17 different ways to say “yes”  

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“REALLY?”

“No man is truly English unless he can say ‘really’ 17 different ways” said Paul Johnson, however ironically. Cultural identity and personality are communicated not only through our choice of words, but how we say them.

AUGMENTATIVE & ALTERNATIVE COMMUNICATION (AAC)

Many people with speech impairments use communication devices based on Text-To-Speech (TTS) technology, allowing them to choose any word they wish, but giving little if any control over intonation. This can give a false impression that the user is also emotionally or even cognitively impaired.

INTERJECTIONS

In TTS, linguistic analysis may be employed to derive a ‘natural’ speech pattern for whole sentences, but not in the case of single word interjections. In answer to the same question, “yes” will be intoned differently depending on whether the speaker wishes to imply enthusiasm, surprise, reluctance or sarcasm.

SAY “YES” 17 DIFFERENT WAYS

If we wished to give AAC users subtle control of the nuance of speech, how would they make this choice? Standard punctuation, ‘’, ‘?’ or ‘?’ is too limited.

THE ‘YES-NO MACHINE’

Just one approach, inspired by early mechanical speaking machines, is the “Yes-No Machine”. Its vocabulary is limited to just “yes” and “no”, but the timing and pitch contours can be directly manipulated with a joystick. People from 8 to 80 years old have found this early prototype engaging and intuitive.

CLASSIFICATION OF SPEECH PATTERNS

Speech impairment is often accompanied by other physical impairments, however, so selecting intonation may be more appropriate than manipulating it. O’Connor & Arnold’s ten patterns of English intonation are one starting point: other phonetic and linguistic systems are of interest. Classifications could be based on either phonetic description (“yes” she said flatly) or emotional intent (“yes” she said noncommitally).

HOW MIGHT YOU CLASSIFY 17 DIFFERENT WAYS TO SAY “YES”?

This project will continue to explore the control of emotional nuance in synthesised speech. Radical new approaches will be inspired by phonetics and other disciplines such as psychology, scriptwriting and music.

Please contribute your thoughts, and leave your contact details so we can keep you updated and involved in interdisciplinary collaboration and future workshops. Thank you.

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