

Alternatives to Speech and Real-Time Communication

Prepared for Autreat 2005

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What We Will Talk About

- Why would you want to use something other than real-time speech?
- What options are there for common situations requiring real-time speech?
- How do you handle prejudice and ignorance?

MOST IMPORTANT POINT

It is okay to not
communicate
“normally”

PART I

WHY WOULD YOU WANT AN
ALTERNATIVE TO REAL-TIME
SPEECH?

What is “Real-Time Speech”?

- “Real-Time” – requiring composing and expressing a thought quickly in response to some external action
- “Speech” – using your biological voice
- Real-Time Speech is anything that combines the real-time aspect defined above with a biological voice
- This presentation will focus on communication techniques other than real-time speech. These include methods that are real-time but not speech, methods that are speech but not real-time, and methods that are neither speech or real-time

Why Real-Time Speech is Difficult

- It requires a good working memory to remember parts of sentences/paragraphs that you have already spoken, as they are gone once voiced
- It requires an understanding of common English (in most of the countries represented here) language syntax, grammar, and vocabulary
- It requires ability to quickly formulate thoughts and responses

Other Reasons Not to Talk

- Physically painful
- Interrupts your own thoughts when you hear your own voice
- Any other physical or neurological problem that makes it hard to talk
- Can't concentrate on reaction to words while concentrating on speaking
- Hard to ask for help or express emotional content

Why I don't always use real-time speech

- Talking hurts my throat
- It depletes my energy reserves quickly
- When somewhat overloaded, I cannot access speech at all
- It is often not possible for me to use speech to ask for help or tell an authority figure they are wrong
- I cannot use real-time speech to talk about my own strong emotions
- But I can talk – so people don't realize I'm leaving a lot of things unspoken

Using Other Forms of Communication, I can...

- Tell a friend, “Thank you for your friendship. It means a lot to me.”
- Tell a dentist, “The tooth you worked on last week is rubbing against the tooth above it, and is starting to give me a headache”
- Ask a shopkeeper, “What are the advantages of this product over the cheaper version?”
- On the phone with computer support, “Hey, I bought the extended warrantee to avoid *exactly* this kind of problem. You are under a contractual obligation to fix this machine!”

PART II

COMMUNICATION OPTIONS

You don't have to give up real-time speech!

- If you find real-time speech is helpful to you, continue to speak during those times it is useful!
- It's not "faking" to communicate typically sometimes and atypically other times
- It's okay to combine typical and atypical communication techniques

Two Types of Communication

- Non-linguistic: Picture or symbol based

Examples

- PECS
- Symbol boards (where symbols express an entire thought)
- Gestures

- Linguistic: Language based

Examples:

- Sign language
- Writing
- Speech
- Some complex symbolic systems

Which Type of Communication?

- BOTH!
- Linguistic communication provides the highest degree of self-direction in our society
- Non-linguistic communication can often be used to supplement language and engage in simple exchanges (why type “Yes, I want that” when a nod will do?)
- However...some individuals have difficulty learning or using linguistic communication. Non-linguistic communication can allow them to take an active role in their own life and should be respected as a valid form of communication.

Non-Linguistic Communication

- Can be used by people unable to access any form of language (whether temporarily unable or permanently unable)
- Some systems can be used with partners who don't share a common language with the speaker (for instance, grunting and smiling have fairly universal meanings)
- Vocabulary quickly becomes too large to be feasible
- Communication partners often have to guess as to possible subjects of conversation
- Communication topics may be limited by vocabulary

Gestures

- Commonly understood meaning within a culture
- Not sign language!
- Used by most people to add “depth” to communication
- Can be used by themselves, especially in quick encounters with predefined interaction scripts (store counters, airline agents, walking past a friend)
- Sometimes need to be exaggerated when used as stand-alone methods of communication

Vocalizations

- Sounds other than normal linguistic speech
- Can be used in place of “yes” and “no”
- Can convey excitement, sadness, anger, and other emotions
- Almost all autistic people do this already, even young children and people with no language ability!

Object Exchange

- An object (or representation of the object) is handed to a communication partner
- Often used to teach the concept that one thing can *represent* another thing, which is a fundamental abstract concept of language
- An empty cup handed to a caregiver might indicate that you are thirsty; a bus pass might indicate that you want to go out

Music Communication

- Good for communicating emotions
- Requires communication partner to understand what you are trying to do
- Entire songs or parts of songs are played or sung
- Among the slowest of communication methods
- Very limited “vocabulary”

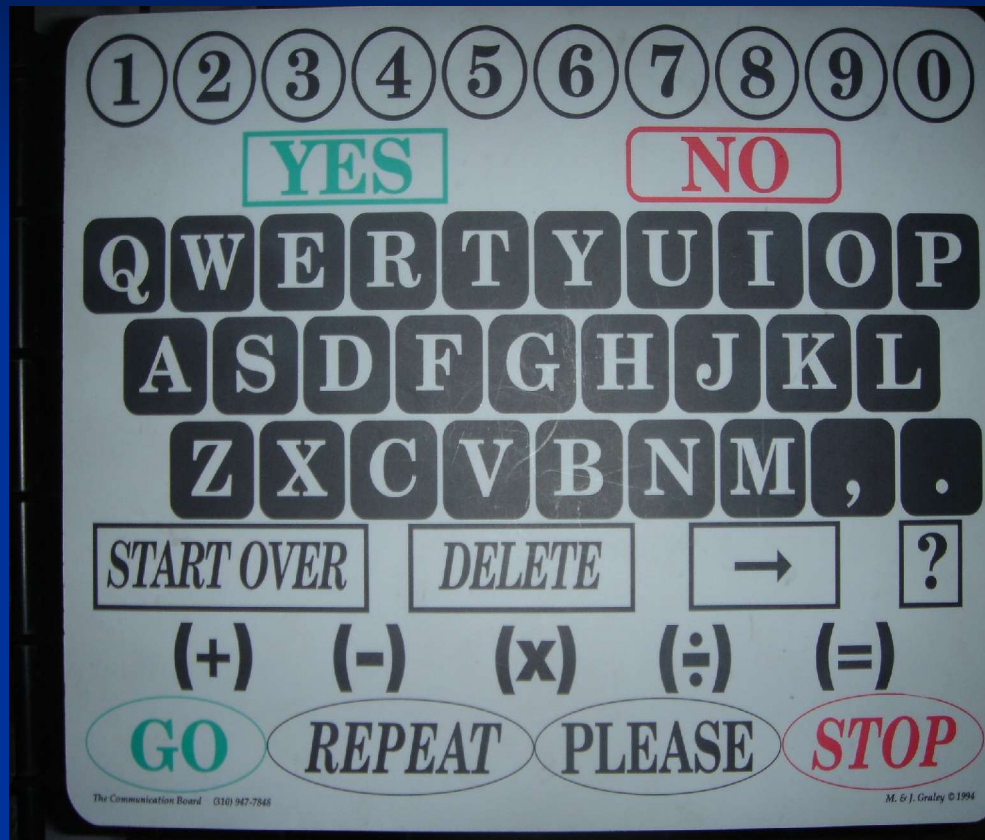
Art Communication

- Pictures, sculptures, and other forms of art used to express a thought
- Can express thoughts that are otherwise very difficult to express
- Not always recognized as communication
- Interpretations of art can differ

Example Communication Board



Example Communication Board



Communication Boards

- Most commonly used as a teaching tool to show the value of language
- Some boards can be large with hundreds of symbols. However, most contain a couple dozen or less
- Good if you know what the “script” will look like and that communication won’t deviate from that script
- Non-linguistic symbol boards may not be useful if you cannot foresee the direction a conversation will take
- Can be made very cheaply, and used in situations other techniques may not be able to be used (intimate settings, the pool, oxygen tent, etc)

Tantrums, Meltdowns, Violence, etc.

- Behavior is often a form of communication
- Autistics rarely do something for no reason!
- Often other forms of communication were tried but not listened to, prior to meltdown
- Its important to help a person find other forms of communication that are socially acceptable, but some behavior is unavoidable and a result of disability - thus it requires accommodation

Linguistic Communication

- Very flexible – in most languages, nearly any idea, opinion, request, or demand can be expressed
- Typically have moderate sized vocabularies
- Requires relatively little “guessing” on part of the communication partner, so unexpected utterances are fairly easy
- Requires ability to cognitively process language
- Requires communication partners to also have literacy in the language

Pre-Composed Notes – Good & Bad

- Requires fairly good written language skills
- Allows nearly unlimited composition time
- Allows use of spelling and grammar checking tools, proofreading by others, etc.
- Can often hide traits that might be seen as negative (no eye contact, unusual speech “accent”, need to stim, etc.)
- Can help mitigate “working memory” problems

Pre-Composed Notes - Examples

To get through security at a friend's apartment:

I do not speak. I am visiting <friend's name>'s apartment, <apt. number>. I have a key and am in the book. My name is Joel Smith.

Pre-Composed Notes - Examples

To buy a meal:

I would like two cheeseburgers and medium fries. I want a large Sprite to drink.

Pre-Composed Notes - Examples

To get back to my car at Denver airport:

M3

E-Mail, Letters

- People with good written communication look “good” in this medium
- Many business transactions can take place on-line or through mail-order (banking, shopping, personal correspondence, etc)
- For autistics with advanced literacy, this can be a medium of empowerment

Internet or Mail Ordering

QuikOrder - Specials Menu - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print Mail AutoFill Options

Address <http://www.dominos.quikorder.com/scripts/mgwms32.dll?MGW/LPN=MWEBLINK&wlap=QUIKORDERDOM&guid=Y> Go

Google Search Web 20 blocked AutoFill Options

SPECIALS

[Back to Current Order](#)

If you have a **Coupon/Special Code**, please enter it here:

OUR #1 FEAST PIZZA: THE Large Deluxe Feast with Pepperoni, Sausage, Fresh Mushrooms, Green Peppers and Onions \$15.99 plus tax

[Add to Order](#) [Quik Order!](#)

Pizza # 1	Available Pizza Types:	14" Hand Tossed, 14" Deep Dish, 14" Thin Crust
	Included Ingredients Are:	Green Peppers, Fresh Mushrooms, Onions, Pepperoni, Italian Sausage
	# of Free Ingredients	5

Feast Pizza: Large Meatza Pizza Feast (Pepperoni, Ham, Italian Sausage, Beef and Extra Cheese) \$15.99 plus tax (for the meat lover in you!)

Done Internet

Instant Messaging (IM)

- Requires a computer and internet connection
- Good for autistics who have problems with speech
- Eliminates non-verbal signals from the communication
- Little feed-back while other party is composing message, causing “out of order” messages

Sign Language

- Requires ability to learn a language
- Limited number of communication partners
- May be difficult for people with motor control issues
- Relies somewhat on facial expressions, eye contact, etc.
- May be good if you have severe CAPD but little problem with language and real-time communication

Interactive Handwriting

- Requires literacy of both sender and receiver
- Does not solve “real-time” issues
- Very cheap! Can be used when more expensive solutions cannot, such as in wet or high crime environments
- Easy to use, requires little training if handwriting is legible and literacy is achieved

Portable Text-to-Speech Synthesizers

- Require good language skills
- Easier to use with good typing speed and spelling ability
- Good for interacting with unfamiliar people where the message can be complex
- Often only practical means of communicating to a group interactive without someone else's assistance
- Can be used over the telephone
- Very expensive (\$2,500-\$16,000 USD new), although used units can be found significantly cheaper (Ebay – anywhere from \$15 on up, depending on age and condition of device)

Speech Synthesizers - Problems

- Often too quiet in noisy environments (restaurants, break times with large groups, train stations, etc)
- Often too loud in other environments (libraries, church) – can be considered disruptive by others
- Can be frustrating – spelling and speech synthesizer limitations often cause mispronunciations
- Unusable in some environments (moisture, high crime, at dark or in direct sunlight)
- English (American dialect) male voices are easiest to understand
- Foreign person and place names are almost always mispronounced
- If you are bilingual, you may need a multilingual device

TTY (TDD)

- Designed as a way of using the telephone by deaf people
- Great for calling large businesses in countries with disability accommodation laws (avoid long hold times, communicate clearly)
- Can be used with relay services where an operator translates between you're your TTY and a receiver who uses a different mode of communication (including a receiver who speaks normally and doesn't use a TTY)
- Internet relay is also an option for many
- People with communication disabilities may qualify for a free TTY from their government
- Requires understanding some basic TTY etiquette

TTY - Problems

- Requires good language skills
- Slower than normal phone conversation
- No “interrupting” each other
- Internet relay (and sometimes non-internet relay) is associated with fraud
- Hard to use with public phones and wireless phones
- International calls may require a device that can speak at two different rates (US and some other nations use 45 baud while most nations use 50 baud)

Facilitated Communication (FC)

- FC involves the physical support of a person communicating, often supporting the wrists, arms, or shoulder
- There is real communication taking place today because of FC
- There is also influenced communication (“puppet on a string”) taking place in the name of FC
- FC appears to deal with Parkinson-like motor planning issues that have been found in autistics
- Independent communication is always a long range goal, but its important to consider realities and allow other communication in the short term

What I Use

- Lightwriter and Link as portable text-to-speech synthesizers
- Handwriting
- Gestures
- “Vocalizations”
- Speech
- Text-to-speech computer program
- TTY
- Email & Instant Messaging
- Pre-composed written messages
- Familiar friends and family

PART III

PREJUDICE & IGNORANCE

Common Reaction

(in most of US & Canada)

- People assume you are deaf
- If you walk and otherwise outwardly appear normal, people don't seem to make assumptions about intelligence
- If a technological device is used, people are very curious
- No “active” discrimination
- Other than curiosity, most people do not make a big deal of it and just interact fairly normally

Less Common Reaction

(in most of US and Canada)

- You are less intelligent than average (especially if you use other forms of assistive technology or you “look” disabled)
- You are disruptive (speech devices in particular are often louder than desired)
- People speak to you in “child” voices and phrases
- Some people think you’re an “asshole” when you are now able to speak things I couldn’t speak before
- In workplace, written forms of communication can sometimes be considered more likely to cause arguments – “We need more facetime among employees”

Professional Attitudes

- People with moderate sized vocabularies and good word pronunciation, and who can use language, are assumed to not be a group that would benefit with alternatives to real-time speech
- Once a person develops any amount of speech, it's assumed that speech *should* become the main form of communication
- There is an assumption that IQ, “functioning level” or other bogus measures can be used to figure out who would benefit from alternatives to real-time speech
- Often address alternatives to speech but not the real-time component – either or both may be problematic

Autistic Attitudes

- Sometimes will misapply the terms “selective” and “elective” mutism (my pet peeve – you know less about my speech problems than I do, so don’t diagnose me!)
- Most autistics don’t have a problem with others using alternative means of communication
- May be significantly more curious than most people
- People with CAPD may have a hard time understanding synthetic voices
- Many autistics who communicate with real-time speech have a hard time with “turn taking”

Other Difficulties

- Group conversation is very difficult as it is very hard without using a natural voice to indicate a desire to participate – and speech devices don't allow the precise timing that this requires
- Most linguistic methods are best suited for seated positions – some are very difficult to use while walking or standing
- Employers will initially see someone who does not use real-time speech as someone who is less able to do the job
- All alternatives to speech, except perhaps sign language, are extremely slow compared to speech
- All alternatives to real-time communication and some alternatives to speech are prone to misunderstandings (especially emotional content)

Personal Attitudes

- “I am faking this”
- “I’m doing this for attention”
- “I’m not disabled enough to need this”
- “Speech is better”

MOST IMPORTANT POINT

It is okay to not
communicate
“normally”

QUESTIONS

???