

What will people say? Speech system design and language/cultural differences

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This paper evaluates the effectiveness of three speech system design strategies in Pashto, a little-studied language of Afghanistan and Pakistan, drawing comparisons with English where possible. The strategies discussed are using (1) prompts at the ends of questions to constrain user responses, (2) specific lexical items in system prompts to encourage user echoing, and (3) introspection as a method for building recognition grammars. It was found that Pashto speakers were strikingly less influenced by system utterances than American English speakers were, and that introspection grammars, even though constructed by a speaker with unusually broad dialect exposure, had both many too many and a few too few, choices. We conclude that the effectiveness of these and perhaps other design strategies, many of which derive from work on English, may vary along linguistic or cultural lines, and new strategies may need to be explored for languages where these do not work well.