandy, O.H. (1993). *The Panoptic Sort: A Political Economy of Personal Information*. Boulder, CO: Westview.
- Grosjean, F. (1982) *Life With Two Languages*. Cambridge, MA: Harvard University Press
- Humphries, J. and B. J. Alcorn (2002) *So You Want To Be An Interpreter? Third Edition*, CD-ROM. Austin, TX: H & H Publishing Co.
- Johnson, R. and C. Erting (1989) *Ethnicity and Socialization in a Classroom for Deaf Children*. Academic Press, p. 41-83
- Keating, E. and G. Mirus (2003). American Sign Language in Virtual Space: Interactions between deaf users of computer-mediated video communication and the impact of technology on language practices. *Language in Society 32*, p.693-714.
- Lucas, C. and C. Valli. (1989). Language contact in the American deaf community. *Sociolinguistics of the Deaf Community*, p. 11-40. San Diego: Academic Press
- Mansell, R. (1996). Communication By Design? In R. Mansell and R. Silverstone (eds.) *Communication By Design: The Politics of Information and Communication Technologies*, New York: Oxford University Press. p.15-43.
- Markowicz H. and J. Woodward (1978). Language and maintenance of ethnic boundaries in the deaf community. *Communication and Cognition, 11*, p. 29-38.
- Metzling, C. & Brennan S. (2003). *When conceptual pacts are broken: Partner-specific Effects on the comprehension of referring expressions*. *Journal of Memory and Language, 49*, pp.201-213.
- Özüyrek, A. (2000). The influence of addressee location on spatial language and representational gestures of direction. In D. McNeill (ed.) *Language and Gesture*. 64-83. Cambridge: Cambridge University Press.
- Ramler, S. (1988). *Origins and Challenges of Simultaneous Interpretation: The Nuremberg Trials Experience*. In D. Hammond (ed.), *Proceedings of the 29th Annual Conference of the American Translators Association*. Medford, NJ: Learned Information, Inc.
- Samarajiva, R. (1986). Surveillance By Design: Public Networks and the Control of Consumption, in *Communication By Design: The Politics of Information and Communication Technologies*, eds. R. Mansell & R. Silverstone.
- Weisenberg, J. and E. Garcia. (2005) *The Effects of Video-relay on American Sign Language*. Brownbag talk. State University of New York at Stony Brook, Department of Linguistics.
- Weisenberg, J. (2003) *Simultaneous codemixing in American Sign Language interpretation*. Unpublished qualifying paper, State University of New York at Stony Brook, New York.
- Weisenberg, J. (to appear) *Mouthing: A Discourse Strategy in English-to-American Sign Language Interpretation*. *Proceedings of the Bilbao-Deusto Conference in Linguistics*. Bilbao, Spain.

THANK YOU!