5SSEL020 – The Making of Language Lecture 1 The Psychology of Language Creation

INTRODUCTION

The urge to generate new languages is widespread among humans. But it is only in the last few thousand years that we have begun to understand languages as complex objects in their own right. Throughout history, most humans have lived in places where more than one language is spoken – although nowadays many of us act as if everyone around us speaks a single language. Many of us know how to use more than one language, at least in simple, specific contexts; and even if we are monolingual, we negotiate our way through different versions of our language on a daily basis. So why not play with what we know? And if we, as linguists, cannot play with languages, who can? The psychology of language creation is, essentially, giving yourself permission to play.

WHAT MAKES A LANGUAGE?

A language is defined by:

Lexis, or words. These carry the identity information (or meanings) of an utterance. Considerations about lexis include:

- The types of words available in a language (e.g. articles a type of determiner – are not available in Russian);
- The range of meanings in a particular word type, and the way
 the language sees particular relationships (e.g. English people
 say "on the bus", French "in the bus"; English "he [went to]
 work"; French "he went [to work]").
- In many languages, words can be put together to make new words (e.g. half+wit = halfwit). They can also sometimes be blended (e.g. British+Exit → Brexit).
- Are there special sets of words for particular functions (e.g. numbers, day names, types of tree, weather conditions) which are key to understanding the language?

Structure. This carries the propositional information of an utterance: WHAT is doing WHAT to WHAT. Considerations about structure include:

- Does the language have a fixed order for a typical two-argument sentence? This can be Subject-Verb-Object (SVO), SOV, VSO, VOS, OSV, OVS or unordered (the word-roles can be indicated by affix or by variance (e.g. she/her). English has systems for several word orders (e.g. "he saw the cat" (SVO), "the cat he saw ..." (OSV), "saw he the cat (archaic but VSO). This may seem arbitrary, but there are rules of usage in each case.
- How does the language handle indirect objects? It could ignore them (e.g. "Jan made a sandwich with cheese" → "Jan made a sandwich; it contained cheese"). It could allow only one, making a three -argument utterance. Or it could allow any number, stacking them together in a particular way, as English does (e.g. "Jan made a sandwich [with cheese] [for their gran]"). It could disallow hierarchical forms (e.g. "Jan made a sandwich [with cheese [from Belgium]]" → "Jan made a sandwich [with cheese], the cheese was Belgian"); or it could mark relationships with affixes, or it could just ignore the problem (like English).
- Is the language synthetic (it has a rich system of morphemes for particular grammatical functions), or isolating (every word remains separate, e.g. "not sure it is not possible")? If synthetic, is it agglutinating (the morphemes are added without changing the stem or themselves, e.g. "unsure it is not possible") or fusional (the morphemes can change the stem or themselves, e.g. "unsure it's impossible")? English is all three, but that is because it has three systems, not no system.

• Does the language have a system of conjugation for verbs (e.g. I am, you are, it is, we/they are) or declension for nouns (like Latin)?

Phonology. This is the method by which the language is exchanged. In most human languages it is by sound, but for your purposes it is visual – you are producing a written report. However, phonology also affects the emotional feel of the language: harsh sounds create a harsh language, fluid sounds a flowing language, etc. So, if your language is intended to be spoken, a section on phonology helps. Don't just say what the sounds are, talk about the effect they have. Considerations about phonology include:

- What sounds does the language use, and what does it not use (e.g. English does not use voiceless vowels, Japanese does; some languages use clicks, some use dental fricatives).
- What effect does the combining of language sounds have?
 (e.g. Modern English uses glides and mutations when two vowels occur together: co-operate → /kwop/erate).
- Are there any natural sound compromises, and does the language acknowledge them? (e.g. in+possible → impossible; but in+put → input in writing even though it is /imput/ in speech).
- How are tones used? Are they used to indicate phatic or pragmatic content, or are they for semantic content (e.g. tonal languages)?

Function. This carries the purpose of the utterance; what is the language for? Considerations about function include:

- What defines these speakers as a group, and how does this definition affect the language?
- What does this group of speakers have to say to each other that requires their own language?
- Is the language a subset of another language? If so, why is this subset needed?
- If this is a specialised language, how good is it at handling utterances from a different specialisation, or more general utterances?

Culture. This carries the intent and context of an utterance. Considerations about culture include:

- Are there local taboos, or acceptable behaviours which would be taboo for the reader? What words mean bad things in the local language but good things in English – and vice versa?
- Does the culture impose particular ideological constraints on the language (e.g. anarchism in Pravic)?
- Are there castes, classes, or other differentiators which affect the language? Are there words which can only be used by certain individuals? Are there words and phrases that do more than just give information (e.g. "Expelliarmus" when waving a twig around)?
- Is there an official organisation to control the development of the language (e.g. L'Académie Française)? Is there an unofficial convention affecting the language (e.g. Standard English & Received Pronunciation)?

Geography. This can affect the potentialities of the language. Considerations about geography include:

- Languages are influenced by their neighbours, so neighbouring languages tend to merge in peacetime or after conquest (e.g. Norman French & Old English). However, in times of conflict the opposite effect occurs (e.g. Serbian & Croatian in the past quarter-century).
- The proximity of other languages is a function of local agricultural fertility – the more fertile the locality, the more local languages (e.g. Papua New Guinea).

- Languages can be separated by isolating features (e.g. wide rivers, seas, mountain ranges), and can develop differently on each side of the dividing feature. Or geographic features can isolate a language, preventing it from mixing with its neighbours. Romansch and Euskera (Basque) are examples of this.
- Tonal languages seem to occur in humid areas of the globe, around the equator. A speculative reason is that tonal control needs lubricated vocal folds (Everett et al, 2015)¹.

In-group versus out-group. This affects language complexity and arbitrariness. The more that the language acts as a marker of the in-group, the more esoteric it becomes. Considerations about In-group versus Out-group include:

- Is this a secret language? If so, what mechanisms are in place to keep it secret? Who knows the secret, and how are they constrained to keep the secret?
- Are there shibboleths, features of the language which are difficult to master, so that if someone tries to infiltrate the group, they can be spotted?
- Are there secret signs? Can out-group people be inducted into the in-group? Are there initiations and expulsions?
- What is it that the group is trying to protect? Don't worry, you can tell me, I won't breathe a word.

These 28 questions help you to understand the psychology of the imaginary people whose language you are describing. If you can make the speakers of your language real then you will make your language real.

WHAT IS A LANGUAGE FOR?

There are five functions that a language performs. Some of them are mutually exclusive, so no single utterance performs all five; but any of them could be the primary purpose for a particular utterance – if such a thing as a primary purpose exists. The five formats are:

Language is for thinking. Utterances which perform this function may not even be uttered, so it may not seem to be a languagelike function; but it is the sole function of the vast majority of language constructs our brains produce every day. Language used for thinking needs little negotiation toward meaning, because it is all kept inside one head; and this makes it very different from uttered language. Nonetheless it is a legitimate target for a conlang or artlang.

Language is for signalling. This function produces utterances where negotiation toward meaning is limited – although, as it involves more than one brain, negotiation is less limited than in language for thought. The purpose of signalling is to engage the activity of others rather than their cognition.

Language is for socialisation. This function is all about negotiation toward meaning, and the meaning being negotiated toward may not even be explicit in the signal. For instance, a soldier's "Yes, sir!" does not indicate agreement with the officer's intentions, it is a signal recognising relative social roles: "I may not agree with what you have told me to do, but I recognise that you are not interested in my agreement, just my acquiescence". When language is used for socialisation, it is not about communicating ideas, it is about establishing social systems.

Language is a social instrument. In this function, utterances do not just lubricate socialisation, they create new realities. John Austin created the term **performative language** to describe doing things with words (see lecture 6).

Language is for communicating. This is the traditional view of what language is for; but, while it encapsulates what is believed to be a key difference between human and nonhuman interaction, it represents only a small fraction of language in use. We like to think that we are in a constant negotiation toward shared explicit meanings through language; but, while the constant negotiation is real, most of it is toward implicit agreement, and the tools of that negotiation are not linguistic. A sympathetic smile, a hand on the face, a quizzical expression — all are signs that the listener is engaging with the sender; and the speaker may be engaging with a slumped posture, a wavery voice, a sad face, all of which indicate that the words "I'm fine" are not the meaning the sender is conveying.

In each of these functions, the language is working in a different way: as a mechanism inside a single brain, as an object transmitted between two brains, as a lubricant inside a group, as a culture-making tool, and as a social relationship between people. Any language can do all these things, so you may wish to consider how your conlang or artlang handles these everyday uses of language.

WHY CREATE A LANGUAGE?

There are five reasons why people produce conlangs and artlangs, and most of them are only marginally concerned with communication. That, however, does not mean they are only marginally linguistic; playing with language is a form of self-teaching, testing the edges of what counts as language. The five reasons for making conlangs and artlangs are:

To experiment with structure. Does a language need more than just nouns and verbs? What use are the extra types of word we use? Could a language have a completely new type of word? Word order is usually seen as just a matter of two arguments, subject and object, with a linking verb; but indirect objects can have a major effect on this. For instance in English, indirect objects can attach to the subject, the object, the verb, or to the SVO proposition. English relies on context to indicate which applies in each case, with some prepositions (like with) working with all four. Could your language use a marker on the indirect object construct to indicate how it attaches to the rest of the sentence?

To experiment with grammar. How does morphology work in your language? Which linguistic effects are produced with affixes and which are generated with independent words? How do your language handle tenses and modality? Does your language have a tight and prescriptive grammar, or a loose and free-form system? How do you produce particular linguistic effects in your language? Which particular linguistic effects can your language not produce?

To experiment with culture. Who uses your language? Why do they use it? What happens if someone not entitled to use the language does so? Are there any explicit social reasons for the language, or are they all implicit? What shibboleths are built into the language, if any? How does the language handle pragmatic features like greetings, second-hand information, idioms, discourse markers?

To experiment with phonology. Is it a language of a region which tends to use particular sounds? Is it a phonologically rich or poor language? Is it harsh or gentle to listen to? Is it limited to just sounds, or does it engage other modalities?

To make a more effective method of communication. Loglan and Lojban are attempts to make a more logical language; Esperanto and Volapuk are attempts to make a simple and

easily-accessed international language. Has anyone tried to make a minimalist grammatical language? How else could you make a simple and international language?

WHAT LANGUAGE CREATION CANNOT DO

You cannot do everything in twelve weeks! You may be one of the 20% who have worked on their own language in the past, in which case you have a head start. But even in this case, do not try to produce a finished language. Remember that no language is ever finished until it's dead; and all your language has to do for this project is convincingly translate a short passage of less than 300 words..

A created language cannot help you explore a truly alien logic: we are trapped inside our own species-logic. However, you can address questions about logical aspects of other human languages, and give novel alternative solutions to particular issues in other human languages; or you can make the assumption that every science fiction writer makes: alien logic is basically human logic with a twist. However, remember that some of the twists offered by science fiction have turned out to be quite complex.

A created language cannot become a real language – unless you can convince people to start using it. Good luck with that.

BECOMING A LANGUAGE CREATOR

An artificial language, like, any language, is composed of three main components:

- Meaning units (lexicosemantic constructs, or words).
- Structure (grammar and syntax);
- Sounds, gestures, and their representations (phonology, other signs, and orthography – but just phonology and other signs for you, you don't have to create a scripting system for your language);

In creating your language you need to go through a repeated iteration of acceptance testing. This involves:

- Identifying meanings you want to include.
- Identifying sound groups (or alphabetic groups) you want to associate with the meaning.
- Identifying the limits of the meaning unit (word type; plurality; context; affix or free-standing; etc.)
- Constructing the morphs of the word according to your existing grammar rules; OR constructing new grammar and syntax rules for the morphs of the word.
- Testing the language against the translation, identifying issues, and going back to step one to solve them.

Informing your choices will be your views about what the language is for, who uses it, and how it is used.

¹ Caleb Everett, Damián E. Blasi & Seán G. Roberts (2015). Climate, vocal folds, and tonal languages: Connecting the physiological and geographic dots. In *PNAS* 112:5, 1322-1327.