

## Spelling by the Zambezi

Africa has a billion people, about 15% of the world's population. Between them they speak 2,000 languages, about 30% of the total number of languages in the world. This means that many of their languages have a relatively small number of speakers; many less than a million, some less than 50,000, less than the population of Bridgend for instance. Yet all these ethnic groups, even small ones like the 15,000 Fwe people of Zambia, are fiercely proud of their own special identity, their culture and their language.

Wales knows what it's like to be a small nation next to a large one and knows what it's like to feel a minority status within a much larger political unit, but nevertheless to feel proud of its distinctive heritage and culture and, of course, its language – even though it is itself a minority language within the nation. So it's not difficult to have a fellow-feeling with other people's awareness of their minority status in a much larger country.

But Welsh has a wonderfully rich literary heritage, with written records and documents dating back to the 900s. This is, however, not the case for most African peoples with a similar mother tongue population. Zambia with its 13 million people has 73 different ethnic groups and languages. English is the official language, the language of government, the law, national media, high business and secondary education. And some Zambian languages have huge populations like the Bemba with 3.5 million, Tonga (1 million) and Nyanja (800,000) which are also spoken by millions of others as second languages. These languages are used at home, at work, in church, for trading in the market, often in local government and in primary school. But then there are the smaller languages, the minority languages, which are also used at home, at work, in church, for trading in the market, but in much more restricted areas.

Most Zambians speak at least two languages, and many speak 5 or 6 – fluently, with ease! No problem! If you want to communicate with a wide range of people, you learn to speak their language!

But in the remoter rural areas, the situation can be very different. The Western Province of Zambia, for instance, is the size of England, but with a sparse population of just 650,000. Historians can identify the province with Barotseland which got incorporated – somewhat reluctantly, it must be said – into what used to be known as Northern Rhodesia, with a 'national' language known as Lozi, or to be more precise, siLozi. But then within the province there are peoples with small populations, but with their own languages – and still, as you can imagine, immensely proud of their distinctiveness and their independence. They have their own customs and traditions, their own sense of dress and architecture, and their own practices of work. The Fwe people know they are different from their neighbours, the Shanjo people, who are different from the Makoma people and the Kwamashi people and the Kwangwa people, and so on and on. But none of these people have a written heritage; their languages are not taught in school like siLozi. They are, nevertheless, vibrant languages which identify the people; they are spoken throughout their communities – the language of small talk, daily conversation, bargaining, gossip, stories, jokes, complaints, protests, thanks and love, praise and

criticism – all the things that you and I engage in every day. But not in writing. Now they want to change that; they see no reason why they should be left behind, and so I went to help them.

And this is how we did it. We were a small team of linguists, funded by a charity that responds to initiatives from local communities like these, who have indicated their desire to have their language in a written form. They select a team of local men and women and fund them, and the Seed Company provide the linguistic expertise for a three week workshop held in a location convenient to the peoples.

People arrived on the Monday and got to know each other, and the team of linguists explained how we were to go about things. On the Tuesday, the work began in earnest. The first task was to audio record a short story in their mother tongues, and then play it back bit by bit, with each member of the team attempting to write it down. Now, how could they do that, if their language had never been written down before? Well, all of these people were literate in siLozi and English; they knew from these languages the consonants and vowels of our (Roman) alphabet and what they stood for in those two languages. And they adapted that knowledge as best as they could in the first instance. There were disagreements among the team members, but there was also a surprisingly great deal of agreement despite each member having a go separately and independently. And then they discussed their differences with the linguist assigned to them, and gradually a greater degree of consensus emerged.

Language is all in the mind; what is written on the page is secondary to what is contained in the mind, and we linguists were there to tease this information out of their brains and facilitate the production of a spelling system that would be appropriate to their particular language. But there would be much more to do; how did we know whether all the sounds of the language had appeared in that first story? How did we know whether the pitch of the voice in pronouncing a word would be significant or not? Or stress? (Just compare your pronunciation of *insight* and *incite*; did you notice that the actual pronunciation of the consonants and vowels is identical, but that there was a shift of prominence from the first syllable of *insight* to the second syllable of *incite*?)

The second stage was then to try and use this very provisional attempt at spelling to work out the meaning of each word and each part of a word in the story. This would help to show up plurals from singulars, present tenses from past, and other grammatical information, and also preposition-type words, conjunctions, negatives, question indicators, and so on. The grammar of the language would have a bearing on the spelling of the languages, of course, as it does in Welsh and English.

The third stage was to go back to all the consonants and vowels that were suggested in the story, and check them all. As linguists, we knew what to look out for, what the likelihoods were, what possibilities and unusual cases there might be. If there was a *p* sound, then we might expect a *b* sound. If there was a *ng* sound, might it appear at the beginning of a word (like in Welsh, but not in English)? If there was a *l* sound, there may or may not be a *r* sound. Which consonants, if any, appear at the end of words? Can two

consonants appear together? Can each of the vowels begin a word? Is there an *h*? We then get the team members to think of as many words as they can that display all these features; this tests our emerging hypotheses and gives them practice in trying out their developing ability to spell.

The next stage was to work on another story using the same strategy as before, but this time we expected a much greater deal of agreement – and lo and behold, that is what happened. The team gained more confidence, and although there were disagreements, they were usually quickly resolved. But not always, because perhaps yet another sound had appeared, one that was rarer than most of the others (like the *-ge* in the English word *prestige*). Or, perhaps, two words sounded almost the same, but not quite: maybe one syllable of one of the words was pitched higher or lower, or was more prominent, like the *insight/incite* example in English. This can be quite tricky to sort out and is often very important; the difference between *teaching* and *urinating* in siLozi was one such sensitive example!

We then took stock of all the sounds we had discovered and agreed on the most appropriate letter for each sound, so that each separate sound that made a difference to the meanings of words (known technically as a ‘phoneme’) had a separate letter, and that each letter represented that one ‘phoneme’ only. This is what is often called a phonetic alphabet; Welsh is an excellent example of one, and English about the worst in the world. Here is a test for you: take the vowel *sound* of the English word *no*, and see how many different spellings you can find for that sound. (Well, you could start off with *know*, *toe*, and so on; don’t forget *plateau*!) You just don’t get that same kind of variety of spellings in Welsh. Now, another test: take the vowel *letter* of *no*, and think of different sounds that it corresponds to in other words. (In this case, you could start off with *do*, *done* and so on; and don’t forget that it is silent in *people*!) Incidentally, that is why children learning to read in Welsh make much swifter progress than children learning to read in English – there are simply far, far less rules to master. And that is why we approach the creation of a new alphabet for a language in that way, to increase the speed of literacy once their alphabet gets established.

However, there is still another great problem to resolve and that is to determine what constitutes a word in the language. Now we are used to this concept because we are literate – after all, you are reading this – and you recognize the words by the spaces either side of them. But it is not so obvious to someone who is trying to write their language for the first time. Imagine writing a word like *helpful* for the first time; you know there is a word *help* and a word *full*; how do you know that *helpful* should not be written as two words? And the word *unhelpful*? Is there a word *unhelp*? And *unhelpfulness*. Is there a word *ness*? The basic clues are: can the ‘word’ ever stand by itself? No, in the case of *un* and *ness* (apart from thinking of a Scottish loch and its monster). And: can anything ever come in between the ‘words’? No, in the case of *un-help-ful-ness*, nor even in the case of *helpful* – different from *he was a great help full of ideas*, because you could put another word like *always* between *help* and *full* (*he was a great help always full of ideas*).

Some languages 'glue' particles together on to their verbs, as they do in Bantu languages like siLozi. So if you wanted to say "I had read it" you put those four words into one single word: *Neniibalile* (*ne*=past + *ni*=I + *i*=it + *bal*=read + *ile*=perfect). All those particles come in a specific order and do not usually stand alone. This took a long time to work out in these languages, I can assure you!

At the end of all this hard work, we then put a little booklet together, showing the alphabet with examples of words that each letter occurs in, a little bit of the grammar to show how words are made up, a few other things like numbers and dates, and then the stories that we worked on. The booklets are then taken back to the communities for their comments and suggestions and hopefully with their eventual approval and blessing. As often as not, it is the churches that jump at these opportunities to get bits of the Bible and hymns and songs into their languages, but the orthography is there for all the community, for schools, public signs and notices, newsletters, businesses, other religions, local government, dictionaries and so the list could go on, including story tellers and local historians who can record tales and other items of their oral cultural heritage. It has invariably generated huge enthusiasm, with great excitement that their 'little' language can be written and read just like any major international language – and the words are *their* words in *their* language.

That's how we go about developing a spelling system; it takes three weeks of intensive work. (However, if there is no intermediate language like English or siLozi, then it takes considerably longer, because the linguist has to learn the language first.)

By the Zambezi? Well, yes, more or less. At Mongu, in the Western Province of Zambia, the river itself is 15 miles away, except in the rainy season when it spreads over those 15 miles on the Mongu side and another ten on the other side, to form a mass of moving water 25 miles across, like viewing the Devon coast from Swansea, or the Lleyrn Peninsula from Aberdyfi beach. The great River Zambezi flows 2,200 miles through Angola, Zambia, and along the borders of Namibia, Botswana, Zimbabwe, over the Victoria Falls, and then on through Mozambique to the Indian Ocean. It passes through dozens of ethnic groups with their distinctive languages and cultures – many of them still waiting for the time when they can learn to write and read in their own language.