

Language, education and identity in Africa

Pinxteren, L.M.C. van

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Author: Pinxteren, L.M.C. van

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6. Five case studies

The previous three chapters of this study examined three research questions, all three related to the central theme of language, education and identity in Africa. This has led at least to a 'proof of concept', showing that rational choices for language in education in Africa are both possible in principle and unavoidable, at least for some countries. Increased use of African languages will also be necessary for a continued process towards new cultural autonomies in Africa, although at present it is difficult to pinpoint how these processes are taking shape. What does seem certain is that the picture will not be even across Africa.

In this chapter, I will try to take this study one step further by examining five countries in a bit more detail. These are two countries already discussed earlier: Botswana (partly in its Southern African context) - and Ghana. To these are added three further countries. These are Tanzania, as a rare example of a country that is already using an indigenous language in more domains than most countries in Africa; Ethiopia, as the country in Africa with the language policy that is perhaps the most supportive of indigenous languages; and the Republic of the Congo (Congo-Brazzaville), as an example from Francophone Africa.

The structure of all brief case studies is roughly the same: a short general introduction, including a mention of the current official language policy; a reference to the cultural and political situation, to the extent made possible by the research presented in chapter three; an overview of (the evolution of) enrolment figures in education; an examination of the language situation and the options for rational choices for language in education; and some conclusions and recommendations. Section 6.6 tries to bring together the lessons learnt from all five studies.

6.1 Tanzania

Tanzania is the only country that has purposefully and successfully introduced an African language for national use. Was this a rational

¹ Information on the language ecology of these countries is contained in country-level spreadsheets of Levenshtein distances between language pairs, as generated through the ASJP database and programme. The full spreadsheets are available on request from the author.

choice, what improvements might still be possible and could this model be replicated in other parts of Africa as well?

Tanzania is a county in East Africa with a population of around 61 million people.² The country is linguistically diverse, just like many other African countries. However, it is unique in that it has adopted an African language (Swahili) as its official language, used in parliament, in the lower courts, primary education and teacher training colleges (Skattum 2018: 68) (see Temu, 1998 for an overview of how this came about).

6.1.1 Cultural and political situation

The Ethnologue currently discerns 125 languages spoken in Tanzania.³ Although Tanzania is a country of considerable cultural diversity, it would be misleading to speak of 125 culturally different entities in the country. In the cultural dimension analysis of chapter 3.5, I was able to analyse information on 18 ethnic groups. On all four cultural dimensions discussed there, the differences within Tanzania are greater than 20 points - such differences in culturally relevant survey question results are likely to correspond to noticeable differences in practice as well. The differences are largest in the Indulgence vs Restraint dimension, with the Luguru and the Hehe scoring on the very restrained side and the Haya and the Iraqw scoring relatively on the indulgent side. Large differences also occur on the 'Fix vs Flex' (LTO) dimension, with the Luguru, the Gogo and several other groups showing as very much on the 'Fixed' side and the Fipa relatively on the 'flex' side. In Tanzania, there is no direct mapping of cultural differences possible onto language clusters. A one on one identification of language with culture does not hold here. This image is supported by the hierarchical cluster analysis of chapter 3.4, which arranges the 14 groups distinguished for that analysis into six separate clusters (not all of the same size). This is an area worthy of further investigation.

Blommaert (2014) shows how the promotion of Swahili was coupled with the state ideology of 'Ujamaa'. This ideology, he argues, was based on overly simplistic and utopian ideas of pan-African values, based on an idealized communal village life which supposedly was the cradle for 'African Socialism' (p 15). He points to the contradiction between these utopian ideas and the actual situation on the ground: the actually existing cultural differences within the country were seen as potentially divisive, were branded as backwards and were consciously

² https://www.worldometers.info/world-population/tanzania-population/ accessed 26 July 2019

³ https://www.ethnologue.com/country/TZ accessed 25 July 2019

ignored or played down, not studied and not used as the basis for developing the 'Ujamaa' ideology (p 32). The idea, therefore, was to build a new Tanzanian nation and citizenry, with the Ujamaa ideology and the Swahili language as unifying factors. Blommaert shows that this in fact failed: the idea of a new Tanzanian nation built around Ujamaa greatly underestimated the 'cultural resilience' of the 'common man' (p 40).4 However, establishing Swahili as the dominant language in the country did not fail: it was a big success and now seems unchallengeable (p 148). Why? Why was it possible to establish Swahili in this way, but not to build a culturally homogeneous nation? Blommaert doesn't provide an answer, his analysis stops at this point. Topan (2008: 264) lists a variety of factors explaining the choice for and success of Swahili: the existing caravan routes; the use by the Germans and the British of Swahili; the use by missionaries; the fact that Swahili was not the language of a dominant ethnic group; and lastly, the role of Julius Nyerere. These are all factors that explain the initial choice for Swahili, but they do not fully explain its continued success. My analysis suggests that in fact, an obvious explanation is available, one that may be unique to Tanzania. I will return to that below.

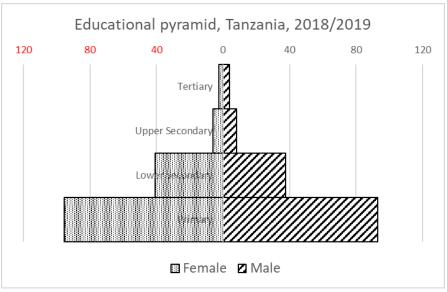
6.1.2 Educational situation

Blommaert demonstrates that the educational system that was inherited from colonial times was left intact. Therefore, it continued to serve the purpose of selecting those who were intelligent enough (in language aptitude terms) to be recruited into the national elite. In order to do this (although it was never explicitly stated as a purpose), the medium of instruction in secondary and tertiary education remained English (p 61).⁵

To this day, the educational system in Tanzania remains highly pyramidical, as shown in graph 1 below.

⁴ There is an important literature discussing how and why African countries post-independence were forced in some way to take account of precolonial institutions and structures. See for an important overview Boone (2003).

⁵ Even though today, for example at the University of Dodoma some of the Swahili-language courses are actually taught in Swahili – see for example https://drive.google.com/file/d/1HLJ3wpeOVq4IPZwdf jPkgprZiJjtx9 /view p 218, retrieved 13 February 2020.



Graph 1 - Educational pyramid, Tanzania, 2018 (Tertiary education: 2019)

The ratio of GER in primary education to tertiary education is 30.5 – as was shown in chapter four, this makes the Tanzanian educational sector highly pyramidical, with a large gap between those who receive higher education and those who do not. Note that slightly more girls than boys are in primary education, but in tertiary education boys dominate.

This selective nature is even more clear when one examines secondary education. In Tanzania, secondary education is divided into the Ordinary level (the first four years) and the Advanced level (the last two years). There is a selective exam after the first four years, leading to a sharp fall in attendance rate between the O and the A level. This is aggravated by the fact that O-level education is free and A-level education is not.⁶ In 1995, the Gross Enrolment Ratio for the O-level was below 7%; by 2010, this had risen to 40% (accompanied by a sharp drop in exam pass rates, as cited in the RISE report 2017, p 3). The same ratio for the A-level was less than 3% in 1990 and less than 9% in 2010. So, in 2010, fewer than 25% of the children who completed lower secondary education got to progress to the advanced level.⁷

Still, with a GER for the initial level of secondary education at around 40%, one can expect that the policy of secondary education in English will come under increasing pressure, as is indeed the case. For many

⁶ This was at least the case in 2015. It could be that the introduction of school fees at this level helps to explain the gendered difference in enrolment.

⁷ http://data.uis.unesco.org/#, accessed 26 July 2019.

children, the switch to English at the start of secondary education will come too soon: their level of English will not be good enough to understand the teaching in that language, even though they would understand the teaching if it would be in Swahili - as illustrated by Mwinsheike (2003) and more forcefully by Qorro (2013). The net effect of this has to be that those children who are less gifted in language or who come from a background less favourable to learning English or who are hampered by a combination of both factors learn less in school than they could learn if the teaching would be in Swahili. In other words, the Tanzanian model leads to a built-in wastage in the system which means children do not reach their full potential. In fact, changing to Kiswahili for secondary education has been declared an official policy, but this policy has never been implemented. Tibategeza and Du Plessis (2018) explain why this is not likely to happen yet: they signal that intentions from the past have not been implemented and that there is no political will at present. '[E]ducation stakeholders still think that English is a language of global business, science and technology and would therefore wish their children to be instructed in that language for them to master it. Additionally, parents still hold misconceptions (...)' (p. 96).

6.1.3 Language situation and language choice options⁸

Blommaert (2014) has described the role of language and state ideology in building Tanzania as a culturally coherent country. He sees language as a 'mosaic' of registers (p 1) and tries to show such a mosaic also in his study of Swahili. In chapter 1.3, I have argued that this type of approach, that is different from the distinction between discerned and designed languages that I propose, tends to downplay or overlook the role of language policy. For Tanzania and Swahili, it is impossible to overlook the role of language policy, because Swahili has been heavily shaped into its designed status, requiring considerable state intervention, joined by an active intellectual elite. This intervention has, as Blommaert shows, been tremendously successful in establishing the hegemony of Swahili in the country. For Blommaert, this is a matter of 'homogenisation from above', of 'institutionalised ideological constructs' (p 3) - terms that seem to denote something negative, instead of something legitimate and normal in modern society.

The ASJP database discerns 106 languages spoken in Tanzania, to which I have added English. Some of these may be different word lists

⁸ Elements of this case study have been published in Pinxteren, Bert van (2020b: 145 – 152).

for what some might say is the same language, leading to ASJP scores that show very easy to learn language pairs, for example for the different varieties of Swahili discerned by the database.

A first thing to note when examining the Tanzanian matrix in light of the above discussion is that English is a difficult or very difficult language to learn for speakers of any Tanzanian language.⁹

A second key characteristic of Tanzania is that indeed, given the criteria developed in the previous chapters, Swahili is a rational choice as a language for Tanzania: it is 'easy' or 'very easy' to learn for speakers of more than 90 other discerned Tanzanian languages. 10 Note that other choices would have been possible as well - there are a number of other Tanzanian languages to which the same applies and which could also have been chosen. What this means is that for the great majority of Tanzanians, Swahili is far easier to learn than English. In terms of the U.S. schema discussed in section 5.4, it is the difference between 15 weeks of full-time instruction for a linguistically gifted person and 80plus weeks for such a person.¹¹ Still, this means that using Swahili as the designed language requires learning for most, if not all speakers of related discerned languages. Yet, the common misconception also quoted by Blommaert (p 63) is wrong. Blommaert writes that the consequence of the nationwide adoption of Kiswahili was "that most children in non-urban inland areas, where Swahili was not the mother tongue of the population, were faced with a 'hidden' language barrier when they entered primary school: that of Swahili. For them, Swahili was as foreign a language as English (a fact already observed by Khamisi 1974: 290) - in spite of the fact that it had become the national language and in spite of the widely heard argument that 'everyone spoke and understood Swahili'." This point could be read in two ways. One could say that the sentence postulates a dichotomy between mother tongues and all other languages - the 'foreign' languages. In such a reading, English and Swahili are both equal in the sense that they fall in the category of 'foreign' languages. One could also say that there is a distinction of degree: some languages could be more 'foreign' (or more difficult to learn) than others. My benchmarking of ASJP distances suggests that this second reading is more appropriate: some languages are a good deal more 'foreign'. For the great majority of

⁹ All ASJP scores are above 95, a good number above 100.

¹⁰ 'Very easy' being defined as an AJSP score of below 60, 'easy' as below 90.

¹¹ These figures serve to illustrate the order of magnitude we should be thinking about when comparing between easy or difficult to learn language pairs.
Precise values for specific language pairs and specific countries and educational systems can only be established through further research.

Tanzanians, Swahili is far easier to learn than English. Here we find the answer to the question posed in the preceding section: this is why even though the cultural unification project failed, the linguistic project of Swahili could become an enduring success.

The borders of Tanzania are not linguistic borders, though. What is true for the Tanzanian languages also holds for most if not all of the languages of the Narrow Bantu language family, as the table below shows.

3110 W 3.			·····	······	·	,	·	·····
2 SYNONYMS, AT LEA	ST 28 WORI	DS						
LOANWORDS EXCLUDED								
LDND								
	GIKUYU	KOONGO	LINGALA	LUBA	SOTHO SOUTHERN	SWAHILI	SHONA	ZULU
GIKUYU	0							
KOONGO	93	0						
LINGALA	87	78	0					
LUBA	86	84	80	0				
SOTHO_SOUTHERN	96	89	83	83	0			
SWAHILI	90	80	80	69	83	0		
SHONA	89	78	90	77	83	73	0	
ZULU	96	83	89	82	75	79	82	C
				1	SOTHO			
	GIKUYU	KOONGO	LINGALA	LUBA	SOUTHERN	SWAHILI	SHONA	ZULU

Table 1 - ASJP database output for selected Bantu languages¹²

It is interesting to note that this similarity is hidden from view by a well-known language classification system such as the Guthrie classification, as updated by Maho (2009). The Guthrie/Maho classification groups Narrow Bantu languages into 16 zones, divided into groups, divided into individual languages. Under this classification, Bantu languages spoken in Tanzania come under the E, F, G, J, P and M zones, giving the impression of a much greater differentiation than what the ASJP database suggests.¹³ (Thus, Swahili is seen as part of the G40 group,

¹² Note that the scores are not for correlation but instead for ASJP distance. The legend was given in section 5.3 above; higher numbers mean greater distance.

ASJP distance score	Difficulty
< 60	Very easy
≥ 60, < 90	Easy
≥ 90, ≤ 95	Medium
> 95, < 100	Difficult
≥ 100	Very

¹³ Banda (2016: 273) calls this 'caging languages into zones'.

Sukuma as part of the F20 group – suggesting they are completely different. The ASJP database also shows them as different, yet this is an easy language pair, ASJP distance 70.)

It is good to realize that in respect of languages, Tanzania and Kenya are two very different countries. Kenya has far more numerous groups of speakers of Nilotic and Cushitic languages than Tanzania does. As the Tanzanian matrix shows, Swahili is a far more difficult language to learn for Nilotic and Cushitic language speakers than for Bantu language speakers. This factor alone may help to explain why pleas such as those by Kanana (2013) to make Swahili the single official language for Kenya as well have fallen on deaf ears.

A third specificity of the Tanzanian situation is the fact that this is a country with two extreme situations; in contrast with a country like Ghana, there are almost no language pairs with 'medium' learning difficulty. So, on the one hand we see a large group of languages that are close to one another. On the other hand, there is a small group of languages that are neither close to one another nor to Swahili. These languages deserve to be examined separately.

The largest group is made up of Nilotic languages. These fall into two clusters:

- Maasai. Also spoken in Kenya. It has over 650,000 speakers in Tanzania and in total is spoken by around 1.5 million people. For Maasai speakers, Swahili and English (and indeed all other languages spoken in Tanzania) are roughly of the same level of difficulty.
- Datooga. Number of speakers estimated by the Ethnologue is around 160,000. The ASJP database discerns four varieties, mutually very easy to learn. However, there is no other language spoken in Tanzania that is easy for them; for them, Swahili and English are roughly equally difficult. The Datooga – Maasai language pair is difficult as well.

Then, there are a few Cushitic languages spoken in Tanzania:

 The largest Cushitic language in Tanzania is Iraqw, number of speakers estimated to be above 600,000. The others are Alagwa (around 50,000) and Burunge (around 28,000). Kieβling and Mous (2003), cited in the Ethnologue, report 'relatively high similarity' between Alagwa and Burunge. The ASJP database suggests that these language pairs are indeed 'very easy' or 'easy'. For Iraqw speakers, Swahili is somewhat easier to learn than English (it falls into the 'medium' category). Gorowa is another Cushitic language spoken in Tanzania, but it is not in the ASJP database.

Then, there are two language isolates:

- Sandawe. There are few language isolates in Africa, but this is one of them. As with Datooga, no other language spoken in Tanzania is easy for them, Swahili and English are roughly equally difficult. Number of speakers estimated by the Ethnologue around 60,000.
- Hadza. Again, a language isolate in the same situation as Sandawe, but the number of speakers is estimated at only around 1,000. It is seen as threatened by the Ethnologue.

Lastly, there is one mixed language:

• Mbugu (or Ma'a). Mbugu is unique, in that it is a mixed language that is made up of Bantu and Cushitic elements. The ASJP database gives separate word lists for 'inner' and 'normal' Mbugu. 'Normal' Mbugu has the Bantu vocabulary, and is therefore closer to Swahili than 'innner' Mbugu. Mous (1995: 199) suggests that Mbugu was originally a Bantu language, but that the additional elements were added because the Mbugu needed to set themselves apart from their neighbours. It has around 7,000 speakers.

It is to be expected that educational results of those native speakers of the minority languages listed above who are not bilingual from birth will fall below those of the Bantu speakers. Because Tanzania publishes its exam results at the school and district levels, it might be possible to substantiate this through research. However, this means controlling for such factors as bilingualism, linguistic mix in schools, general socioeconomic factors and school-related factors such as the ratio of (qualified) teachers to students and the enrolment ratio in the district. A quick comparison of 2019 primary school results shows an average score for three districts that have at least a large proportion of non-Bantu speakers that is 89% of the score of three districts with mostly Bantu speakers. This seems significant, given the fact that many schoolchildren in Tanzania are exposed to Swahili from a very early age.¹⁴

¹⁴ The comparison is between Bunda, Hanang and Kondoa districts (non-Bantu) versus Ikungi, Manyoni and Singida Rural (Bantu) districts. See https://www.necta.go.tz/ for information on the exam results.

To sum up: Swahili is difficult or very difficult for less than 2 million or 1.5% of the Tanzanian population. For all others, it is easy or very easy to learn. However, learning an 'easy' designed language still requires formal schooling and a reasonable amount of effort, even for those gifted in languages.

What does this mean for rational choices in education in Tanzania?

6.1.4 Conclusions and recommendations

A number of conclusions and recommendations seem obvious, keeping in mind the general principles that have been outlined in chapter 5.2.

- 1) The choice of Swahili as a designed language of (primary) education in Tanzania is a rational one (although not the only one that would theoretically have been possible): this language is easy or very easy to learn for over 98.5% of all Tanzanians. It should be noted that for most speakers, Swahili still requires a fair amount of learning, although far less than learning for example English.
- 2) It is to be expected that sooner or later, the pressure to switch from English to Swahili in lower secondary education will increase. Given the current enrolment levels near what I have defined as the 'language barrier', this would be a rational step to take that is bound to increase efficiency in education. However, it is important that this transition should not be undertaken overnight but that it be planned carefully. If and as enrolment figures increase in senior secondary education, a change to Kiswahili at that level will also be necessary, but at the moment it is not. 16
- 3) Compared to the current language policy, this means that English will be taught as a subject up to the end of secondary education; Swahili will replace English as medium of instruction at that level. In tertiary education, the current English-only language policy will have to change as well. Swahili will become more and more important, as an increasing proportion of tertiary education will use Swahili as medium of instruction. If this occurs in parallel with an increase in enrolment levels, then the paradoxical result of this will be, as demonstrated in chapter 4.2.2 that the proportion of the population that have a

¹⁵ For a convincing description of the benefits of this, see Brock-Utne (2013).

¹⁶ For an interesting perspective on this by an education practitioner, see https://www.thecitizen.co.tz/magazine/success/1843788-4009890-yapdwpz/index.html accessed 8 August 2019.

- command of English at a reasonable level will increase, compared to the current situation.
- 4) The current monolingual education system is wasteful in terms of talent and resources, especially regarding speakers of non-Bantu languages. Again, this should be changed in a gradual and well-planned way.¹⁷ For the smaller population groups, existing levels of bilingualism might be used as a resource, but the limitations of this case study do not allow definite conclusions on this point.
- 5) Topan (2008: 266) argues that by now, the success of Swahili and the extent of intermarriages within the country have reduced the dangers of 'tribalism'. Quoting Batibo, he argues that liberalization and decentralization may help in checking the erosion of indigenous languages in the country. Indeed, as recalled above, cultural boundaries do not coincide with linguistic boundaries in Tanzania. Therefore, it should be possible to introduce further efficiency gains without threatening national unity. This can be done by gradually introducing instruction using local languages as medium of instruction at the primary level, especially for those native speakers for which Swahili presents relatively greater difficulties. The wide consensus among scientists is that early education in a language that is closest to the one spoken at home yields best results.
- 6) These recommendations mean that the study and teaching of languages spoken in Tanzania besides Swahili should be taken up in the country, as recommended by Muzale and Rugemalira (2008). Students should be encouraged to study a Tanzanian language besides Swahili and language departments should be set up for other Tanzanian languages, to start with the minority languages. It is telling that the Swedish-funded 'Languages of Tanzania' project that ran until 2008 was located in the 'Department of Foreign Languages and Linguistics' of the

¹⁷ The task may not be trivial; thus, Trudell and Adger (2014) point to problems related to Maasai orthography as developed in the colonial period that would have to be addressed.

University of Dar-Es-Salaam – the University had no department for the study of other Tanzanian languages besides Swahili.¹⁸

In general, this first case study demonstrates that the approach developed in the previous chapters shows promising results, also when compared to existing literature, at least for Tanzania. Swahili is a rational choice for education in Tanzania. Are other African countries in a position to make a similar choice? Is it possible to say something about that using this approach? For that, we will need to look at a few more cases.

¹⁸ Currently, though, there is research into 'other Bantu languages' within the Department of Swahili Language and Linguistics:

https://www.udsm.ac.tz/web/index.php/institutes/iks/department-of-swahili-language-and-linguistics accessed 28 August 2020.

6.2 Republic of Congo

In the previous case study of Tanzania, we have shown how in that country, the choice of Swahili as a designed language to serve a large number of relatively similar discerned languages was indeed a logical choice, given the proximity to one another of the great majority of the languages discerned in Tanzania. Most people in Tanzania speak a discerned language that is part of the similar family of Narrow Bantu languages. However, these languages are spoken in many more countries in Central, Eastern and Southern Africa. Would a choice like the one made for Tanzania be possible for other countries as well? In this case study, we will look at a country with a different colonial history but with a similar linguistic makeup: the Republic of Congo (also known as Congo-Brazzaville). All languages discerned for the Republic of Congo belong to the Narrow Bantu family. What can be said about rational choices for language use in higher education in such a country? The Republic of Congo is a country in Central Africa with a population approaching 5.5 million people,2 heavily concentrated in the South and in the region around Brazzaville (the Pool region). Congo has retained French as its official language after gaining independence in the wave of countries that became independent in 1960. Lingala and Kituba are the two officially recognized 'national languages'.

6.2.1 Cultural and political situation

The Ethnologue currently discerns 62 languages spoken in Congo,³ but again, this does not mean that there is a similar number of different cultural entities in the country. Congo was not included in the cultural dimension analysis in chapter three of the study, due to a lack of available survey data. For Vansina (1990) the entire area was part of the same cultural tradition, at least until around 1920.

After independence, the country experimented for a period with socialism, with various rulers, until Denis Sassou-Nguesso took over in 1997. Although multi-party democracy was introduced, Sassou-Nguesso has managed to remain as president ever since, winning the civil war of 1997-1999. Discovery of oil made him and his family very rich.

¹ Although there is a small group of Bayaka in Congo who speak an Ubangian language.

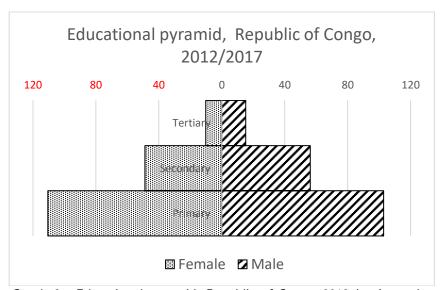
² https://www.worldometers.info/world-population/congo-population/ accessed 8 November 2019.

³ https://www-ethnologue-com/country/CG accessed 8 November 2019.

6.2.2 Educational situation

In the field of education, the country has made considerable progress. Primary education is universal and secondary education is common. However, there is a gap between lower and upper secondary education: just over half the children who go to lower secondary education continue on to upper secondary education. The Gender Parity Index shows that whereas the ratio of boys to girls in lower secondary education is close to 1, many more boys than girls proceed to upper secondary education (the Gender Parity Index drops to 0.57).⁴ All education is in French.⁵

The education pyramid for 2012 (primary and secondary education) / 2017 (tertiary education) is shown in the graph below.



Graph 2 - Educational pyramid, Republic of Congo 2012 (tertiary education: 2017)

Note that the GER for tertiary education in Congo has increased by 50% between 2012 and 2017, probably partly as a result of the country's Education Strategy 2015-2025. The gender imbalance in favour of boys at secondary level becomes even more prominent at tertiary level.

The ratio of GER in primary education to tertiary education is 8.4 – this makes Congo a country with a fairly pyramidical education structure, though less pyramidical than Tanzania (with a ratio of 30.5).

⁴ UNESCO data, 2012.

⁵ http://www.axl.cefan.ulaval.ca/afrique/congo.htm accessed 15 November 2019.

6.2.3 Language situation and language choice options

Where the Ethnologue discerns 62 languages currently spoken in Congo, the contributors to the ASJP database discern 126 Congolese languages, to which I have added Swahili and French.

By now, it should not come as a surprise that French is difficult or very difficult to learn for L1 speakers of all Congolese languages.

Where in Tanzania over 98% of the population speaks one of the 'Narrow Bantu' languages, this is the case in fact for the entire population of the Republic of Congo: almost all languages discerned in the country belong to the Narrow Bantu family. As was shown for Tanzania, the discerned languages in this family are all fairly closely related - most of them form easy or very easy language pairs. Does that mean that, like in Tanzania, it would be possible to make a rational choice for one national indigenous language in this country?

Baka (2005: 107) notes that there are four languages of wider circulation in Congo: Kituba, Lingala, Laadi (Lari) and Sango.⁶ A comparison of these four languages together with Koongo as shown in the table below reveals how close these languages are: Sango is clearly more distant, but the other language pairs are easy or very easy.

2 SYNONYMS, AT LEAST 28 WORDS									
LOANWORDS E	XCLUDED								
LDND									
	KITUBA	KOONGO	LAADI	LINGALA	SANGO				
KITUBA	0								
KOONGO	62	0							
LAADI	68	47	0						
LINGALA	83	78	79	0					
SANGO	94	97	98	92		0			
	KITUBA	KOONGO	LAADI	LINGALA	SANGO				

Table 2 - ASJP distances for languages with wider circulation in Congo

If we were to apply the same logic as in Tanzania, would it be possible to develop any of these languages into a designed national language for use in higher education in the Republic of Congo? Looking at the full matrix and purely from a theoretical point of view, the best candidate

⁶ Sango is the lingua franca of the neighbouring Central African Republic; the Ethnologue does not report any Sango-speakers in Congo.

would seem to be Wumbvu – it presents a problem for only three other languages, all with very few speakers.

Again, the ASJP database itself is not a sufficient tool for making choices of this type: input from linguists with more detailed knowledge of the local languages would be a necessity.

It is interesting to note that in the Republic of Congo, in spite of any formal policies, a development such as the one suggested above is actually occurring: Bagamboula (2019) describes how Laari (Laadi) has developed into a lingua franca in the populous areas of Brazzaville and the surrounding Pool region, merging elements of Koongo, Suundi and Lingala. In her view, this has also led to the forming of what she calls a 'mega-ethnicity' of Laadi-speakers. She does not specify to what extent Laari is also used as a lingua franca in other parts of Congo, but with the support of a properly-designed language policy, it is thinkable that such an expansion would be possible. In that way, Laari could possibly develop into a distinct national language for the Republic of Congo. In a way, this development seems similar to what has happened in the Central African Republic, where Sango has obtained the status of national language (Mazrui, 2019).

It is good to note that other choices would also be possible.⁷ Thus, one could imagine a choice of keeping several national languages for the Republic of Congo but choosing them in such a way that they overlap with choices made in neighbouring countries and are more in line with cultural and historical identities that may have a stronger position in the region. This would also give a potential for pooling the resources for language development from several countries. For example: the ASJP databse discerns 38 Kikongoic languages,⁸ spoken in Gabon, RdCongo, Angola (Cabinda) and Congo DR. They form easy or very easy language pairs and one of them could be developed into a designed 'standard Kikongo'.

Kituba and Laadi are both Kikongoic languages, but Lingala is not, although the combination of Lingala with most Kikongoic languages is still easy. This could mean that such a bilingual solution would be more appropriate for RdCongo.

6.2.4 Conclusions and recommendations

As was the case for Tanzania, a switch to an indigenous language for tertiary education is not yet necessary in Congo, since enrolment figures are so low that French or any other language can be used.

 $^{^{\}rm 7}$ I am grateful to Dr Elise Bagamboula for suggesting this alternative.

⁸ See https://glottolog.org/resource/languoid/id/kiko1234 for a list of Kikongoic languages as discerned by the Glottolog database.

Already at present, the use of French as medium of instruction in primary and secondary education is bound to lead to a waste of talent and resources, because it is likely that not all children have a level of French that is sufficient to follow education in that language, although in principle they may have the intellectual capabilities.

Baka (2005: 102) proposes to use the L1 as much as possible for the first four years of primary education and to switch to an indigenous language of wider communication after that and to use this language until the end of secondary education. In his proposal, this language of wider communication will be taught as a subject in the first years of primary school and another language of wider communication would also be taught as a subject. He proposes to use the four languages mentioned above in four different parts of the country up until the end of lower secondary education and to switch to Lingala and Kituba after that, using both also at the tertiary level.

The ASJP database suggests that a simpler solution might be possible, thanks to the predominance of the Narrow Bantu language family in Congo: one or two discerned languages would be relatively equally difficult (or easy) for almost all Congolese and could therefore be chosen as national language for use in higher education. As Bagamboula (2019) argues, a development towards a common lingua franca is already taking place for Laari. Supporting such a development based on an inclusive language policy would help build a national culture in Congo, would make learning easier and more efficient for children and would therefore provide important benefits for the country as a whole. However, a bilingual solution around one of the Kikongoic languages and Lingala would also be possible and it might be culturally more appropriate.

Compared to the current language policy, this means that French will be taught as a subject up to the end of secondary education; one or two indigenous African languages will replace French as medium of instruction at that level. In tertiary education, these indigenous languages will become more and more important, as an increasing proportion of tertiary education will use them as medium of instruction. If this occurs in parallel with an increase in enrolment levels, then the paradoxical result of this will be, as demonstrated in chapter 4.2.2 that the proportion of the population that have a command of French at a reasonable level will increase, compared to the current situation.

Of course, there are countries in Africa where the linguistic situation is much more complicated. What would the ASJP database suggest for such countries? That is the challenge for the next case study, which looks at Ethiopia.

6.3 Ethiopia

In the previous sections, we used the approach developed so far to examine the logic (or otherwise) of the language choices made in Tanzania and in the Republic of Congo. For Tanzania, the choice of Swahili as a designed language for use in (primary) education was a rational one, because it is easy or very easy to learn for more than 98.5% of all Tanzanians. It is to be expected that sooner or later, this choice will be extended to at least the first level of secondary education as well. However, for the speakers of some minority languages, Swahili is *not* a logical choice and a recommendation was to introduce those minority languages as medium of instruction, in the first instance in primary education, at least for the larger population groups. For the Republic of Congo, a similar choice would be possible, although the historical circumstances are very different and such a choice has not (yet) been made.

In this section, we will look at a country with a completely different linguistic situation, where completely different language choices have been made in education: Ethiopia. Will it be possible to say something rational about Ethiopia, using the approach developed so far?¹

Ethiopia is a country in the horn of Africa with a population of nearly 113 million people.² Just like many other African countries, it is linguistically very diverse. From a political point of view, the country is unique in Africa, in that it was never colonized in the same way that other African countries were. Therefore, an indigenous language (rather than a non-indigenous colonial language), Amharic, was for a long time the language of instruction; it is still the national working language.³ Ethiopia is also unique in that since 1991, the government has been in the hands of the Ethiopian People's Revolutionary Democratic Front (EPRDF), which gained power after a civil war that had its origins in part in failure to accommodate the internal diversity in the country (Fiseha 2012: 439). In fact, Ethiopia is now unique in Africa in explicitly recognizing the rights of its nations, nationalities and peoples in its Constitution.

¹ I am grateful to Dr. Azeb Amha for her valuable comments on an earlier draft of this case study; note, however, that the analysis is mine and possible mistakes and inaccuracies are as well.

² https://www.worldometers.info/world-population/ethiopia-population/accessed 23 October 2019.

³ Recently, however, the government decided to introduce four additional working languages (Afar, Oromo, Somali and Tigrigna). The practical meaning of this remains unclear. See https://qz.com/africa/1812085/ethiopia-adds-afan-oromo-somali-afar-tigrigna-languages-to-amharic/, accessed 29 July 2020.

"A 'Nation, Nationality or People' for the purpose of this Constitution, is a group of people who have or share large measure of a common culture or similar customs, mutual intelligibility of language, belief in a common or related identities, a common psychological make-up, and who inhabit an identifiable, predominantly contiguous territory."⁴

Individual regional states are free to choose their own working language and also to decide on the language(s) of instruction in primary education. English became the medium of instruction at the secondary level and is the only medium of instruction at tertiary level (Appleyard and Orwin 2008: 278).

6.3.1 Cultural and political situation

In 1994, Ethiopia became a Federal Republic. Administratively, it currently consists of ten regional states and two city districts, states which were formed in a way largely corresponding to the existing distribution of major ethnolinguistic groups over the country.⁵ The Ethnologue currently discerns 90 languages spoken in Ethiopia,⁶ compared to 125 for Tanzania.

In the cultural dimension analysis of chapter 3.5, I was able to isolate data for five ethnolinguistic groups (Amhara, Gurage, Oromo, Sidama and Tigrinya). On only one of the three cultural dimensions for which I found data was the difference within Ethiopia greater than 20 points – such a difference in culturally relevant survey question results is likely to correspond to noticeable differences in practice as well. The differences are largest in the Indulgence vs Restraint dimension. However, even on this dimension the differences are smaller than for example in Tanzania. It could be that, seen from a distance, Ethiopians are more alike than they think.

Smith (2013: 121) does not feel Ethiopians are all alike culturally speaking and points to the practical consequences of the cultural diversity she sees, for example where she points out: 'Different ethnolinguistic groups in Ethiopia have strikingly different visions of what citizenship should entail, and at least some of these conflicting visions represent distinct and competing institutional arrangements.' It

⁴ Article 39.5 of the Ethiopian Constitution, http://www.wipo.int/edocs/lexdocs/laws/en/et/et007en.pdf accessed 17 July 2017.

⁵ On 18 June 2020, the Sidama regional state was formed. It split off from the SNNP region after a referendum. See https://borkena.com/2020/06/18/council-ratify-ethiopias-new-ethnic-sidama-statehood/, accessed 29 July 2020.

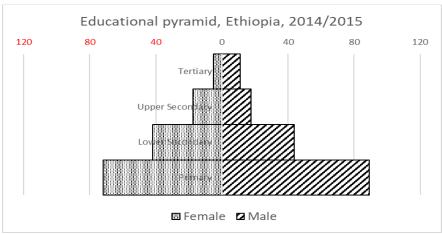
⁶ https://www.ethnologue.com/country/ET accessed 9 September 2019

would be interesting to investigate real versus imagined cultural differences further for Ethiopia.

It is interesting to compare the assessment of ethnofederalism of Smith with that of Abbink (2011). Basically, where Abbink stresses that the glass is half empty, Smith calls it half full. Abbink (p 607) feels: "The federal structure (...) generates competition between the NNPs (or ethnic groups), specifically their aspiring elites, about 'resources' (...), federal funds and about communal or religious identity. In other words, they have a political interest to take position against each other." Smith, on the other hand, stresses how 'certain kinds of claims, such as ethnic and gendered claims by citizens, can be read as liberatory and democratizing rather than atavistic or primordial, as both the western media and dominant political regimes would have us conclude.' (p. 8) A fuller discussion of these assessments is outside the scope of this study, but some examples of what is happening in Ethiopia are included in section 6.3.4, because they may serve as examples for what could also happen in future in other countries in Africa.

6.3.2 Educational situation

To this day, the educational system in Ethiopia remains fairly pyramidal, as shown in the graph below.



Graph 3 - Educational pyramid, Ethiopia, 2015 (tertiary education: 2014)

The ratio of GER in primary education to tertiary education is 10.0 – as was shown in chapter four, this puts Ethiopia somewhere in-between countries with a very 'steep' pyramid like Tanzania and countries with a more equal pyramid like Botswana. A comparison with the data shown on Ethiopia in chapter four also shows the progress made over the past

decade: in 2005, all enrolment rates were much lower and the ratio mentioned above stood at 29.2. The enrolment levels of girls have grown much closer to those of boys, although much less so at tertiary level.

These statistics hide the fact that there are still considerable regional disparities within Ethiopia. Thus, Woldehanna and Jones (2006: 26) conclude that even though there have been considerable improvements compared to the past, 'given a very low baseline of educational enrolment in areas such as Gambella, Benshangul, Somali and Afar, more concerted action is needed to further reduce the inter-regional educational gap.'

Secondary education has a strongly selective nature, which becomes clear when one examines the difference in GER between lower and upper secondary education. The GER in lower secondary was nearly 43% in 2015; in upper secondary, it was under 18%. This is less selective than in Tanzania, where only one in four children proceed from lower to upper secondary education, but still means more than half of all children drop out at this stage.⁷

With a GER for the initial level of secondary education higher than 40%, one can expect that the policy of secondary education in English will come under increasing pressure; as argued for Tanzania, it is likely that the switch from a local language to English will lead to wastage for those children whose intellectual abilities would be good enough to understand instruction at secondary level in an easier language, but not in English. Indeed, at least in the Oromio region, some use of Oromo in tertiary education is visible: it 'has become a medium of instruction in teachers' training institutes and has been used as a medium of instruction in colleges in the region.'8

6.3.3 Language situation and language choice options

The ASJP database discerns no fewer than 121 languages to look at for Ethiopia, to which I have added English.

A first thing to note when examining the Ethiopian matrix in light of the above discussion is that, just like it is the case for Tanzania, English is a difficult or very difficult language to learn for speakers of any Ethiopian language.⁹

A key difference with Tanzania is that in Ethiopia, speakers of the different language families are more evenly divided. Speakers of

⁷ http://data.uis.unesco.org/#, accessed 23 October 2019.

⁸ http://www.haramaya.edu.et/academics/college-of-social-sciences-and-humanities/dept/afan-oromo-and-literature/ retrieved 23 October 2019.

 $^{^{\}rm 9}$ All ASJP scores are at or above 95, a good number above 100.

Cushitic languages make up around half the population, of Semitic languages around 42%, of Nilo-Saharan languages¹⁰ around 7% and of Omotic languages not more than 1% (Hudson 2003: 94).¹¹

The situation in terms of ASJP distances within each of these language families is different; therefore, it seems useful to discuss them one by one.

The ASJP database discerns 17 languages in the **Ethiosemitic** subfamily of Semitic languages. The major languages in this group include Amharic, the Gurage languages, Tigre and Tigrinya. Within this subfamily, there are a number of languages that are easy to learn (though not *very* easy) for speakers of all other languages in this subfamily.

The ASJP database discerns 70 Cushitic languages. Cushitic languages are different from one another: a fair number of language pairs are in the difficult or very difficult category. Yet, there are also a number of language pairs in the very easy or easy categories. Cushitic languages are divided into a number of sub-families. One of these is the Agaw or Central Cushitic subfamily, of which the ASJP database discerns eight varieties spoken in Ethiopia that form easy or very easy combinations. Another large sub-family are the East Custhitic languages; the ASJP database discerns 49 of them; the largest of these languages are Somali and Oromo.¹² Some of these languages are easy for speakers of all other East Custhitic languages.

The ASJP database discerns 20 **Nilo-Saharan** languages that are spoken in Ethiopia. The Nilo-Saharan language family is internally diverse: many language pairs are difficult or very difficult, some are of medium difficulty, but a number of them are easy or very easy. The ASJP database suggests that there is not one language that could be developed into a Nilo-Saharan language that would be easy or very easy to learn for all speakers of Nilo-Saharan languages. In fact, it might be necessary to use six or seven languages.¹³

¹⁰ There is no scientific consensus that grouping languages together into a Nilo-Saharan family is actually justified.

¹¹ Other sources, though, give slightly different percentages, especially for the smaller language families.

¹² See Bulcha (1998) for a description that gives insights into the background of the position of the Oromo language in Ethiopia.

¹³ Some of these languages belong to the Western Nilotic subfamily, which also includes Luo. These languages have a large speaker base in Uganda and Kenya and form easy or very easy language pairs. Other languages in this group can almost be considered language isolates and have only a small speaker base.

The ASJP database discerns 28 **North Omotic** languages.¹⁴ For these languages, the situation is almost the same as that for the Ethiosemitic languages. There are some languages that are easy (and in some cases very easy) to learn for all other speakers in this group.

In addition, the database discerns four **South Omotic** languages. It would seem rational to use one of the South Omotic languages as designed language for use in education. (The combined number of speakers is around 300,000.)

This means that if we look at 'easy' languages to use in higher education, not more than 12 languages would be enough for Ethiopia (of which half would be Nilo-Saharan languages), instead of the 30 Skattum (2019) currently reports as being used in primary education. In practice, of course, it might be expedient to select a larger or slightly different group of languages; however, that does not detract from the principle. For primary education, the closer the designed medium of instruction is to a discerned L1, the easier and therefore better it is for the majority of children. However, one could imagine that for lower secondary school, a switch to an 'easy' language is a rational thing to do, if that means that for a country like Ethiopia not more than twelve languages are sufficient.

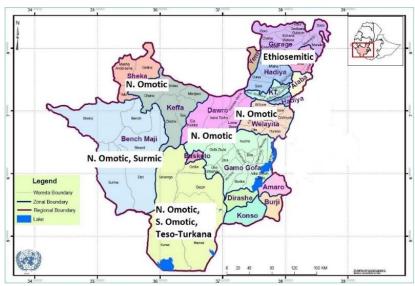
The table below shows a theoretical result using twelve language chosen for their mutual differences. These 12 languages (plus English) are indeed difficult combinations.

2 SYNONYMS,	AT LEAST 2	8 WORDS											
LOANWORDS I	EXCLUDED												
LDND													
	WETAWIT	LUO	TESO	SURI CHAI	GUMUZ	GWAMA	KUNAMA	XAMTANGA	W OROMO	WOLAYTTA	AMHARIC	ARI	ENGLIS
WETAWIT	0												
LU0	97	0											
TESO	99	95	0										
SURI CHAI	97	101	101	0									
GUMUZ	101	97	99	99	0								
GWAMA	98	98	101	99	96	0							
KUNAMA	97	94	100	98	95	98	0						
XAMTANGA	103	98	101	103	99	101	98	0					
W OROMO	99	100	101	95	103	100	100	100	0				
WOLAYTTA	100	104	101	100	95	96	96	100	92	0			
AMHARIC	101	97	104	100	101	95	100	96	102	98	0		
ARI	104	100	100	99	100	97	101	102	100	97	97	0	
ENGLISH	101	103	99	100	101	102	100	103	102	101	96	97	
	WETAWIT	LUO	TESO	SURI CHAI	GUMU7	GWAMA	KUNAMA	XAMTANGA	W OROMO	WOI AYTTA	AMHARIC	ARI	ENGLIS

Table 3 - Difficult language pairs, Ethiopia

¹⁴ This includes the three 'Dizoid' languages.

Below is an illustrative map of what this would mean for what is probably the most complex of Ethiopia's areas from the ethnolinguistic point of view, the SNNP regional state.



Map 1 - Potential higher education language map, SNNP, Ethiopia¹⁵

6.3.4 The Ethiopian experiment

Ethiopia is a leader in Africa when it comes to decentralised language policies, because it allows regional states to make their own choices for medium of instruction in primary schools and for the working language in administration. Thus, it is a country that, in a way, has implemented a number of the suggestions by Laitin (1992: 158):

- " 1. Language 'states' or 'regions' are designated, and procedures are established by which the people of the region can set an official state language for use in a range of functions, specified by regional leaders but constrained by the central state.
- 2. An administrative court at the federal level is constituted to hear demands for boundary rectification and state creation, with the authority to implement its decisions.
- 3. A national language is designed by the federal government which all citizens are required to know for educational advancement, government promotion, and civil service employment."

¹⁵ Basic map adapted from Aynalem Adugna, http://www.ethiodemographyandhealth.org/ retrieved 29 October 2019.

As described by Smith (2013), in Ethiopia states can and do designate official state languages. The House of the Federation can decide on boundary disputes. Indeed, Smith describes in some detail in chapter 4 how leaders from the Silt'e or Siltie group were able to petition the House of the Federation in order to create a separate district and how such a district was in fact created after a referendum ordered by the Ethiopian House of Federation. In 2019, another relatively peaceful referendum was held that led to the creation of a new state for the Sidama community, separated from the SNNP state¹⁶ - it may not be the last. Thus, Cochrane and Bekele (2019) point to proposals for the creation of an 'Omotic' state.¹⁷

The resemblance between this setup and what was recommended by Laitin (1992) is striking and it seems that it has given Ethiopia the possibility for addressing some long-standing issues in a peaceful manner. As an example, the two separate city districts (Addis Abeba and Dire Dawa) have a multi-ethnic population, as is common in many other African cities. In Addis Abeba, Amharic is the language spoken by the majority; the largest minority is Oromo, with nearly 11% of the population. In Dire Dawa, nearly half the population is Oromo, with large minorities of Somali and Amhara speakers. In other African cities, their multi-ethnic character is used to justified a choice for the excolonial language as medium of instruction. In Ethiopia, both cities show that a different choice could be possible: they have primary schools with several mediums of instruction (Smith 2013: 153).

The literature gives examples of the types of effects that the Ethiopian language policy has had; thus, Seid (2014) shows how in the Keffa region, there is a language shift from Nayi (ISO 639-3 code: noz) to Kafa (ISO 639-3 code: kbr) (both are North Omotic languages), because Kafa is now being used in education and in other domains. Before 1991, the shift was rather from Kafa to Amharic.

Processes of language choice are not easy or straightforward, as some further examples from the literature may illustrate.

Savà and Tosco (2008) show why in the Oromia region, a standardized version of the language could be developed, in a process that took some time historically and that was possible in part because Oromia saw itself as being in competition with the Amharic area. This standard was developed in spite of the fact that the Ethnologue database discerns three Oromo-like languages spoken in Ethiopia. In contrast,

¹⁶ https://www.aljazeera.com/news/2019/11/ethiopia-sidama-vote-federal-region-electoral-board-191123150618999.html retrieved 27 November 2019.

¹⁷ https://fanabc.com/english/2019/07/scholars-discuss-procedures-to-obtainstatehood-status/ retrieved 23 October 2019.

Guidi (2012) describes in some detail why attempts in 1999 and 2000 to introduce a designed language made up of a combination of Wolaytta, Gamo, Gofa and Dawo ('Wogagoda') met with wide popular resistance and in fact failed, even though these languages are closely related.¹⁸ Cochrane and Bekele (2019: 33) analyse these attempts as top-down. It followed after earlier top-down attempts to combine Gamo, Gofa and Dawo into one language; those attempts were perceived as threats to linguistic and cultural identities. The addition of Wolaytta made the mix only more explosive, because on the one hand the Wolaytta perceived their language as being superior (therefore they tended to resist the move) and the others perceived the attempt as threatening their already threatened identity (and therefore they resisted as well). This resulted in fact in increased ethnic tensions in the region (p 38) and led to a stalemate that left all groups weaker than they could have been. Obviously, it is likely that such situations will occur in other communities and areas as well and that a top-down approach may be difficult to implement. However, just saying that things must be done bottom-up does not itself solve any problem. Joswig (2020) compares the experience with Wogagoda with some others, including those of speakers of various Ale dialects (an East Cushitic language with around 85,000 speakers). He shows that through a bottom-up consultation process, Ale speakers were able to see the advantages of a standardized form of their language for written communications and to reach a decision on this. However, other attempts to do the same in Ethiopia remain mired with difficulty. So this is a difficult, but not an impossible process. It might be possible to overcome some of these difficulties by building carefully designed incentives to collaboration as suggested in the next section.

In this context, it is interesting to note the study of Küspert-Rakotondrainy (2004), who has used an analytical framework taken from Bourdieu in a study of the Gumuz and Shinasha communities. She found that the recent introduction of local language instruction in primary schools had beneficial effects on school attendance for both communities, especially for girls, and on achievement in schools. However, the identity effects were different, related to the different positions these communities have historically occupied. Thus, for the Gumuz increased access to education is associated with modernization and upliftment, whereas for the Shinasha, it is associated with a reappreciation of their distinctiveness and with tradition. This is where, then, choices are possible, at least for the Shinasha: using Shinasha as

¹⁸ The benchmarked ASJP database shows these discerned language pairs as mostly 'very easy' and in one instance 'easy'.

medium of instruction will stress their Shinasha identity; using an easy to learn other language will stress their integration for example with other speakers of North Omotic languages. Neither community, though, is a passive recipient: in both communities, there may be strong (and conflicting) opinions on the best course to take.

What this short discussion shows is that indeed, language, education and identity are closely related, but how exactly this works out in practical situations would require considerably more work. In any case, it would seem important to recognize and try to understand these linkages in order to come to rational policy decisions.

6.3.5 Conclusions and recommendations

The Ethiopian situation is clearly considerably more complex than the situation in Tanzania and the Republic of Congo and this gives rise to conclusions that in part are different from and add on to those reached for Tanzania.

1) Ethiopia is perhaps unique in Africa in its effort to promote its many languages, at least for use in primary education. A potential drawback of this policy is that it puts a premium on difference, rather than on similarity: if becoming recognized as a separate 'people, nation or nationality', with a separate language leads to additional resources, this provides an incentive for people to profile themselves as such. In Ethiopia, as we have seen, there are a number of small linguistic communities, for which learning other, larger languages is difficult or very difficult. In order to minimize the disadvantages associated with a small linguistic community and to give maximum opportunities for educational advancement for children in these communities, collaboration will be a necessity (although it is not a solution for every small linguistic community). Therefore, in addition to the four principles proposed in chapter five, Ethiopia leads me to suggest a fifth principle: build incentives for linguistic collaboration, especially for related linguistic communities.

What could that mean? One incentive for collaboration could be built around the minimum number of speakers needed to justify the use of that language as a medium of instruction at a specified level.

One could hold, as a purely theoretical example, that for a minimum of 1,000 speakers it is justified to develop a language to such an extent that it can be used as designed language for the first four years of primary education. Then, for a minimum of 10,000 speakers, it might be justifiable to do the same for the whole of primary education. For lower secondary education, a minimum of 100,000 speakers might be

required, for upper secondary 500,000 and for tertiary education, a minimum of around 1 million speakers.

Theoretically, one could add to this an approach that takes prevalence of bilingualism into account; thus, for linguistic communities where bilingualism is not prevalent lower thresholds might be acceptable than for communities where it is, in order to still create a situation that offers equal opportunity to all children.

- 2) It is to be expected that sooner or later, in Ethiopia as well as in Tanzania, the pressure to switch from English to local languages as medium of instruction in lower secondary education will increase. Given the current enrolment rate just above what I have defined as the 'language barrier', this would be a rational step to take that is bound to increase efficiency in education. However, it is important that this transition should not be undertaken overnight but that it be planned carefully. Secondary education in local languages should be perceived from the start as quality education, not as second-hand education. If and as enrolment figures increase in senior secondary education, a change to local languages at that level will also be necessary, but at the moment it is not.
- 3) Cochrane and Bekele (2019) and others also point to the issue of the *quality of education*: just expanding education without investing in the quality of teachers, schools and materials may not be productive; at the moment, many children learn their own language and are officially taught Amharic and/or English as a subject, but the level of teaching is such that achievements remain very far below those of the Estonian educational system (although on the other hand, not so long ago those children might not have received any education at all).
- 4) For tertiary education, a switch to indigenous languages as suggested above is not yet necessary; enrolment figures are still so low that English or any other language can be used. However, if enrolment rates increase to levels approaching those of the global North, a gradual switch to indigenous languages will become advisable. If the numbers suggested in conclusion 1) above would be applied to Ethiopia, this would mean an evolution towards tertiary education possibilities in one or more Ethiosemitic languages, one or more East Cushitic languages (for example Oromo), perhaps a Central Cushitic language and a North Omotic language.¹⁹

¹⁹ Speakers of Nilo-Saharan languages in Ethiopia would be at a relative disadvantage, because of the small speaker communities and large differences between the languages. For some, a possibility might be provided in

For all those who will find these languages easy to learn (the vast majority of all Ethiopians), this would mean a tremendous improvement compared to the current situation, which requires a high level of English. For the remaining smaller groups²⁰ there would be no similar improvement (but also no worsening compared to the current situation). For most of them, the possibility to learn in their own discerned language or a language that is easy for them up to a higher level than is presently possible would still be an improvement.

- 5) Ethiopia may have to consider a model where several languages are used at the federal level, similar to countries like Belgium, Canada or Switzerland. The solution suggested above with five languages (one Ethiosemitic, three Cushitic and one North Omotic), if implemented, would make access to national debate and policy making possible in an easy to learn language for over 90% of all Ethiopians. Reaching 100% would require adding several more languages. A monolingual alternative could either use an indigenous language (such as Amharic or Oromo), but this would put those Ethiopians who find that language difficult or very difficult to learn at a disadvantage. Another possibility would be to use an international language such as English, but even if the Ethiopian educational system would be just as good at teaching English as the Estonian system (which is currently not the case), that would still disenfranchise around 60% of Ethiopians at the national level.
- 6) Smith (2013) holds that Ethiopia harbours a number of very different cultural communities; my study suggests a less diverse picture, but it is not finely grained enough to be able to make confident statements at this level about Ethiopia. However, Smith also feels that the fact that linguistic rights (coupled to citizenship rights) are recognized in Ethiopia may be a factor that works in favour, rather than against national unity. Still, how to balance a federal, decentralized system with many different languages with the need to keep a nation together is clearly a challenge that Ethiopia is still struggling to find an answer to. Key element in this might be to move to a limited number of national languages, as suggested above and to adopt policies that encourage learning several Ethiopian languages.

neighbouring Eritrea, Kenya and Uganda, which have larger speaker communities in these languages.

²⁰ According to the Ethnologue, the situation in Ethiopia is different from that in some other countries, in that speakers of these languages generally do not have a majority of people who are bilingual from birth; many are indeed monolingual.

In general, this third case study again demonstrates the power of this approach, but it also shows its limitations. These limitations lie in the difference between what seems rational and equitable and what are sure to be intervening political realities on the ground.

All in all, using the benchmarked ASJP database can hopefully serve as an input for a national debate in Ethiopia along more rational lines. What could we learn from examining a country at the other side of the continent, for example Ghana?

6.4. Ghana

In the previous three case studies, we have looked at a country that has chosen one designed indigenous language to serve a large number of relatively similar discerned languages (Tanzania), a country that would be in a position to make such a choice (Republic of Congo) and a country with a different colonial history from the rest of Africa and a traditionally dominant indigenous language (Ethiopia). In this case study, we will examine a linguistically diverse country that has a long colonial history with the UK but at the same time with a relatively long period of independence: Ghana. What can be said about rational choices for language use in higher education in such a country? We will also venture a brief excursion into Nigeria and look at the question of what the potential is (or otherwise) of using either Ghanaian or Nigerian Pidgin English as a designed national language in education. Ghana is a country in West Africa with a population approaching 31 million people.1 Ghana has retained English as its official language. The country is peculiar in that one language, Akan (Twi)2, is spoken by around half the population as L1 and many more as L2.

6.4.1 Cultural and political situation

The Ethnologue currently discerns 73 indigenous languages spoken in Ghana,³ but again, this does not mean that there is a similar number of different cultural entities in the country. In the cultural dimension analysis of chapter 3.5 I was able to analyse data on eight ethnolinguistic groups. On all four cultural dimensions discussed there, the differences within Ghana are greater than 20 points - such differences in culturally relevant survey question results are likely to correspond to noticeable differences in practice as well. The differences are the largest in the Indulgence vs Restraint dimension. A fairly large difference also occurs in the 'Fix vs Flex' (LTO) dimension, with Ewe being very much on the 'Fixed' side and the Gonja relatively on the 'flex' side. Because of the dominance of the Akan, their scores are close to the national average. What is more, the scores of the largest ethnolinguistic groups (the Akan, Dagomba, Ewe and Ga) are fairly similar, with only some of the smaller ethnolinguistic groups having a different score. The cluster analysis of chapter 3.4 shows that out of the

¹ https://www.worldometers.info/world-population/ghana-population/ accessed 31 October 2019.

² The Ethnologue, however, discerns four Akan languages.

³ https://www-ethnologue-com/country/GH accessed 31 October 2019.

five groups that could be distinguished for that analysis, four are in the same cluster. An interesting fact is that the Akan of Ghana and those of Côte d'Ivoire do not cluster together (using anthropological methods, MacLean 2010 reaches the same conclusion). Together, this suggests that Ghana enjoys a certain measure of a common and national cultural frame of reference, even though not all ethnolinguistic groups may subscribe to it fully (see also the analysis of the role of indigenous languages and English in national identity formation in Ghana as given by Anyidoho and Kropp-Dakubu - 2008).

Ghana was the second country in Sub-Saharan Africa to gain independence, in 1957, under the leadership of Kwame Nkrumah. Since then, the country has witnessed a tumultuous history involving coups, military rule and periods of profound economic crisis. However, the country returned to a multi-party democracy after elections in 1992 and has remained a democracy since; ruling presidents have been defeated at elections several times and there have been peaceful handovers.

6.4.2 Educational situation

In the field of education, the country has made considerable progress. Stokroos (1998), comparing four different countries in Africa, already concluded that Ghana was the country that had best succeeded in adapting its educational system to African cultures. Primary education is universal and secondary education is common, the government having expanded tuition-free education to the senior secondary level in 2017.4 Ghana has experimented with several medium of instruction models - for an overview, see Klu and Ansre (2018). Currently, the official policy is to use English as the sole medium of instruction after the first three years of primary education. 5 During the first three years, indigenous languages are used. However, Ghana officially supports only 11 indigenous languages.⁶ The actual implementation of this policy is patchy, to say the least, as described for example by Trudell (2016) and Anyidoho (2018). As Yevudey and Agbozo (2019) argue, this may be related to the fact that most teachers themselves have a multilingual background and resort to frequent code-switching and translanguaging in an effort to maximize their teaching efficiency.

⁴ http://citifmonline.com/2017/09/im-investing-in-free-shs-for-ghanas-future-akufo-addo/ retrieved 6 November 2019.

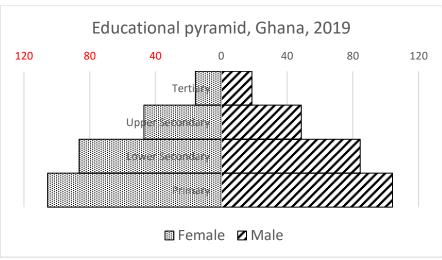
⁵ See for example p 28 of the Strategic Plan 2018-2030 of the Ghanaian Ministry of Education, available at

https://planipolis.iiep.unesco.org/sites/planipolis/files/ressources/ghana-education-strategic-plan-2018-2030.pdf (accessed 7 November 2019).

⁶ http://www.bgl.gov.gh/ accessed 7 November 2019.

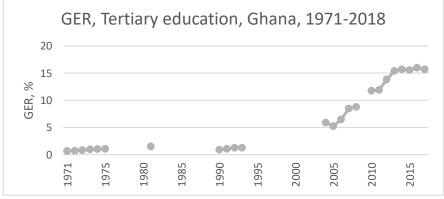
These efforts might in fact lead some teachers to deviate from the official language policy, whereas others do not. When there is a national service that posts teachers to schools regardless of their language repertoires, some teachers may end up teaching pupils with an L1 that the teacher also speaks – those teachers could use that language, even if the policy is different. Other teachers may not be able to speak the languages of their students – they can therefore not employ such a strategy.

The education pyramid for 2019 is shown in the graph below.



Graph 4 - Educational pyramid, Ghana, 2019

The progress made in Ghana in the past 45 years can be illustrated by the graph below, showing the evolution of the GER in tertiary education over the years.



Graph 5 – GER, tertiary education, Ghana, 1971-2018

Another tell-tale statistic (also derived from UNESCO data) is the Gender Parity Index for senior secondary education, showing the ratio of girls to boys. In 2000, this ratio was still 0.66 - for every three boys attending senior secondary school, there were two girls. By 2018, the ratio had improved to 0.95 – an impressive achievement.⁷

The ratio of GER in primary education to tertiary education is 6.1 - as was shown in chapter 4.2, this puts Ghana close to the top in Sub-Saharan Africa – the top country is Botswana, with a ratio of 3.4 (which is still below the ratios in the global North).

What percentage of Ghanaian children have mastered English at the B2 level by the end of their secondary school career? An approximate calculation was already given in chapter 4.2.3. Using WASSCE examination results, I gave an estimate of 54% of those who sit for the WASSCE examination and just under 15% of all 18-year olds in Ghana (in 2018).

A less optimistic assessment is given by Stoffelsma and De Jong (2015). They found that in Ghana, only 48% of first-year students for a Bachelor of Education had a B2 level in English reading proficiency, even though a WASSCE 'credit pass' is a requirement for admittance. Therefore, one might expect that all students have the B2 level - yet Stoffelsma and De Jong found this not to be the case. It would be interesting to do further research into this apparent discrepancy.\

As discussed in chapter 4.2.3, it could be that this national picture hides considerable regional differences from sight, especially differences between rural and urban areas. It might be that in urban areas, the proficiency in English of Ghanaian youngsters is closer to the situation in Malta, where around 48% of the 18-year olds have mastered English at the B2 level. At present, I have no data to support such an assertion but if it would be the case, it would represent a devastating indictment of the current Ghanaian language policy, which would then seem to play a role in increasing the inequality in the country and could therefore be a factor in dividing, rather than uniting the country.

The data as presented here suggest a few things:

It is likely that the efforts of a good number of students who are currently following secondary education go to waste, not because of a lack of intellectual ability in general, but because a lack of mastery of English. A vivid illustration of this idea is

⁷ This may not be the end of the story because, as shown in chapter five, in most countries of the global North girls now outperform boys.

given by Arkorful (2014). He describes the 'Schools for Life' programme in Northern Ghana. This is a nine-month part-time programme, taught not by professional teachers but by community members who speak and teach in the same language as the children. The curriculum is restricted to literacy in the local language, numeracy and life skills. He finds that this nine-month programme is just as effective as three years of formal primary school (p 78). This is a built-in inefficiency in the Ghanaian educational system that is bound to get more and more onerous as enrolment levels increase.

- If enrolment figures increase even further, the current language model in Ghana will reach its limits and pressure to change is bound to increase. This could go quickly: in 2017, Ghana abolished the school fees for senior secondary education. This has led to a considerable increase in the gross enrolment rate in secondary education: from 56% in 2012 to 63% in 2019.8 A similar increase in the enrolment rates in tertiary education seems likely, based on this.9
- The current educational model provides a strong incentive to parents to do whatever they can to give their children a head start in life by providing them with the best English education they can find or afford (for example via the elite Achimota school¹⁰). This also explains, at least in part, the resistance that parents feel towards teaching in local languages, even though they have a generally positive attitude towards the local language (Beyogle, 2014). This provides a strong incentive to duplicating existing socio-economic inequalities through education, as already described by Bourdieu. In Ghana, these are in part also regional inequalities, the North being consistently behind the Southern part of the country in many areas, including education, as pointed out for example by Higgins (2009) and further analysed by Abdulai and Hickey (2016).

Would it be possible to devise a language policy that uses certain designed Ghanaian languages as medium of instruction and if so, what would be considerations that are relevant for making a rational choice?

⁸ http://data.uis.unesco.org/# retrieved 18 March 2021.

⁹ I am grateful to Dr Dodzi Kpoglu for pointing out this development.

¹⁰ Founded in 1924 as the Prince of Wales College, this elite school was the first of its kind in Ghana and remains highly respected to this day.

6.4.3 Language situation and language choice options

Where the Ethnologue discerns 73 indigenous languages currently spoken in Ghana, the ASJP database discerns 65 Ghanaian languages, to which I have added English.

The first thing to note about the Ghanaian matrix is that both English and Ghanaian Pidgin English are either difficult or very difficult to learn for the majority of mother-tongue speakers of other Ghanaian languages. English and Ghanaian Pidgin English together form a 'very easy' combination, so early exposure to Pidgin English may help children to later learn standard English.

A second feature is that, unlike in Tanzania, the indigenous languages spoken in Ghana are not conveniently close to one another. Thus, choosing for example Akan (Twi) as the national language is not a rational choice the same way it is for Tanzania: for many Ghanaians who do not speak Twi as their L1 the language is a bit easier than English, but for millions of Ghanaians, it is not; switching to Twi would not constitute an 'inclusive' solution as proposed in the third principle outlined in section 5.2; it would lead to considerable resistance.

The major language families in Ghana are the Kwa and the Gur languages (both part of the Volta-Congo family), but these families are internally diverse: for example the Chala/Konkomba language pair (both are Gur languages) is difficult, as is for example the Adangbe/Ikpana language pair (both Kwa languages).

Still, rational choices for language use in higher education may be possible by looking at subfamilies. The largest of these is the Potou-Tano subfamily of Kwa languages; these languages are spoken in Ghana, but also in parts of Ivory Coast. As is clear from table 1, several of these languages are easy to learn for any of the other languages in this subfamily. This is true for example for Efutu, but also for the Fante variety of Akan. The Bureau of Ghana Languages (BGL)¹¹ supports Akan/Twi, Gonja and Nzema from this language subfamily. It would be conceivable to use several of these languages in primary education but make a switch to just one of these languages as medium of instruction for secondary and higher education – this language would then have to be taught as a subject in primary education.

Another subfamily of the Kwa languages is Ga-Dangme, which has two discerned languages. It is a very easy language pair; either one of these languages could be developed for use in higher education. Note that Ga/Twi is *not* an easy language pair. However, Ga is easy to learn for speakers of a number of the Ghana-Togo mountain languages discerned in Ghana. Ga and Dangme (or Dangbe) are both supported

¹¹ http://www.bgl.gov.gh/language-overview.php, retrieved 28 February 2020.

by the BGL. Again, it would be conceivable to use both languages in primary education but to make a switch to just one of these languages as medium of instruction for secondary and higher education – this language would then have to be taught as a subject in primary education.

A last subfamily of the Kwa languages is formed by the Gbe languages, of which Ewe is the most important one spoken in Ghana. As shown in chapter four, most of the Gbe language pairs are very easy. Ewe is supported by the BGL.

The Gur languages form a different family, with many discerned languages spoken mainly in the North of Ghana (and neighbouring countries). This family is internally diverse; there is not one language that is easy to learn for all Gur-speakers. However, with three languages it would be possible to have a solution for all or nearly all Gur languages spoken in Ghana. The Gur languages supported by the BGL are Dagaare, Dagbani and Kasem. Dagaare and Dagbani are easy or very easy to learn for almost the same group of other Gur languages; from the point of view of inclusiveness, a more rational choice might be possible.

If the same rule of thumb would be applied to Ghana that has been suggested for Ethiopia (discerned languages with a minimum speaker base of one million as medium of instruction in tertiary education), then tertiary education would have to be provided in Ghana in five or six languages, possibly in addition to English: one Potou-Tana language, one of the Ga-Dangme languages, a Gbe language and two or three Gur languages. Again, this would be an inclusive solution that would be a tremendous benefit for Ghanaians and for Ghana as a whole. As Ansah (2014: 14) has pointed out, to implement such solutions would need to take the actual sociolinguistic situation on the ground into account. It would require a good collaboration between the Ministry of Education, the Ghana Education Service, the Ghana Statistical Service and the Linguistics Association of Ghana. That way, it will be possible to offer mother tongue education to every child in a decentralized way.

LOANWORDS EXCLUDED	210000																			
ONG			-																	
	AHANTE	ANUFO	₹		BAULE	DOMPO	DWANG	ELLI	ЭССНОВЕ	GENYANGA	GONJA	HILL GUANG	KRACHI	LARTEH	NAWURI	NCHUMURU	NKANI	NZEWA	TWIASANTE	TWIFANTE
AHANTE	0		_																	
ANUFO	87		0																	
ANA	76		88	0																
BAULE	78		29	99		0														
DOMPO	87		78	84	7	62	0													
DWANG	93		Š.	87	~	77 28		0												
EFUTU	87		87	87	~	87 82		08	0											
GECHODE	87		83	82		83 76			75	0										
GENYANGA	98		SH	87	~	84 75		. 22	73	83	0									
GONJA	35		83	87	80	69 98		11	. 92	72 7.	73	0								
HILL GUANG	82		88	87		77		9/	17	81 78	82	82 0	0							
KRACHI	82		28	82		83 81		62	98	71 7.	. 11	72 80		0						
Larteh	88		81	98		87 75		82	83	84	82	84 69	9 82		0					
NAWURI	35		99	90	8	87 74		13	84	29 92	62	61 83	3 65) 98	0				
NCHUMURU	88		88	87	8	87 78		75	80	9 69	. 69	70 84	57		86 69		0			
NKAMI	87		87	82		83 74			17	7.		77 68		72 8.	81 76	76 78		0		
NZEMA	79		74	72		77 86		88	87	8 76	8	88	3 89		87	95 91		88	0	
TWIASANTE	87		<u></u>	71	7	75 85		77	81	88	82	85 86	3 82		84 92	87			79 0	
TWFANTE	06		遨	71	7.	76 84		88	11	7. 18	11	88	77		85 88	8 80	18		81 46	
	MUMITE	2									_	-		_	_	The second secon				

6.4.4 English, Creole, Pidgin?

In some countries, including in Ghana and Nigeria, new languages have developed that have acquired status of lingua franca. This includes languages such as Sango in the Central African Republic, Krio in Sierra Leone and Ghanaian and Nigerian Pidgin English. Both in Ghana and Nigeria, English-based Pidgins have developed that are widely used. One might therefore ask the question whether these could be developed into designed languages as the single language to use in higher education on a national level, thus avoiding the need to use multiple languages.

For Ghana, this does not seem to be a likely development, because the language is not spoken in the whole country, but mostly confined to the greater Accra region, where it competes with Akan as a lingua franca. Also, according to the Ethnologue, its use is gendered, being used mostly by males.¹²

For Nigeria, the situation could be different. Nigerian Pidgin English (also known as Naijá) is very widespread in the country and is in fact developing into a Creole, because more and more children learn it as a first language (Simpson and Oyètádé, 2008). It therefore seems to be a legitimate question to ask: could Nigerian Pidgin become a national language in Nigeria and could it potentially solve the problem of which language to use in higher education?

What answer would the ASJP database suggest?

The first thing to notice about Nigeria is that it is linguistically very diverse. The Ethnologue discerns 507 living indigenous languages. The ASJP database discerns 380 (including English). These languages are from very different language families: there are substantive numbers of speakers from Afro-Asiatic languages (Hausa being the largest), Nilo-Saharan languages (Kanuri being the largest) and Niger-Congo languages from several families, including Southern Bantoid (Ibibio, Tiv), West-Benue-Congo (Yoruba, Edo, Igbo, Nupe, Idoma), Kalabari and various Platoid languages (Jukun and others).

¹² https://www-ethnologue-com/language/gpe retrieved 8 January 2020.

¹³ https://www-ethnologue-com.ezproxy.leidenuniv.nl:2443/country/NG retrieved 8 January 2020.

2 SYNONYMS, AT L	EAST 28 WOR	DS											
LOANWORDS EXCL	UDED												
LDND													
	ΠV	IBIBIO	YORUBA	EDO	IDOMA	IGBO ONITSHA	NUPE	JUKUN TAKUM	KALABARI	KANURI	HAUSA		NIGERIAN PIDGIN
TIV	0												
IBIBIO	99	0											
YORUBA	96	94	0										
EDO	99	94	87	0									
IDOMA	97	87	98	94	0								
IGBO ONITSHA	96	93	95	98	98	0							
NUPE	98	93	94	91	95	95	0						
JUKUN TAKUM	94	96	101	88	95	96	91	0					
KALABARI	98	101	94	101	98	91	99	99	0				
KANURI	101	103	98	103	99	98	101	97	94	0			
HAUSA	104	103	97	96	99	100	96	101	96	99	0		
ENGLISH	104	103	99	100	98	100	100	100	101	102	98	0	
NIGERIAN PIDGIN	103	103	98	98	97	100	100	102	97	101	99	41	
						IGB0		JUKUN					NIGERIAN
	TIV	IBIBIO	YORUBA	ED0	IDOMA	ONITSHA	NUPE	TAKUM	KALABARI	KANURI	HAUSA	ENGLISH	PIDGIN

Table 5: Selected Nigerian languages

As is clear from table 5, showing these main languages, English and Nigerian Pidgin form an easy combination. Both languages are difficult or very difficult for all of the other Nigerian languages in this selection. What is also clear is that there are only a few other easy language combinations, such as between Edo and Yoruba and between Edo and Jukun. Of the three major languages of Nigeria, the Igbo – Yoruba combination is of medium difficulty, the combination of either of these with Hausa is about as difficult as the combination with English.

The Ethnologue reports that there are several dialects of Nigerian Pidgin: 'Lagos Pidgin, Delta Pidgin, Cross River Pidgin, Benin Pidgin. No unified standard. Dialects may be very different from each other.' This is a logical development – pidgins are formed on the basis of a mixed lexicon using words from different languages, but in this case with English as the dominant source. However, it is logical that in different linguistic areas, words from different other languages will be added in. In addition, pronunciation will be different, depending on the sounds that are common in the different linguistic areas; the same may hold for the grammar. The consequence of this is that sooner or later, the Ethnologue will come to decide that it is necessary to discern different Nigerian Pidgin languages.

Note also that the Ethnologue does not mention 'Kano Pidgin' or 'Maiduguri Pidgin'. This is because Nigerian Pidgin does not currently enjoy nationwide coverage in Nigeria: in its different varieties, it is mainly spoken in the South of the country. Northerners do learn the

¹⁴ https://www-ethnologue-com/language/pcm retrieved 7 January 2020.

language, mainly to deal with Southerners, and those that do can be recognized by their Northern accent.¹⁵

Of course, policy could influence this. One could imagine developing Nigerian Pidgin into a designed language with a formal grammar, pronunciation rules and a vocabulary that could include words from a variety of Nigerian languages. However, it would only make sense to do this if the source languages that would be at the basis of such a development are not too different – but in this case, they are. The ASJP database looks at lexical differences, but a quick look at Wikipedia reveals that for example Hausa and Yoruba are also very different in their phonology and grammar. This means that it will be difficult, if not impossible, to develop the language in such a way that it is *equally easy to learn* for all Nigerians: there will always be inequities, no matter what solution may be conceived. What is possible, in theory, would be to develop the language in such a way that it is *equally difficult* to learn for all other Nigerians – but because English already serves that purpose, what would be the point?

There is another theoretical possibility: all Nigerian parents could decide to abandon their own languages and to change over to speaking Nigerian Pidgin with their children from birth, or at least to make sure that these children grow up in a largely Nigerian Pidgin-speaking environment - for a number of children especially in the South of the country, that is of course already happening. For these children, it will be easier than for others to learn standard English, at least if the designed Pidgin is close to the current Nigerian Pidgin. If this process takes place in certain parts of Nigeria but not in others it will only lead to a sharpening of the internal divisions in the country. This is likely to happen if Nigerian Pidgin itself borrows more heavily from some Nigerian languages than from others. One could argue that Pidgin is (or Pidgins are) culturally more appropriate and therefore 'feel' better, especially because of such borrowings and other changes. However, this could probably also be accomplished through Nigerian English and unless people massively switch to Nigerian Pidgin as their L1, the indigenous languages will always feel even better. If the Pidgin is similar to some, but not to all languages, then this would lead to resistance. But if the choice is between changing to a more equitable form of Nigerian Pidging than the current one and changing to (Nigerian) English - why not choose English instead?

In conclusion, developing Nigerian Pidgin into a designed language would be possible, but it cannot be done in such a way that it would become an easy alternative language for **all** Nigerians – the underlying

¹⁵ Akinyinka Akinyoade, personal communication.

language ecology prevents it. This same reasoning also applies to Ghana: the Gur languages are very different from the Kwa languages, but within the Kwa languages there is great diversity as well. In Ghana, just as in Nigeria, the underlying language ecology would prevent developing the Pidgin as a national language that would be an equitable and easier alternative than English. In other words: pidgin will not solve anything.

What this also means, following the logic explained in the earlier chapters, is that Nigeria will have to change over to using multiple languages in higher education at some point in the future; one of these could still be English. It would be possible, using the method developed in these case studies, to carry out such an analysis for Nigeria as well. I have chosen not to do this because the method developed here itself does not provide final answers, Nigeria has a rich base of linguists better able to do the analysis and the approach itself is sufficiently developed through the other case studies.

6.4.5 Conclusions and recommendations

As was the case for the previous countries, a switch to indigenous languages for tertiary education is not yet necessary in Ghana, since enrolment figures are so low that English or any other language can be used. However, enrolment rates have doubled in the 2005-2015 period and could double again in the next decade. If that happens, the strain on the system will increase and the pressure for a change to indigenous languages at least for a part of tertiary education will increase.

Already at present, the use of English as sole medium of instruction in secondary education is bound to lead to wastage and loss, because it is likely that not all children have a level of English that is sufficient to follow education in that language, although in principle they may have the intellectual capabilities.

For Ghana, it would be possible to choose five or six languages as designed languages for higher education (possibly in addition to English) and that would cover almost the entire population and guarantee equitable access to education at levels that cannot be achieved using English as the sole medium of instruction. This is a lower number than the number of languages currently supported for primary education; however, it might be necessary to make a slightly different choice of the languages chosen as medium of instruction, in order to do justice to the principles of ease of learning and of inclusivity as outlined in chapter 5.2. Given the common cultural basis that seems to bring together most major ethnolinguistic groups in Ghana and given the level of cross-cultural understanding that seems to exist there, this should not pose a threat to national unity, but rather serve to

bring the peoples of Ghana even closer together, especially if policies are put in place that encourage Ghanaians to learn each other's languages.

We have briefly examined whether or not Pidgin could provide a solution to the language problem, either in Ghana or in Nigeria. The conclusion was clear – in those countries, they are no solution. In the previous case studies, the conclusion was that in future, non-indigenous languages will no longer be used as medium of instruction in secondary education and will have at best a minor role as medium of instruction in tertiary education. For Ghana, the situation might be different from that in other countries, in that it is thinkable that English will continue to be used as medium of instruction in parts of secondary and tertiary education, alongside indigenous languages.

For the last in this series of case studies, let us now look at a country with one clearly dominant language, a country which also has the highest enrolment rates in education in Sub-Saharan Africa: Botswana.

6.5 Botswana (as part of Southern Africa)

In the previous case studies, we have looked at countries that have low enrolment rates in tertiary education. For this last case study, we look at the country that has the highest enrolment rate and where, furthermore, a choice for a language to use in higher education is obvious: Botswana. Botswana has a small minority of speakers of the Khoisan languages. Because of their special position, they will be treated separately; they are spoken also in Namibia and South Africa. In addition, because of the relationship between Tswana and other Southern African languages, a short paragraph (without a full analysis) has been added about South Africa.

Botswana is a country in Southern Africa with a population of less than 2.5 million people. As is the case for almost all other African countries, Botswana is linguistically diverse; it has retained English as its official language. Botswana is peculiar in that one language, Tswana, is spoken by over 80% of the population either as L1 or as L2. For an overview, see for example Chebanne (2016b).

6.5.1 Cultural and political situation

The Ethnologue currently discerns 26 indigenous languages spoken in Botswana,² but again, this does not mean that there is a similar number of different cultural entities in the country. In the cultural dimension analysis of chapter 3.5 I was able to analyse data on 12 ethnolinguistic groups. On two of the four cultural dimensions discussed there, the differences within Botswana are greater than 20 points - such differences in culturally relevant survey question results are likely to correspond to noticeable differences in practice as well. The differences are the largest in the 'Fix vs Flex' (LTO) dimension. A fairly large difference also occurs in the Indulgence vs Restraint dimension, with the Sarwa³ being very much on the restrained side and the Kgatla less so - even though all groups in Botswana score on the restrained side of the spectrum. The cluster analysis of chapter 3.4 shows that all nine groups that could be distinguished for that analysis fall into the same cluster. An interesting fact is that the Tswana of Botswana and those of South Africa do not cluster together. In popular perception there is a

¹ https://www.worldometers.info/world-population/botswana-population/accessed 18 November 2019.

² https://www-ethnologue-com/country/BW accessed 18 November 2019.

³ The 'Sarwa' ethnic designation is particularly problematic; it is used in Botswana to denote all Khoisan speaking groups.

clear cultural distinction between the Bantu-speaking peoples in Botswana and the minority speakers of Khoisan languages.

Together, though, this suggests that Botswana enjoys a certain measure of a common and national cultural frame of reference, even though not all ethnolinguistic groups may subscribe to it fully.

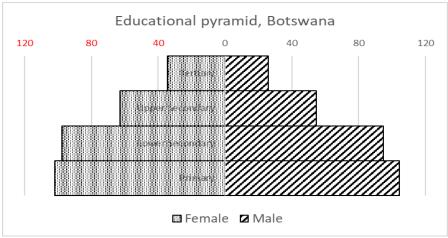
Botswana became a British protectorate in 1890, partly as a result of efforts by leaders at that time of three ethnolinguistic groups in the country, who sought to keep the country out of the control of the South African Boer settlers (Gulbrandsen, 2012: 48/9). As a protectorate, the country was able to enjoy a relative degree of autonomy before gaining independence in 1964. Botswana has been a multi-party democracy from the start, with the Botswana Democratic Party always in the majority. Economically, the country has done relatively well, profiting from income from diamond and other mines.

6.5.2 Educational situation

In the field of education, the country has made considerable progress. Primary and lower secondary education are universal. There is a cut-off point between lower and upper secondary education: only two out of three children who start secondary education continue to the upper level. In Botswana, Tswana is used as the medium of instruction in the first two years of primary education. English is used afterwards. No other languages are used in education.⁴ Chebanne (2020, personal communication) feels that it would be too much to say that Botswana has a language policy as such; rather, there are a number of commonly-accepted practices in education and in administration.

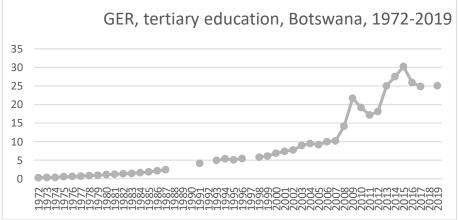
The education pyramid for 2015 / 2008 (upper secondary education) is shown in the graph below.

⁴ See Annah Molosiwa at http://theconversation.com/training-can-help-botswanas-teachers-manage-multiculturalism-69058, retrieved 18 November 2019.



Graph 5 - Educational pyramid, Botswana, 2008/2015

The progress made in Botswana in the past 45 years can be illustrated by the graph below, showing the evolution of the GER in tertiary education over the years.



Graph 6 - GER, tertiary education, Botswana, 1972-2019

The ratio of GER in primary education to tertiary education in 2015 was 3.4, which puts Botswana at the top of Sub-Saharan Africa (although this ratio is still below those of the global North).

Molosiwa and Bokhutso (2016) have argued that the current language in education policy of Botswana puts speakers of other languages than Tswana at a disadvantage. Is this picture confirmed if one looks at the ASJP database? Would it be possible to devise a more equitable language policy? This question is probably easier to answer by looking at the Khoisan and the Bantu languages separately.

6.5.3 Language situation: Khoisan languages

The Khoisan languages are among the most endangered in Africa, totalling together fewer than around 300,000 speakers, mostly from marginalized communities.

The Khoisan languages may be one area where the ASJP database reaches its limitations, due to the phonetic transcription mechanism it uses. All click sounds are represented by only one symbol in the ASJP word lists. With this limitation in mind, however, it is still possible to say something about the Khoisan languages, using the ASJP database. It discerns 29 of them (including some extinct languages), spoken in Botswana, Namibia and South Africa. They fall into three families: Tuu, Khoe-Kwadi and Kx'a (see table 6).

A first feature that they have in common is that English, Tswana and Xhosa are all either difficult or very difficult languages for all speakers of Khoisan languages.

A second thing to note is the internal diversity of the Khoisan languages: there is not one language that would be easy to learn for all of them. This internal diversity is often overlooked in discussions of Khoisan speakers, who tend to be lumped together. But in spite of the overlooked internal diversity, there are some easy or very easy combinations within individual Khoisan language families. Thus, for the Tuu family, Xoon is easy or very easy. There are only around 2,500 speakers of Tuu languages. For the Kx'a family, only the various varieties of Kung remain; they form an easy combination with together around 15,000 speakers.

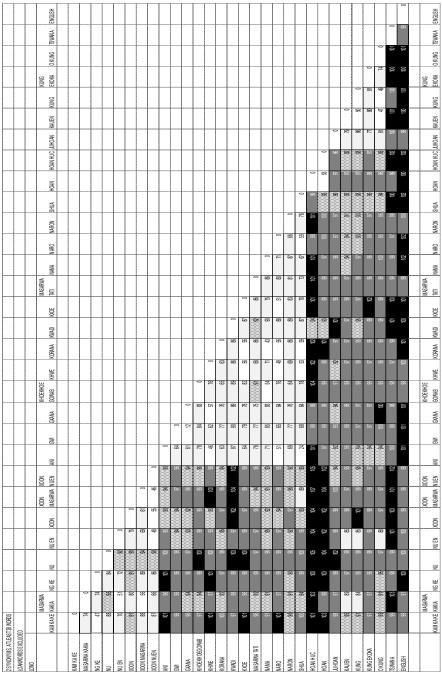


Table 6: ASJP output, Khoisan languages

The largest Khoisan language family is Khoe-Kwadi. The largest of the discerned languages in this group is Khoekhoegowab, also known as Nama. It has around 200,000 speakers. It is easy for speakers of all other Khoe-Kwadi languages and is used as medium of instruction in primary schools in Namibia in the first three years and taught as a subject in later years.⁵

In Botswana, Xoon has around 2,000 speakers, Kung has around 7,000 and Khoekhoegowab almost none. However, there are around 45,000 speakers of other Khoe-Kwadi languages, Haikom (not in the ASJP database) being the largest.

Botswana does not follow the example of Namibia: none of the Khoisan languages are used in education, all children are confronted with English and Tswana from day one. Mokibelo (2010) shows the difficulties related to this, leading especially to systematic underperformance in English. She points to a specific issue, also discussed by Chaudenson in relation to French teaching, namely that speakers of Khoisan languages typically have difficulties in learning English that are different from those experienced by speakers of Bantu languages. English is roughly equally difficult for speakers of either Tswana or of a Khoisan language. However, because the L1 is different, the type of problem experienced by learners is different. If the curriculum is taught using textbooks geared towards Tswana speakers, and perhaps by teachers who are themselves Tswana speakers as well, this will put Khoisan speakers at a disadvantage they will find difficult to overcome. This disadvantage is in addition to the disadvantage caused by cultural differences and socio-economic inequality discussed by Molosiwa and Bokhutso (2016).6 Mokibelo (2016) compares the situation of San and Zezuru (Shona) speakers with mainstream Tswana children. She finds that both groups are disadvantaged, but tends to group them together, even though the Shona-Tswana language pair is much easier than any of the Khoisan-Tswana language pairs.

A related issue has to do with the appropriateness of the school system itself. Many of the Khoisan speakers still employ a nomadic or seminomadic lifestyle that is adapted to the arid conditions of the Kalahari Desert. Children are therefore often sent to hostels in towns or cities and separated from their families in order to attend class. This system

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http://www.nied.edu.na/assets/documents/05Policies/NationalCurriculumGuide/National Curriculum Basic Education 2016.pdf, accessed 19 November 2019.

⁶ See Chebanne and Dlali (2019) for another searing critique of the current situation.

⁷ See Van Pinxteren et al (2020) for a more extensive discussion on educational issues in dryland areas in several parts of the world.

has the double effect of causing trauma in children and of alienating them from their roots. This means those children who are both intelligent and strong of character – therefore, those children who potentially could be most valuable to their communities – are taken out, thereby intellectually impoverishing their communities at a time when, due to climate change, increasing demands are made on their resilience and adaptability. This type of problem has been pointed out in connection to pastoralists in other areas and has led for example to the experiment with Pastoralist Field Schools in East Africa.⁸

Taking the rule of thumb proposed for Ethiopia as a guideline, one could imagine using three designed Khoisan languages for use in in the first years of primary education: Xoon, Kung and either Haikom or Khoekhoegowab (because the latter has already been developed for that purpose in Namibia). This would be far better than the current situation, which in fact forces children to learn a (very) difficult language (Tswana) and then through this language to learn another (very) difficult language. (The current situation is akin to forcing English-speaking children to learn in Chinese for the first few years of education and to use their knowledge of Chinese then to switch to education in Hindi – a recipe for failure.) It would be even better to develop the education system to such an extent that all children who speak a Khoe-Kwadi language could get a fuller education in a designed Khoe-Kwadi language (even though that would probably not offer any solace to speakers of Tuu or Kx'a languages).

Chebanne (2016a) has pointed out that a harmonized language development policy with a harmonized writing system are both essential for any of this to have any chance of success.

6.5.4 Language situation: Bantu languages

The ASJP database discerns six Bantu languages spoken in Botswana besides Tswana. These languages all make for easy or very easy language combinations. Nevertheless, one should realize that speakers of for example Kalanga face difficulties in learning Tswana that are greater than those faced by native Tswana speakers (they are equivalent for example to English speakers trying to learn Dutch). The current educational system of Botswana does not take these difficulties into account, although individual teachers might. Conscious action to give extra support to non-Tswana speakers of Bantu languages would probably be beneficial both to the country and to individual learners.

⁸ http://www.fao.org/capacity-development/news-list/detail/en/c/883112/accessed 19 November 2019.

Tswana has a large speaker base in South Africa as well. Therefore, in line with the fifth principle introduced in the Ethiopian case study (encourage collaboration), it might be cost-efficient to develop Tswana in Botswana in harmony with the development of Tswana in South Africa and in fact also in harmony with closely related discerned languages like Sotho. This would be rational, but it is not a straightforward matter. Thus, Machobane and Mokitini (1998) provide an insightful analysis of the problems in creating a harmonized writing system (orthography) for Sotho.

Banda (2016) also discusses the issue of the many writing systems (orthographies) that exist in Africa. He points out how they are needlessly complicated and different from each other and from the conventions of English spelling (which unfortunately are among the least logical found anywhere). He documents that in practice, official orthographies are often not followed and that a practice is emerging that does justice to the multilingual repertoires many people have. His plea is for allowing this to happen. Here, in my view, Banda commits an error of thought. It does not follow from the fact that colonially-developed orthographies needlessly divide Africans that leaving things to chance will lead to better outcomes: that reasoning disregards the advantages of standardized writing systems. Instead, African-designed policies are needed that offer maximum simplicity and that capitalize on possibilities for mutual intelligibility between related languages – the policies that Prah has been working on.

In this context, it may be illustrative to look at Tswana and other languages in South Africa before turning to further conclusions and recommendations.

6.5.5 Language situation: South Africa

Below is the matrix of ASJP distances between the 11 official languages of South Africa.

2 SYNONYMS, AT LEAS	T 28 W/OPD	2									
LOANWORDS EXCLUD		<u> </u>									
LDND											
	NDEBELE	NORTHERN SOTHO	SOTHO SOUTHERN	SWAZI	TSONGA	TSWANA	VENDA	XHOSA	ZULU	AFRIKAANS	ENGLISH
NDEBELE	0										
NORTHERN SOTHO	85	0									
SOTHO SOUTHERN	73	59	0								
SWAZI	60	74	75	0							
TSONGA	66	70	75	67	0						
TSWANA	85	70	66	88	77	0					
VENDA	72	76	71	68	75	81	0				
XHOSA	55	84	70	59	73	86	71	0			
ZULU	61	77	75	43	70	86	71	52	0		
AFRIKAANS	101	101	100	104	101	98	103	101	102	0	
ENGLISH	95	101	99	99	98	99	98	100	99	59	(
		NODELEDN	00710								
	NDEBELE	NORTHERN SOTHO	SOUTHERN	SWAZI	TSONGA	TSWANA	VENDA	XHOSA	ZULU	AFRIKAANS	ENGLISH

Table 7: ASJP output, official languages of South Africa

Again, it is good to point out that both Afrikaans and English are difficult or very difficult languages for any L1 speaker of one of the other languages spoken in South Africa. It is also good to note that the Afrikaans-English language pair is very easy – using the same criteria proposed in the other case studies, using only one of them as language in higher education should be possible. Afrikaans-speakers are often praised for their excellent command of English, but taking into account the proximity of both languages there seems to be no cause for special admiration here.

Alexander (1998) has argued that in South Africa, only two Bantu languages (Nguni, encompassing Ndebele, Xhosa, Swazi, Tsonga and Zulu) and Sotho (encompassing the others) could be developed for formal use in education and other domains. This thesis is only partially supported by the ASJP database. The Nguni languages do form very easy language pairs, with the exception of Tsonga. On the other hand, the internal variety within the Sotho-Tswana languages seems to be larger than within the Nguni languages; the Sotho-Tswana language pair is easy, but not *very* easy. Using the same criteria as employed for the other case studies would lead one to conclude that only one (and in fact, any one) of the Bantu languages discerned in South Africa would need to be developed as the designed language. In the completely hypothetical case that for example Afrikaans and Zulu would become the two official languages of South Africa, this would lead to a

⁹ See Msimang (1998) for an analysis of how these ideas were sabotaged in the Apartheid era.

tremendous strengthening of the position of Zulu. However, developing Sotho and Nguni, as suggested by Alexander, would also have this effect. What seems certain is that South Africa's current language policy with eleven official languages will inexorably lead to a strengthening of the position of English. Alexander (2001) has pointed this out as well, and has argued for the creation of a new, common South African identity. The research of chapter 3.2 illustrates that such an identity might in fact be forming.

The Gross Enrolment Ratio in tertiary education in South Africa in 2017 stood at 22.37%, not far below the level of Botswana.

6.5.6 Conclusions and recommendations

Batibo (2004: 60) has argued that the future of Setswana depends on the commitment of the country's decision makers. However, as I have shown, the commitment of decision makers can and will be influenced by broader societal processes that are at play, such as the steady increase in enrolment. As was the case for the previous countries, a switch to indigenous languages for tertiary education is not yet necessary in Botswana, since enrolment figures are so low that English or any other language can be used. However, enrolment rates have almost tripled in the years since 2007. If this type of growth continues in the coming decade, the strain on the system will increase and the pressure for a change to Tswana at least for part of tertiary education will increase. In chapter 3.3.2, I pointed to Botswana's history of involvement with the British, leading to its ability to retain a relatively higher degree of cultural autonomy than some other countries in Africa. This history might also mean that, like in Ghana, English will retain its position as medium of instruction for at least parts of tertiary education for a longer period of time than in a country such as Tanzania.

Already at present, the use of English as medium of instruction in secondary education is bound to lead to wastage and loss, because it is likely that not all children have a level of English that is sufficient to follow education in that language, although in principle they may have the intellectual capabilities. Matiki (2010) has shown that the dominance of English in the legal system disempowers the majority of Botswanans who do not have a sufficient command of the language.

Botswana is unique in that it has speakers of all three Khoisan language families within its borders. The ASJP database has been used to estimate the evolution over time of human languages.¹⁰ According to Holman et al (2011: 25), the Khoisan languages may have the oldest

¹⁰ https://en.wikipedia.org/wiki/Automated Similarity Judgment Program accessed 25 November 2019.

roots in the world, thereby representing a unique human heritage. Preserving and promoting this heritage in some way could rightfully be portrayed as a matter of national pride for the country. Using some or all of these languages in education would be a way of doing so that would also provide a service to the speakers of these languages, especially if it is done in a way that supports sustainable livelihoods. The ASJP database suggests that these cannot be lumped together – developing one Khoisan language as the designed language would not offer an equitable solution for the speakers of languages in the other language families. Using at least three Khoisan languages for the first years of primary education would probably help to increase the achievement of Khoisan speakers. In addition, special measures should be considered aimed at ensuring that education is relevant to the pastoral lifestyle of many Khoisan-language speakers.

The Botswana experience reinforces the importance of using foreign-language teaching methods that take the specific difficulties of speakers of different languages into account: a method that works well for Bantu speakers may be less appropriate for Khoisan speakers and vice versa. For South Africa, the short analysis shows that rational choices may not be the same as choices that seem realistic given the current sociopolitical situation of the country; however, the analysis does show alternative choices that may be feasible in the current context that lead to better outcomes than the current situation.

6.6. Some challenges and conclusions

6.6.1 Five case studies: applying the theory

This study examines Vansina's prediction that neo-African traditions will appear, based in part in African languages. In chapter three, I demonstrated that in some countries these neo-African traditions seem to be developing along national lines; in other countries, such a development does not seem to be taking place. In any case, the traditional ethnolinguistic distinctions seem to be losing their significance, at least in a number of cases. However, the situation is different from area to area and no clear patterns can be distinguished. In chapters four and five, I have tried to explain why African languages are currently not being used more in higher education and I have investigated the scope for rational choices in language use for (higher) education. This was done at a fairly abstract and theoretical level, although much more concrete than what is found in most other pleas of this type. In this chapter, I have explored what the theoretical insights gained could contribute when applied in five different country situations.

In these five case studies, I tried to look at the overlap (or lack of it) between the cultural and the linguistic situation in each country and examined the feasibility or otherwise of rational choices for language in higher education in as many countries (Tanzania, Republic of Congo, Ethiopia, Ghana and Botswana). I also looked at languages from some of the language families more in general and at several neighbouring countries, including South Africa.

Only in Botswana was it possible to some extent to map cultural differences onto language differences: the Bantu speakers in that country seem to be culturally different from the small groups of speakers of Khoisan languages. Even there, the mapping is not one on one: the Khoisan languages belong to three different language families; the data do not allow me to determine whether or not this also corresponds to three different cultural areas within the Khoisan-speaking communities. In Ethiopia, I only have data for five of the larger ethnolinguistic groups. That data suggests that seen from a distance, Ethiopians may in fact be more alike culturally than they think themselves. In South Africa, there seem to be positive indications that the link between language and culture that may have existed in the past is now no longer there: the Tswana, Sotho and Swazi in South Africa are more similar to one another than to their siblings in Botswana, Lesotho and Eswatini. In the other three countries, there is no clear

mapping of cultural differences onto linguistic differences. As authors like Topan (2008) or Smith (2013) have argued, this also means that a switch to using African languages in and by itself does not need to pose a threat to national unity, contrary to what is popularly believed.

In all countries in Sub-Saharan Africa, enrolment in tertiary education is still (far) below the level common in the global North. Therefore, a change to using African languages in higher education is not yet necessary for any of these countries; there are enough young Africans that have sufficient language abilities and general intelligence to fill up the relatively few places available to them. However, this is likely to change if enrolment figures double again, as they have done in the past and as has also happened for example in Europe. Such a development could take place in the next decade or so and is perhaps most likely to occur first in Botswana, the country with the best performance in this regard in the region. However, a shift to a different or additional medium of instruction, at least for part of tertiary education, requires careful preparation and planning - if such a change is foreseen, then it is best to start preparations as early as possible.

The case studies also show problems at the level of secondary education, where in a number of countries, enrolment rates, especially at the level of lower secondary education, already exceed 40%. I do not have precise information on what level of language knowledge is necessary to profit from education at this level: the only indication that I have is for tertiary education. There is abundant literature complaining about high dropout rates in secondary education in Africa. Some of that must be related to adverse socio-economic conditions, to the quality and/or the affordability of education and to discouraging or even threatening conditions in schools, especially for girls. However, some of it is likely to be due to language as well: secondary education in what is essentially a foreign designed language puts certain demands on the language learning abilities of children and those abilities are not distributed equally over the population. In addition, the required level of Cognitive/Academic Language Proficiency (CALP) only develops in the late teens. Increasing numbers of children are likely to drop out because of insufficient skills in the language area, even though their intellectual capabilities in other areas might be sufficient to profit from the education if it would be provided in a more easily accessible designed language. This factor is bound to become more important with increasing enrolment rates in secondary education: more children

¹ One statistic is for example the 'cumulative drop-out rate to the last grade of lower secondary general education' as published at http://data.uis.unesco.org/#. For Ghana, this rate was more than 21% in 2016; for Estonia, it was under 0.5%. (Data retrieved 22 November 2019.)

in secondary education will mean that the average language abilities of children enrolled in secondary education will decrease and therefore that the average amount of effort required to teach them a foreign designed language to the required level will increase. Secondary education in many countries would clearly become more efficient (in terms of rates of successful completion at a given rate of investment) if it were to be provided in designed languages that are easier to learn for children.

The five case studies show that it is possible to arrive at rational choices for a limited number of designed languages in the countries studied. For Tanzania, I have shown that Swahili is easy to learn for over 98.5% of all Tanzanians (in sharp contrast to English, which is difficult or very difficult for all Tanzanians) and I have suggested that this forms a new and powerful explanation for the enduring success of Swahili in the country, an explanation that is better than the partial explanations I found in the literature I surveyed. It is important to stress that learning an 'easy' designed language still requires formal instruction, although far less than a 'difficult' language would require. I therefore suggest that using some of the Tanzanian discerned languages that are more distant from Swahili as designed languages at least in the initial years of primary education might improve the efficiency of education for L1 speakers of those languages.

I have pointed out how for the speakers of minority Nilotic and Cushitic language as well as for the speakers of Hadza and Sandawe (considered to be language isolates), Swahili is not an easy language. For them, it would be important to introduce education (at least at primary level) in a designed language that is more accessible to them. What the Tanzanian example also shows is that the differences within the Narrow Bantu family of languages (to which most discerned Tanzanian languages belong) are smaller than those within the Nilotic language family – choosing one easy designed language is possible for the Narrow Bantu family, but not for the Nilotic family.

Both the literature discussed on Tanzania and the analysis from chapter three point to the fact that even though Narrow Bantu languages spoken in the country form relatively easy language pairs, this does not mean that Tanzania has a culturally homogeneous Bantu-speaking majority: large cultural differences within the country remain, that cannot easily be mapped onto language families.

The Republic of Congo is in a certain way in a similar situation as Tanzania, in that all the discerned languages spoken in the country belong to the Narrow Bantu family. The recommendation by Baka was cited, who suggests using the L1 as much as possible for the first four years of primary education, then to switch to one of the country's four

languages of wider communication and to narrow this down to Lingala and Kituba for upper secondary and tertiary education. The ASJP database in fact suggests that an easier choice might be possible, because several discerned languages are easy to learn for all Congolese. This is in line with developments already taking place more or less spontaneously in the country – a rational language policy would make it possible to support and accelerate this process towards an indigenous national language, at least for higher education. Following the suggestion by Baka, it would be possible indeed to use the L1 for the first years of primary education and then to immediately switch to one or two discerned languages:

The choice that would suggest itself for the Republic of Congo is certainly not possible for all African countries. In Ethiopia, the linguistic situation is considerably more complex. Ethiopia's current ethnofederalist policies put a premium on difference, rather than on similarity. Perceptions of either difference or similarity can to a certain extent be influenced by policy. Therefore, I propose a fifth principle, in addition to the four developed in chapter five (use a limited number of languages; that are easy to learn; that are as inclusive as possible; that take account of bilingualism). This fifth principle would be to build incentives for **linguistic collaboration**, especially for related linguistic communities.

This could be done for example by stipulating that developing a designed language for use at a specific level of education would only be done if the speaker base of discerned languages that are related to such a designed language is large enough. In Ethiopia, as in other countries, switching to local languages at the level of lower secondary education would probably already increase efficiency at that level. For higher education, the ASJP database suggests this could be developed in four or five languages.

The Ethiopian case study also brought home some of the limitations of the approach of using the ASJP database. These are related to the fact that what may seem rational and equitable at a theoretical level might not be a realistic outcome to aim for, given the current socio-political situation in the country. However, my approach at least offers a starting point for a rational debate and a way of starting to think about incentives for convergence in designed language use in a domain such as (higher) education.

The Ghanaian case study in a way gave similar results to those of Ethiopia. In Ghana, the indigenous languages are not conveniently close to one another. For the Kwa family of languages, three languages would be necessary for an equitable solution (for example Akan, Ga

and Ewe). For the Gur family of languages, a further three languages would seem to be necessary. It might be possible that English is used as medium of instruction alongside Ghanaian languages for longer than might be the case for some other countries. Ghana is one country where the data presented in chapter three suggests that a national culture may be forming, even though in-country differences between ethnolinguistic groups remain.

Lastly, the Botswana case study reinforced some of the conclusions and recommendations from the previous case studies. Most people in Botswana speak a Bantu language and for them, Tswana would seem to be a logical choice as language for higher education. Botswana has the highest enrolment rate in tertiary education in Sub-Saharan Africa, but it is still below the 40% level. However, it is entirely possible that the country will reach that threshold in the next decade or so. If so, an orderly and planned transition involving a gradually expanding role of Tswana in tertiary education would seem to be possible and desirable. At the same time, introducing some of the other languages spoken in Botswana as medium of instruction in the first years of primary education would probably be a wise strategy, because it would increase learning efficiency.

This is especially true for speakers of Khoisan languages. The ASJP database suggests that the Khoisan languages are internally very diverse and indeed, they are considered to be made up of three language families. Botswana is the only country that has L1 speakers from all three families within its borders. Preserving and promoting this heritage in some way could rightfully be portrayed as a matter of national pride for the country. Using some or all of these languages in education would be a way of doing so that would also provide a service to the speakers of these languages, especially if it is done in a way that is culturally appropriate and supports sustainable livelihoods.

The Botswana experience also shows that methods of teaching English should be adapted to the specific linguistic background of the learners: methods that may be suitable for Bantu-language speakers may not be ideal for speakers of Khoisan, or indeed of Chadic or Nilotic languages. My study thus supports the conclusions by Kaschula and Nkomo (2019: 621), who argue:

'What is required is a mutually inclusive linguistic environment that celebrates not only linguistic equity between African languages and exoglossic languages, but also African identity, culture, and indigenous knowledge in the context of what such an approach can bring to African development. What goes to the core of such a developmental approach would be to use African languages for the purposes of education.'

The analytical framework and the case studies together demonstrate that indeed, there are good possibilities for rational language-ineducation policies in Africa. They also lead to a few additional insights that I would like to present here.

6.6.2 Decolonizing education: a different perspective

The analysis in these case studies leads to a perspective that should be added to existing perspectives on decolonizing education. These existing perspectives tend to be focused on the content of education, rather than on the sociological function of education. Thus, Ndofirepi and Gwaravanda (2019: 589) say: 'Placing the African knowledge system at the centre of analysis involves the use of the African knowledge paradigm, worldview and categories of thought as the basic framework of analysis'. Curiously, they manage to decolonization of Universities without even once referring to the issue of language, thus in a way illustrating the assessment of Kaschula and Nkomo (2019: 619), who say that "[t]he language question is then the 'elephant in the room' when it comes to development in Africa, indeed to transformation of the continent at all levels, from societal, educational to economic transformation." Prah (2016) before them has already pointed to the link between the two: building on indigenous knowledge systems requires also building on knowledge as transmitted through indigenous languages. Mbembe (2015) asserted: 'The African University of tomorrow will be multilingual'.

As was shown in chapter 1.4, Bourdieu has demonstrated that there is a relationship between enrolment ratios in education and the social function of education and its role in elite reproduction. The analysis of the evolution of enrolment rates as well as the 'steepness' of the educational pyramid (indicated by the enrolment ratio in tertiary education divided by the enrolment ratio in primary education) are meaningful for understanding the function of education in a particular society.

Looking at enrolment ratios and the steepness of the pyramid in colonial times, it is clear that the function of education was limited to recruiting a small number of local cadres for work within the colonial system – what Campbell (2017) calls 'education for submission'. An efficient way of recruitment was to provide substandard education in a foreign language to a small group of 'privileged' children. Some were so intelligent (and so malleable) that it showed even under such adverse conditions – they were then recruited and given a continuing

education of a higher standard. This system clearly was conceived in a top-down manner.²

The problem is that the system was essentially kept, but with ever larger numbers of children and students in the system - but the system won't scale. This is bound to be a problem already in a number of countries with high enrolment rates in (lower) secondary education because it is not likely that educational systems in those countries will be able to give all children the foreign language skills that they need in order to profit from that education. However, because the educational pyramid is conceived top-down, this problem is not seen. As long as there are enough young people with the required language skills to fill up the few places available to them in tertiary education, the essentially colonial model of education can continue. However, there is a limit to this. In the global North, so many young people attend tertiary education that giving them all the required foreign language skills becomes a practical impossibility. That is why even in countries with a relatively low number of speakers of local languages, such as Estonia, tertiary education is predominantly in an indigenous designed language. Trends in enrolment over the years in Africa show that this 'language barrier' is likely to make itself felt in a number of African countries within the space of the next decade or so.

Bourdieu helps us understand that shifts in the function of education are never uncontested. Therefore, continued expansion in tertiary education is likely to lead to different types of social strife and unrest; planning for what lies ahead may help to make these struggles more peaceful and more productive than they will otherwise be.

Preparing for a system where many more students than is currently the case take up tertiary education requires a shift in thinking about the educational pyramid: instead of conceiving it top-down, as in the colonial period, it will be necessary to conceive it bottom-up. What do I mean by this? As outlined above, in colonial times the demands on the quality of primary and secondary education for all but the elite could be limited. Children needed to be given a chance to show their language abilities and once the selection was made, would be taught all else they needed to know at higher levels of education. The fact that those without the required abilities did not get the maximum benefit from their schooling did not matter so much. Again, as long as the system is

² It is good to bear in mind that this top-down system was not invented specifically with the intention of keeping the colonized in their place, although it had that function. Educational systems in Europe at the end of the 19th and well into the 20th century were also conceived top-down and had a specific function in elite reproduction that is different from the current situation.

aimed at educating only a relatively small proportion of the population, this works fine.

However, in a highly developed society, maximum levels of education are a must in order to ensure maximum productivity. This means that under-achievement is no longer an acceptable outcome. If primary and secondary education are of substandard quality, the stress on tertiary education to make good on the missed opportunities of earlier phases will become unbearable. Furthermore, those that do not proceed to tertiary education will be left empty-handed. In other words, in future, all brains will be needed and they need to be developed at all levels of education.³ This means that the educational pyramid needs to be conceived bottom-up. As argued in chapter two, the net result of teaching more children, but teaching them foreign language as a subject, instead of using it as medium of instruction will be an increase rather than a decrease in the number of people who speak such a foreign language. It will also mean that results in other areas (such a science-related subjects) will go up.

Decolonizing education should go beyond decolonizing the University curriculum. It is necessary to also question the top-down model of education that was inherited from colonial times.

6.6.3 Identity, culture and language - are they related and if so, how?

Ask any lay person what he or she considers to be characteristic of his or her ethnic culture and 'language' will invariably be one of the first things mentioned.⁴ In chapter 1.1, I quoted Adichie, who said that 'Language is the constructs of culture'. This statement echoes Prah (2010b: 83): 'Language is thus a historical and cultural register of the speakers of the language. It is impossible to conceive of culture without language or language without culture'. This captures the popular imagination, which holds that somehow, there is a relationship between the two. However, the case studies demonstrate the difficulty

³ Hence the title of my presentation at the ECAS2109 conference: '<u>African Intellect – Key to Development</u>'.

⁴ Thus, in 2019, the Netherlands Institute for Social Research published a report authored by Beugelsdijk et al on the Dutch cultural identity – a summarized popular version, 'Thinking of the Netherlands' was published in English. On p. 11, the Dutch language is shown as the topmost of 20 traits seen by the Dutch as characteristic of the country. In chapter nine of the full report (in Dutch only), Beugelsdijk gives an excellent overview of where to situate Dutch national culture using the approach of cross-cultural psychology using the vocabulary of dimension scores as pioneered by Hofstede and a hierarchical cluster analysis similar to the one presented in chapter 3.4 of this study.

of pinpointing this. Yet the question remains: can we somehow get more precise?

In the literature, perhaps the most famous idea on the connection between the two is in the so-called 'Sapir-Whorf' hypothesis, as first suggested by the US linguist and ethnologist Edward Sapir in 1949 and later refined by another US linguist, Benjamin Whorf (1956). In its currently most used form, the hypothesis holds that language and culture are interdependent and that the language people speak influences some of their decisions and behaviour. Yuka and Okolochi (2011) use it as their main argument in support of greater use of African languages. However, I am with Fabb (2016: 56), who discusses the hypothesis and the ways it has been used and argues 'that it is premature to come to these conclusions. Languages vary in much more complex and detailed ways than is accommodated by the binary divisions favoured in the Whorfian articles.' This conclusion is also supported by the material presented in the case studies.

But if that is so, what then can we say about these matters? A more sophisticated approach can be found in Wierzbicka. Wierzbicka (1997) holds that it is possible to describe cultures through a study of key words and their meanings in different languages. She gives the example of the word 'friend' in different languages, such as American English, British English, Polish and Russian. What she shows is that the equivalent of this word (and related terms) in each language refers to a different category of people - from rather wide in American English to very restricted in Russian. She holds that by using more terms like this and by studying more languages, it is possible to describe both linguistic and cultural differences. She has developed 'Natural Semantic Metalanguage' for making such descriptions. However, doing this requires a high level of specialist multilingual expertise and a great amount of work. This may explain why, even though Wierzbicka described her approach more than twenty years ago, there are not many authors that have made use of it.5

Davis and Abdurazokzoda (2016) show that there are relationships between how languages are structured and cultural characteristics, comparing data from the World Atlas of Linguistic Structures (WALS), for example on ways of showing politeness, with cultural traits, using data from the World Values Survey.

A preliminary conclusion, also supported by the case studies, can be that there *is* a relationship, but it is not always one-on-one: it can also be one-to-many, and this in fact in either direction (one cultural area

⁵ But see for example Ameka (2016) for an illustration of how Wierzbicka's approach can be used for describing culturally specific relationships as expressed in certain African languages.

with several languages or one language serving different cultural traditions). The discussion is not helped any by the controversies, pointed out in section 1.3, on what to call a language. The common trope is that in Africa, there are over 2,000 languages - but are there over 2,000 cultures? In section 1.7, I called this a pre-scientific myth. Yet, in line with the thinking of Vansina (1990), larger-scale cultural traditions used to exist in Africa. Vansina has shown this for the region of Equatorial Africa. This is a region where many different languages can be discerned, although, as shown in the case study on the Republic of Congo (section 6.2), many of them are closely related. If, like Prah (2012) one were to hold that the actual number of languages is much smaller, then a better agreement between linguistic and cultural differences and similarities in Africa might be found - but as the example of culturally diverse Tanzania, with its large speaker base of closely related Bantu languages seems to suggest, such an agreement is not likely to be absolute.

There is a large body of literature that links ethnic and linguistic fragmentation within a country to lack of mutual trust, to bad governance and all that it entails and to failing economic performance. The classic study in this regard is by Easterly and Levine (1997); this study has led to a host of similar studies, all more or less confirming their findings – see for example Michalopoulos and Papaiouannou (2016). However, as pointed out in section 1.3, these studies depend on source data on ethnolinguistic groups that are based on the colonial period and need to be treated with some caution and suspicion.

In this light, it is interesting to look at the more sophisticated approach that was used by Desmet et al (2016: 442). What they find is that even small linguistic divisions between groups can lead to market inefficiencies: trade becomes more difficult in these circumstances. However, it is only the larger differences, between languages that separated thousands of years ago, that lead to much larger negative effects, leading to a skewed distribution of resources and the likelihood of civil conflict. Likewise, Beugelsdijk and Klasing (2016) show that greater differences in values within regions also leads to lower trust levels in those regions – and to lower levels of economic growth.

The link between culture and language is to a certain extent malleable. Hofstede (2001: 63), almost in the beginning of his classic book, devotes a few paragraphs to two exceptional situations he encountered in Europe. His research findings revealed to him that in Belgium, there is one national culture, even though there are two quite different languages spoken in the country: Dutch and French (a 'medium to

difficult' combination, depending on the variety of Dutch chosen).6 For Switzerland, he found a different picture: the French speakers were culturally more aligned with France, the speakers of their two Germanlike languages⁷ more with Germany. Hofstede explains this from the specific history of the countries. For Europe, these two situations are not so common. Africa, however, has a radically different history and the research of chapter three suggests that both the Belgian and the Swiss situations may be much more common in Africa than they are in Europe. In Ghana, for example, a situation akin to that of Belgium might exist; Ghana is a territory where there is a long history of interaction between the groups living in different parts of the country. However, there is no empirical evidence that suggests that the hypothesis on the feasibility of nation building put forward by Grotenhuis (2016), as discussed in chapter 1.5, is in fact correct. Cultural and linguistic alignments or rifts are the results of long-term historical processes that can be influenced by social engineering to only a very limited extent, much more limited than Grotenhuis seems to believe. With Blommaert (2014: 40): the 'cultural resilience' of the 'common man' should not be underestimated. It is not possible to ignore historical realities when trying to mix peoples of different linguistic and cultural origins together in whichever way the social engineers please and hope for a stable outcome.

Building on the work of Desmet et al (2016), Gerschman and Rivera (2018: 231) arrive at a more nuanced analysis. By looking at linguistic distance, they find that 'only deep-rooted diversity, based on cleavages formed in the distant past, is strongly inversely associated with a range of regional development indicators. In other words, small differences are not so important – but countries with considerable cultural differences are faced with developmental challenges. This does not mean that ethnically homogeneous countries are conflict and violence-free; these studies all show statistical correlations that hold when comparing many countries, but that do not say much about individual countries.

There is a related point that needs to be made here and this is about the relationship between language and (social and technological) innovation. As argued in sections 5.1 and 5.2, using a designed

⁶ The Ethnologue discerns three Dutch-like languages spoken in Belgium: Flemish, Dutch and Limburgish, ISO 639-3 codes vls, nld and lim. https://www-ethnologue-com/country/BE/maps accessed 3 March 2020.

⁷ Swiss German has ISO 639-3 code gsw, Walser wae.

⁸ The concept of linguistic distance and the different ways of measuring it is discussed in chapter five.

language that is easy to learn for as many people as possible is essential for giving access to the functions associated with citizenship in a country. Enabling citizens to function as such through indigenous designed languages will enhance public debate and will thereby stimulate the development towards cultural autonomy. This will also make it easier to create a fertile breeding ground for social and technological innovation. On the other hand, restricting access to the national debate to those who know the colonial language well enough will tend to muffle or stunt such debate and innovation and cause it to go underground.

Let's again revisit the conclusions from the previous chapters and try to discover what links can be found between them.