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Katanga Swahili and Heerlen Dutch: A sociohistorical and linguistic comparison of contact varieties in mining regions

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Abstract: This article compares sociolinguistic and structural outcomes of language contact processes in two mining areas on two different continents, namely the Katanga region in the southeast of what is now the DR Congo, Africa and Heerlen as centre of the former Eastern Mine District in the southeastern province of Limburg in the Netherlands, Europe. Several similarities between these two regions make this comparison interesting. Both in Katanga and Heerlen, the natural copper and coal resources were located in border regions that were peripheral to central seats of government. In both regions, the exploitation of these resources, the growth of mining industries and rapid urbanization, began in the same period, the late nineteenth to early twentieth centuries. Despite being located on different continents – Africa and Europe – similar social conditions of language contact were responsible for the genesis of the language varieties underground and above ground. The language contact situations in Limburg and Katanga both resulted in structural innovation of Dutch and Swahili respectively. The most interesting innovation we identify in both cases can be characterized as the regularization of grammatical properties, and the expansion of aspect marking.

Keywords: Katanga, DR Congo, Heerlen, Netherlands, mining, regularization, language contact, contact-induced restructuring, aspect marking

1 Introduction

This article compares sociolinguistic and structural outcomes of language contact processes in two mining areas on two different continents, namely the Katanga region in the southeast of what is now the DR Congo, Africa and Heerlen as centre of the former Eastern Mine District in the southeast of the Netherlands, Europe.

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Several similarities between these two regions make this comparison interesting. Both in Katanga and Heerlen, the natural copper and coal resources were located in border regions that were peripheral to central seats of government. In both regions, the exploitation of these resources, the growth of mining industries and rapid urbanization, began in the same period, the late nineteenth to early twentieth centuries. Despite being located on different continents – Africa and Europe – similar social conditions of language contact were responsible for the genesis of the language varieties underground and above ground, and, in the European case, for erasure or neglect in historical research records and in official reports presenting the number of languages spoken.

In both regions, the Catholic Church, mining companies and state authorities shared an interest in controlling the fast expanding multi-ethnic and, hence, multilingual migrant workforces as much as possible, especially through rigidly enforced housing policies. Therefore, the main question we will address in this article is that given these similar conditions of exploitation and colonialism (in the Dutch Eastern Mine District a case of internal colonialism, cf. Heller et al. [2016: 67–69]): what were the sociolinguistic and structural outcomes of the mining? This article will show that similar social mining ecologies brought about similar sociolinguistic and structural outcomes.

Both Katanga and Heerlen had to deal with newcomers, recruited from abroad, since the local inhabitants avoided working in the developing mining industry and were too small in numbers to satisfy the growing needs of the industry. Moreover, the shortage in work force caused fast and rapid displacements of miners and thus a high mobility of people. From a sociolinguistic perspective, both Katanga and Heerlen revealed a geographic organization of the urban setting, reflecting above ground a strict functional hierarchy, and underground with the result that speakers of some languages could not access each other easily, i.e. languages of the miners did not come in contact with foreman languages above ground. Further, both in Katanga and Heerlen, immigrants brought along their languages on their way to the mine i.e. many different Bantu languages, including varieties of Swahili, for Katanga and varieties of German, Polish, Italian and Slovenian for Heerlen. Since “the movement of people across space is (...) never a move across empty spaces” (Blommaert & Dong 2010: 368), these migrants to Heerlen and Katanga must already have been in contact with other languages spoken by inhabitants of their

1 The Swahili language is also known as Kiswahili, ki- being the Swahili prefix for nouns that refer to languages. We opt for Swahili because it is clear we are talking about the Swahili language, not about the Swahili people or “Waswahili”. The label Swahili is also more current in the literature (132 hits for “Swahili” in the title of articles in peer reviewed journals from 1990 to 2017 versus 49 hits for “Kiswahili”, source: Linguistics and Language Behavior Abstracts).
migration-trajectories (cf. Fabian [1986] for an earlier similar argument). The transnationality of these movements implies that (a) deterritorialization of languages took place on their way (Luba-Kasai for example for Katanga, Polish for example for Heerlen) and (b) that locality-production through language practices must have taken place resulting in localized Swahili, labeled kikwetu (lit. ‘the language of our place’), and localized Dutch, going under such labels as Misjmasj ‘mixed language’, Hollesj mit knoebele ‘Dutch with lumps’, Steenkolen nederlanders ‘coalmining Dutch’ and Huillands (lit. Cry-landish) ‘a kind of Dutch that makes you cry’. The explosive growth of immigrants resulted in a process of language shift in which migrants speaking rather closely related Bantu languages in Katanga had to learn Swahili and Polish, Slovenian, Italian migrants in Heerlen had to learn Dutch as a second language. Both on the Katanga Copperbelt and in Heerlen, contact-induced restructuring of Swahili and Dutch has resulted in structural innovation. Finally, this localization in both areas, the explosive growth of the multilingual labour force changed a language system that must have been more diffuse in the beginning into one that became more focused and one in which aspect marking in certain constructions has become more prominent than tense. The indexicalities of these language varieties show similarities in their diversity: they are indices of professional pride and solidarity, but also of local pride and community belonging (Cornips and de Rooij 2018).

1.1 Swahili as spoken in Katanga, DR Congo

Swahili as spoken in Katanga, DR Congo, is quite different from so-called East Coast Swahili as spoken in coastal Tanzania and Kenya, and is regarded as one of several distinct regional varieties spoken in the western part of DR Congo (Bose and Nassenstein 2016; Goyvaerts 2007; Nassenstein 2015). Since almost all of the research on Swahili as spoken in Katanga has been restricted to Lubumbashi, the capital of Katanga, some authors refer to the language as “Lubumbashi Swahili” or, in French, le swahili de Lubumbashi (see e.g. Ferrari et al. 2014; Gysels 1992; Polomé 1968; Schicho 1982). Perhaps this would be a more apt label for the language than Katanga Swahili, but we will use the latter one here because it is more current in the literature.

In the urban centers of the Congolese Copperbelt, located in the southeast of Katanga, Katanga Swahili is widely spoken as a first language by an estimated number of 2.5 to 3 million people. In the cities on the Copperbelt, Katanga Swahili

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2 Kikwetu is composed of ki-, a noun class prefix used for names of languages, -ku- a place marker, and -etu a 1st person plural possessive form.
is one of many languages used in daily life. French is used in more formal domains of life, while so-called “ethnic” languages are also used in the domestic sphere, especially by recent migrants. Katanga Swahili is used in all informal settings; it is used in the domestic sphere but also in informal public settings (public transport, markets, shops). It should be emphasized that many daily conversations are characterized by moderate to heavy mixing of Swahili and French (Gysels 1992; de Rooij 2000). Informal notes and letters are often written in Swahili but since Katanga Swahili has no standard orthography, writing is often done in idiosyncratic ways (cf. Blommaert 1999, 2004; Fabian 1990; de Rooij 1997: 118–125). Books, especially religious ones, and newspapers are widely available in Swahili, but the variety used in these publications is very similar to East Coast Swahili and is almost like a foreign language for speakers of Katanga Swahili.

1.2 Dutch as spoken in Heerlen (Eastern Mine District), the Netherlands

The immigration due to the expanding mining industry in the early beginning of the twentieth century has altered the linguistic uniformity of Heerlen in two important ways: (i) the local population who spoke dialect only became almost a minority (see Table 2 in Section 2.2) and (ii) a new intermediate variety, or rather, a new regional Dutch variety emerged that Cornips has labeled Heerlen Dutch to distinguish it from standard Dutch due its regional linguistic characteristics (see Cornips 1994, Cornips 1998a). If we adopt the various scenarios discussed by Thomason and Kaufman (1988), Heerlen Dutch may be considered as the result of imperfect group learning during the very rapid process of language shift due to an insufficient availability (of speakers) of standard Dutch in the beginning of this century (see Section 2.2). Such a shift began with the carryover of contrasts and patterns from the shifters’ local dialect into their version of standard Dutch: that is, with their unawareness that these patterns did not exist in the target language. Subsequently, these patterns have spread to the target language as a whole (see Thomason and Kaufman 1988: 38, 51). This language shift resulted in a Dutch that was quite different from what was considered standard as shown by the following quote by the dialectologist Kats in 1952: “any of us who listens in the streets, in tram, or bus will be upset linguistically by listening to the kind of Dutch that is often spit out there” [in Heerlen/LC].

3 “ieder die zijn oor wel eens te luisteren legt op straat, in tram of bus, zullen evenals ons wel eens de taalkundige haren te berge zijn gerazen bij het horen van het Nederlands dat daar vaak wordt uitgebraakt”
Heerlen Dutch is used in all informal settings: it is used in the domestic sphere but also in informal public settings (public transport, markets, shops). It should be emphasized that many daily conversations are characterized by light to moderate mixing of Dutch with dialect (Cornips 1994; Giesbers 1989). However, people write in standard Dutch; written Heerlen Dutch can be found when used in parody-style practices like in carnival for instance (Cornips and de Rooij 2015).

2 The emergence of the Mine Districts and Katanga Swahili and Heerlen Dutch

In what follows, we will explain how Katanga Swahili and Heerlen Dutch came into existence, under what conditions it grew up and how that shaped their structure and use.

2.1 Mining industry in Katanga

The history of Katanga Swahili is thoroughly entangled with the genesis and development of the mining industry in Katanga (Fabian 1986). Long before the Western colonization of Africa, Katanga was known for its trade in copper. In the course of the nineteenth century, Katanga developed into a crossroads for trading routes connecting the east and west coasts of Africa (Higginson 1989: 6–7). A key player in this was Msiri, the king of Garengeze, whose court was based in Bunkeya in Central Katanga, from which he controlled most of the region. When in the 1890s prospectors working for Western companies discovered large deposits of copper and other metals that could be mined and processed on an industrial scale, this resulted in the so-called “scramble for Katanga”. Leopold II’s Congo Free State and the British South Africa Company were both anxious to take control of Katanga, so they organized several expeditions trying to get Msiri to sign a treaty with them. Msiri was able to hold off all these attempts until in 1891 he was killed by one of the members of the Belgian-funded Stairs expedition after which the Belgians took effective control of Katanga (Perrings 1979: 5–9).

Not long after that, mining efforts got underway by the Union Minière du Haut-Katanga. In this stage these were small-scale mining activities involving very few Europeans. During these early days, the UMHK heavily relied on British expertise employing engineers with mining experience in South Africa. Through this personnel, the use of English and Fanakalo (Mesthrie, this volume), the
language used in many of the South-African mines, was prominent. This was to remain so for the next decades until the different kinds of worries among business and government stakeholders led to the well-known policy of stabilization of the workforce. The rapidly expanding scale of mining resulted in problems of worker recruitment. Many workers were recruited outside the Belgian Congo and their recruitment was subject to restrictions imposed by foreign colonial authorities. One of the main restrictions was that workers could only be recruited for a limited period of time. As the need for workers in other British colonial territories surged, these restrictions were tightened. As payment was low and working and housing conditions on the Katanga Copperbelt were horrible, death rates were high and many workers did not serve out their contracts (see Table 1).

### Table 1: Mortality, desertion and turnover rates among voluntary workers, 1913–1922 (based on Perrings 1989: 174–175).

| Year | Mean number present | Mortality per cent per year | Desertion per cent per year | Turnover per cent per year |
|------|---------------------|-----------------------------|-----------------------------|-----------------------------|
| 1913 | 290                 | 4.49                        | 50.34                       | 170.7                       |
| 1914 | 348                 | 7.00                        | 22.41                       | 156.0                       |
| 1915 | 1,035               | 2.89                        | 11.18                       | 84.3                        |
| 1916 | 1,011               | 3.17                        | 9.89                        | 137.6                       |
| 1917 | 1,148               | 4.09                        | 13.59                       | 108.2                       |
| 1918 | 2,414               | 14.29                       | 28.79                       | 120.7                       |
| 1919 | 3,091               | 2.26                        | 23.07                       | 102.9                       |
| 1920 | 3,327               | 0.96                        | 29.43                       | 121.8                       |
| 1921 | 2,979               | 1.88                        | 27.76                       | 146.4                       |
| 1922 | 2,101               | 1.90                        | 16.75                       | 119.0                       |

#### 2.2 Heerlen (Eastern Mine District) in Dutch-Limburg

In the Dutch-Belgian-German borderland (today the Euregio [European Region] Meuse-Rhine) four coalfields were situated close to each other: the Campine (see Auer and Cornips (2018), Pecht (this volume)) and Liège areas in Belgium, the mining region north of Aachen in Germany, and the South Limburg basin in the

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4 This section only discusses the expansion period of coal mining between 1900 and 1930 since these had a major impact on the linguistic situation in the Eastern Mine District with Heerlen as center.
Netherlands (Knotter 2008). Therefore, much border crossing took place – not only across the Belgian-Dutch-German border but also between coal mines in the north of France and adjacent Belgian Wallonia, and the notion of “foreign labour”, as Knotter (2008) emphasizes, must be treated with caution. Figure 1 shows the location of the mines in the Belgian-Dutch-German borderland in the twentieth century (from Knotter 2008: 3).

Mining in Dutch Limburg rapidly expanded around 1900 with the following mining companies: Dutch State Mines, Oranje-Nassau Mines, Laura and Vereniging, Domaniale, and Willem-Sophia. The Dominiale Mine in Kerkrade was part of the German Aachen Mine District and was the only one that was exploited in the in medieval times by the abbey of Rolduc (Knotter 2014: 377). The mining industry continued to expand during World War I in a strip of land of some 30 kilometers length and 10 kilometers wide in the south of the Dutch province of Limburg stretching between the Belgian and German borders (Knotter 2014: 378). Between 1900 and 1930 mining in Limburg was building up in full force with the exploitation of eleven new mining sites. Heerlen, a small village populated by 6,000 people in 1899, became the centre of the so-called Eastern Mine District. The Heerlen region quickly housed three privately owned mines – Oranje-Nassau Mine I (1899), III (1917), IV (1928) and the Dutch State owned Emma (1913). Other new mines in Heerlen’s direct surroundings were Willem-Sophia (1902, Spekholzerheide), Laura (1905, Eygelshoven), Wilhelmina (1906, Terwinselen), Oranje-Nassau II (1906, Schaesberg) and (Julia 1928, Eygelshoven). The Dutch State owned mine was as about as large as the four Oranje-Nassau Mines together. The administrative headquarters of both the privately owned and State mines, including boards of directors, were located in Heerlen.

The expansion of the Dutch Limburg mining industry led to an explosive production of coal: the mines produced 300,000 tons in 1900 against 1,292,289 tons ten years later (Brassé and Van Schelven 1980: 23) simultaneous with an explosive increase of employment: from 600 men in 1898 to 38,000 in 1930 (Langeweg 2011:342). Mine workers were in even far greater demand since labour turnover during the first three decades was huge (Langeweg 2011: 342). In general, according to Langeweg (2011: 342) the joint mining companies had to replace more than 40% of the total number of employees, and particularly before 1914 (World War I) up to almost 90%. A journalist of the socialist newspaper *Het Volk [The People]* notes about Heerlen in 1917: “The houses, the people, the entire atmosphere is un-Dutch [...]. All kinds of strange people walk around and one hears a hodgepodge of languages and dialects.”

5 “De huizen, de menschen, heel de sfeer doet on-Hollandsch aan... Allerlei vreemde typen loopen er rond en men hoort een mengelmoes van talen en dialecten om zich heen.”
Knotter (2008:9) argues that the recruitment of miners followed a hierarchical scheme, i.e. miners were preferentially recruited:

(i) “from each mining district in the Euregio;
(ii) from other regions within national boundaries (be it mining regions or not);
(iii) from bordering mining districts within the Euregio Meuse-Rhine;

Figure 1: Location of the mines in the Belgian-Dutch-German borderland (from Knotter 2008: 3).
(iv) from mining districts (more or less nearby) outside the Euregio; and
(v) foreign labour migrants or ‘guest workers’ from countries further away.”

With respect to the recruitment strategies in (i) and (ii) above, Limburg itself could not supply sufficient labor for the mines, nor the other parts in the Netherlands. The various recruitment strategies of the mines within Limburg, the Dutch-Belgian-German borderland and finally a broad altered the social, religious and linguistic uniformity of Heerlen (Knotter 2014).

At the end of 1920, due to recruitment (see [iv] and [v]) abroad, more than 20%, and in 1930, 33% of the coal miners came from outside the Netherlands (Langeweg 2011: 342). These percentages increase when examining the labor force underground in the pit where 40% of the miners had a foreign nationality. More than half of these foreigners had a German nationality and in the latter part of the 1920 especially people from Central and Eastern European countries were recruited (Langeweg 2011: 342). In the 1920s, at least in the private Oranje Nassau Mines, skilled Poles were recruited directly from Poland for work in the pit (Knotter 2008: 15).

From a perspective of the municipality level, the expanding mining industry in the Eastern Mine District attracted numerous workers from elsewhere in the Netherlands and abroad to live in Heerlen within a span of thirty years, as shown in Table 2 and Table 3.

**Table 2:** Number and origin of inhabitants of Heerlen between 1899 and 1930.

| Year | Number of inhabitants of Heerlen | Born in Limburg % | Born outside Limburg % |
|------|----------------------------------|-------------------|------------------------|
| 1899 | 6,312                            | 87.8              | 12.1                   |
| 1920 | 33,014                           | 47.8              | 51.1                   |
| 1930 | 46,917                           | 45.3              | 54.7*                  |

* 22% of whom were born outside the Netherlands (Dieteren [1962: 47])

Since the depression in the 1930s, the mining companies were able to attract young men from the Limburg area itself by means of internal on-the-job training (the so-called *leesjongensopleiding*) which after World War II became the Underground Industrial School (Ondergrondse Vakschool) (Langeweg 2011: 346) and due to the fact that the job of coal miner was not seen any longer as something foreign. The mining companies now only recruited abroad ([v] above) during temporary shortages between 1948 and 1951 in Italy, between 1955 and 1957 in Austria and Italy again, and after 1960 skilled coal miners were recruited from Yugoslavia and Morocco (Langeweg 2011: 346–347).
The following numbers give an impression of the scope of industrialization in the Eastern Mine District as a former agricultural area: 1.8% and 56.8% of the population lived in a rural and industrialized area, respectively, in 1956. These percentages were 11.4 and 21.5%, respectively, in 1975, and 11.5 and 23%, respectively, in 1988 for the Netherlands (Hinskens 1993: 76).

### 3 Policy of stabilization work force through housing policies

#### 3.1 Katanga

After World War I, the Belgian authorities got increasingly worried about the presence of engineers and workers from British colonial territories which they felt could undermine Belgian sovereignty. Measures were taken to oust English speaking personnel and their use of English and Fanakalo (Fabian 1986:)

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| Nationality       | 1930 number | %  |
|-------------------|-------------|----|
| Dutch             | 35,563      | 76%|
| German            | 6,253       | 13%|
| Polish            | 1,209       | 3% |
| Slovenian         | 789         | 2% |
| Belgian           | 525         | 1% |
| Austrian          | 304         |    |
| Hungarian         | 256         |    |
| Czechoslovakian   | 250         |    |
| Italian           | 226         |    |
| French            | 62          |    |
| Russian           | 20          |    |
| Rumanian          | 13          |    |
| Luxemburgish      | 6           |    |
| English           | 6           |    |
| Swiss             | 2           |    |
| Other             | 6           |    |
| without nationality| 211        |    |
| Total             | 46,885      | 100%|
A new policy of stabilization was to solve increasing problems of recruiting workers from abroad through foreign agents. This policy aimed at establishing a reliable, well-trained, workforce that could reproduce itself. Workers were then recruited mostly from within the Belgian Congo, and first and foremost from Swahili-speaking areas, hereby neutralizing the influence from British territories. And even before this, workers from a Swahili-speaking background formed a sizeable minority: in 1914, some 15% of recruited labor hailed from the Swahili-speaking Tanganyika-Moëro district in Northern Katanga (Fetter 1976: 40). The U.M.H.K. mining corporation, just like other colonial industrial conglomerates in the Congo, housed its workers in so-called camps, which were designed to accommodate as many workers as possible within a specific area. In these camps, conditions were very poor, especially in the first decades of the twentieth century and workers were subjected to a strict surveillance regime (De Meulder 1996). Colonial authorities, the Catholic Church, in the guise of the Benedictine order which had all but ousted other Catholic mission orders as well as Protestant influence, were united with the mining corporation in disciplining workers into conformity with obedience, even by physical force: “... corporal punishment was seen as a practical solution to the African workers’ restiveness, even though it was illegal after 1922” (Higginson 1991: 11).

Each one of these three players wanted order from different motivations but one could say that ultimately all these efforts contributed to profit making by the mining industry that was all-powerful in this industrial-colonial setting.

Labour unions were strictly forbidden in the Congo, so workers found other ways to cope with racial discrimination, and exploitation, such as millenarian religious movements like the African Watchtower sects (Higginson 1989: 124), that provided alternatives to the Catholic church, and participating in “... an intense cultural life, centered on ethnic, mutual-aid, burial and dance associations” (Fabian 1986: 110).

The policy of stabilization was accompanied by a deliberate language policy choice favoring the use of French and Swahili instead of Fanakalo and English. Along the trading routes from the East-African coast to Katanga, Swahili must have had some presence in Katanga from the third part of the nineteenth century onward. However, Fabian (1986) concludes from archival research on reported language use, it probably did not have the status of a lingua franca until the new language policy that favored French and Swahili, was put in place. The new recruitment and language policies made Swahili the most important urban vernacular in the cities of the Katanga Copperbelt. Since the 1920s, people have been migrating continuously between the urban centers of Katanga and the economically interconnected surrounding countryside and regions further away. So, it
should not come as a surprise that the vernacular Swahili spoken then and now was, and still is, highly variable as a result of a permanent process of second language learning by newcomers speaking closely related Bantu languages. Another factor promoting variability in the language is the absence of a written norm for Katanga Swahili; what is written in Swahili, religious tracts, books, newspapers, and communications from the government, are all closely modeled on Standard Swahili. From oral sources, we know that Swahili was well established as a vernacular language by the 1930s. Migrants’ first languages were used.

Figure 2: Map of the Belgian Congo railroad network showing the major cities of the Copperbelt: Elisabethville (present-day Lubumbashi), Kolwezi, and Jadotville (present-day Likasi) (c) Albert Sarlet, www.bck-kdl.be, CC BY 3.0 nl, https://commons.wikimedia.org/w/index.php?curid=36967239.
in the domestic domain for inter-parent communication, but parents often communicated with their locally born children in Swahili (Fabian 2009).

3.2 Eastern Mine District (Heerlen)

A recurring problem hindering labour supply was the housing shortage (Langeweg 2011: 344). Because housing played an essential role in selection and commitment, the mining companies built houses for their personnel, in cooperation with mainly Roman Catholic housing corporations and making use of national government subsidy schemes (Langeweg 2011: 348). Langeweg (2011) argues how mining companies, housing companies, trade unions, employment agencies, and the dominant Catholic Church, all did their utmost to regionalize the labor market by stabilizing the work force in South-Limburg and in doing so discouraged Dutch miners to cross borders.

There were all kinds of sanctions: recruiting agents were chased and fined because of illegal practices; miners living in company dwellings had to leave house as soon as they started working across the border; if they wanted to return to their former employer they had to wait three months before being employed again. Also, trade unions and the church staged a campaign of anti-propaganda: the Walloon mines were depicted as unsafe and unhealthy: family life and family morals would be undermined by the freedom commuters enjoyed far away from home. Dutch mining companies, supported by the influential Roman Catholic Church in Limburg, tried to control their labor force and to bind them to mining in the region. (Knotter 2014: 380, quoted from; Rutten 2011: 38–43)

Both the Catholic Church and the Mining companies would benefit from a “quiet” mining labor force from a political and religious perspective (Kreukels 1986: 82). The Catholic Church tried to recruit as many Catholic workers as possible. According to a resolution of the Dutch Catholic bishops on June 1, 1915: “we try to take measures for workers who are heading to Amsterdam and Rotterdam to guide them to the mining basins in Limburg where fewer dangers threaten their religious belief and virtue” (Kreukels 1986: 82). The mining companies provided grants to the Catholic Church and societal organizations that were preferred by the church (Kreukels 1986: 82). They also largely financed indirectly Catholic social activities such as some sections of the Catholic Trade Union (Christelijke Mijnwerkersbond and Limburgsche Rooms-Katholieke Werkliedenbond (Kreukels 1986: 131). The sociogram of the municipality of Heerlen (Gemeente Heerlen 1986: 14) summarizes the relation between the Mining companies and the Catholic Church as follows: “The mining companies played [...] the role of the modern feudal liege lord but the relationships between employer and coal miner reached completion by the church which occupied
itself with health care, education, societal organizations and nursing care."6 The mining companies collaborated with the church in erecting building corporations: the first one was *Ons Limburg* [our Limburg] in 1911. Fourteen thousand houses for workers and more than 1,000 for so-called *beamten* (higher employees) were built between 1905 and 1930 and six houses for unmarried workers from 1918 onwards (Brassé and Van Schelven 1980: 185). More than one third of all mining neighbourhoods in the Eastern Mining District were built in the northern part of Heerlen (Gemeente Heerlen 1986: 12). These mining neighbourhoods were so-called garden cities and called *kolonieën* or *koloniés* with a French-like stress on the last syllable instead of the second one as in standard Dutch. They were built according to the English model in which every house had electricity, running water and a garden. These new housing estates in Heerlen were isolated from the habitat of the established population. As Klessmann (1986: 344) notes, these housing estates offered mining families to live together and to live from crops of own gardening and to keep some livestock. The reason to spread the coal miners in *koloniés* was to prevent common political activities and large-scale urbanization (Messing 1988: 81; Kreukels 1986: 121).

Heerlen stretches out in a strip of land of ten kilometers length and two kilometers width in 1938. This strip housed the older established communities and 22 *koloniés*, each with 5,000 inhabitants working as coal miners. The *koloniés* were separated from each other by meadows, fields, gardens and other uncultivated areas. Each *kolonié* housed its own societal services and shops and were self-serviced. The newspaper *De Limburger Koerier* in 1938 characterizes the *koloniés* as follows:

> It is strange that a mass of thirty thousand workers does not stand out but it is true. The coal miners live in their own housing groups that other people do not often visit. The certainty that one faces a coal miner is the fact that some have blue spots in their faces as the result of shooting accidents [underground/LC] or injuries through which the coal dust has penetrated into the skin.
> (Kreukels 1986: 426)

The powers of the mining companies were almost unrestricted: they owned a police force, the so-called *mijnpolitie* ‘mine police’. The mine police had unconditional access to the *koloniés* that were owned by the mining companies. Moreover, the rental contracts in the *koloniés* were linked to the labour contract:

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6 *De mijn speelde (...) de rol van moderne feodale leenheer maar de betrekkingen tussen werkg- ever en mijnwerker werden vervolledigd door de kerk, die zich o.m. met de gezondheidszorg, onderwijs, verenigingsleven en ouderenzorg bezig hield.* (Gemeente Heerlen 1986: 14)
resignation of the mine entailed automatically termination of renting the house and in the case of the foreign coal miner, a deportation across the border.

### 3.3 Segregation underground as a reflection of Heerlen’s social geography

The mining industry was hierarchically organized: there was a huge difference in function and prestige between the so-called *beamtes* ‘officials who received their salary per month’ (Staatsmijnen in Limburg 1952: 323) and miners. The former group included members of the mining directions, technicians underground and above, and administrative employers. The miners underground were divided functionally as well. Examples in increasing order of importance are: hand putter, apprentice cutter, cutter, foreman hewer and among the lower administrative ranks: assistant overseer (*hulp-opzichter*), overseer (*opzichter*), (master) overseer (*meesteropzichter*) and chief overseer (*hoofdopzichter*). The extremely strict hierarchical division in the mining company was reflected in social life in the municipality of Heerlen. All *koloniés* were built, for economical reasons, as close as possible to the four shafts in Heerlen which were located to the north of the railway. Thus, the miners ended up living in the north, the mining officials in the south, where the administrative headquarters of the private and state mines were also located. Societal segregation was, and probably is, still visible in Heerlen at the 1980s: independent professionals and employees are much more represented in Heerlen-Zuid than in Heerlen-Noord, which also holds for cultural participation, such as a higher proportion of inhabitants who are subscribed to the city theatre, music school and creativity centers. Heerlen-Noord counted significantly more unskilled manual laborers (Gemeente Heerlen 1986: 129–130, 183).

### 4 Contact-induced language effects above ground

#### 4.1 Social meanings and prestige of local versus “refined” Swahili

From the fragment below taken from an interview Johannes Fabian (F) carried out in 1985 with Kisimba Adolphe (K) and Kalundi Mango (Ka), two old-time inhabitants of Katanga’s capital Lubumbashi (the former Elisabethville), it
becomes clear that as early as the mid 1920s Swahili had become an index of local urban belonging; incoming Swahili speakers from the north were confronted with negative appraisals of what was perceived as their “refined”, “pure” Swahili. As a result they quickly accommodated to the local Katanga variety of Swahili. In the passage quoted here, Kisimba Adolphe recounts the experience his father had after leaving his native village near Manono in the North of Katanga and arriving in Elisabethville in 1928.

(1) Fragment from Fabian (2009),

K: bon/ anatoka mille neuf cent vingt
huit/ kuya huku: alikуwa eko anasema
kiSwahili/
F: eeh/
K: tena anasema kiSwahili bora:
F: kule kwa: kule ku nord/
K: kule eeh/
Ka: kule na ...?...
K: kule ku: nord: ku Tanganika: eh: ku:
Ka: Tanganika...?...
K: eh/ bo balikuwaka banasema
kiSwahili muzuri sana/
F: mm/
K: banakuya humu: baba: banzake
wote: banduku yake: parce que
banduku yake banamuke walifika mbele
yake eh?
F: eeh/
K: balifika mille neuf cent vingt cinq:
F: eeh...
K: habakuwe kusema beko nasema
kiSwahili bora/ bale alitoka na kiSwahili
bora: anafika huku balimucheka/
F: mm/
K: yee alinielezea baba/
F: eh/
The urban dwellers of the Copperbelt talk about their variety of Swahili as an impure version of the refined Swahili of the North, but at the same time they are proud of it as it marks its speakers as rooted in the urban industrial South. While they may still feel part of a particular ethnic group, and even know a little bit of the language of that group, their place-attachment is expressed through Katanga Swahili which they often, quite tellingly, refer to as *kiSwahili ya kwetu* (literally ‘Swahili of our place’), or simply *kikwetu* ‘language of our place’.

### 4.2 Adult second language learning of Dutch and dialect in Heerlen

A sociological study by Brassé and Van Schelven (1980) sheds light on the rate of the process of language shift in Heerlen. They examined the process of integration (assimilation in their words) of Polish, Slovenian and Italian immigrants who became inhabitants of Heerlen between 1920 and 1940. Cornips (1998a) already discussed their findings. Among others, they questioned a subset of these immigrants (n = 392) about the degree of speaking ability in either Dutch or the dialect. Tables 4 and 5 give the immigrants’ opinions. Both tables display that (i) at least since 1920, Heerlen was already a multilingual community where at least both Dutch and/or dialect were spoken and (ii) the speaking ability in both Dutch and dialect increased tremendously between the first and second generation of immigrants, even though they were all born outside the Netherlands. This is an indication that the language shift in Heerlen took place at a very fast rate.

The percentages in Table 4 differ from Table 5 in that all the generations of immigrants believe that their speaking ability in Dutch is better than their command of the dialect of Heerlen. These opinions indicate that Dutch, rather

| Generation | None or bad | Moderate | Well | No answer | Total N = 392 |
|------------|-------------|----------|------|-----------|---------------|
| 1          | 8 16%       | 25 50%   | 10 20% | 7 14%     | 50            |
| 2          | 0           | 3        | 170 97% | 3         | 176           |
| 3          | 0           | 1        | 153 92% | 2         | 166           |
than the dialect, was the target language in the process of language shift (see Thomason and Kaufman 1988).

Finally, Table 6 shows that the acquisition of Italian, Polish and Slovenian decreases per generation.

Table 5: Respondents of Polish, Italian and Slovenian descent and their reported speaking ability Heerlen dialect (self report); source Brassé and van Schelven (1980).

| Generation | None or bad | Moderate | Well | No answer | Total N = 392 |
|------------|------------|----------|------|-----------|---------------|
| 1          | 25 16%     | 9 18%    | 5 10%| 11 22%    | 50            |
| 2          | 38 22%     | 26 15%   | 84 48%| 25 14%    | 176           |
| 3          | 32 19%     | 6 4%     | 90 54%| 38 23%    | 166           |

Table 6: Respondents of Polish, Italian and Slovenian descent and their reported speaking ability in Polish, Italian and Slovenian, respectively (self report) source Brassé and van Schelven (1980).

| Generation | None or bad | Moderate | Well | No answer | Total N = 392 |
|------------|------------|----------|------|-----------|---------------|
| 1          | 3          | 3        | 38 76%| 6         | 50            |
| 2          | 95 54%     | 30 17%   | 40 23%| 11        | 176           |
| 3          | 136 82%    | 6        | 7    | 17        | 166           |

5 Structural sketch of the contact variety Katanga Swahili

5.1 Phonology

Katanga Swahili has a symmetrical five vowel system consisting of /i/, /e/, /o/, and /u/. Phonetic values of /e/ and /o/ range, depending on the environments they occur in, from [e] to [ɛ] and from [o] to [ɔ] respectively.

7 This section is a shortened, slightly updated and revised version of the structural sketches in de Rooij (1996, 2007) which are based on sociolinguistic and ethnographic fieldwork in Lubumbashi, the capital of Katanga Province, DR Congo, in 1991 (June-October) and 1992 (June-December). Financial support for this research by the Institute for functional research into Language and Language Use and the Netherlands foundation for the Advancement of Tropical Research is hereby gratefully acknowledged.
Several consonants occurring in East Coast Swahili (ECS) are absent from Katanga Swahili, among them glottal fricative /h/. Other ECS sounds do not occur in Katanga Swahili either, most probably due to ad/substrate influence from Bemba and Luba-Kasai, where they do not function as phonemes (cf. Kashoki 1968; Burssens 1939). In Luba-Kasai and Bemba we do not find the following ECS sounds: voiced palatal affricate /ʤ/, voiced velar plosive /g/, glottal fricative /h/, and alveolar vibrant /ɾ/. In Katanga Swahili, these are commonly replaced by /j/, /k/, ø, and /l/ respectively. Furthermore, in Bemba we do not find voiced alveolar plosive /d/, voiced labio-dental /v/ and alveolar fricative /z/. These are often replaced in Katanga Swahili by /l/, /f/, and /s/ respectively.

/s/, /z/, /t/ are often palatalized to [ʃ], [ʒ], and [c ~ tʃ] respectively when followed by /i/. This palatalization is often perceived to be a typical feature of speakers with a Luba-Kasai background. Furthermore, the ECS preverbal tense prefix -li- is normally pronounced as [ri] or [ɾi]. Katanga Swahili has a range of prenasalized consonants that are also found in substrate languages (cf. Bostoen 1997: 91). The status of some of these prenasalized consonants as phonemes remains to be settled (de Rooij 1997: 335).

Summarizing, it seems clear that contact with ad- or substrate languages has resulted in a phonological system that has drifted away from the East Coast Swahili system and has become more similar to the systems of ad/substrate languages. Phonemes that do not occur in ad/substrate languages have been lost, partly or completely. The clearest example of this process is /h/ which is almost categorically left unarticulated. Other phonemes have blended into one, where the phoneme that is absent in one or more ad/substrate languages has been lost or weakened. An example is the blending of East Coast Swahili velar plosives /g/ and /k/ into /k/.

### 5.2 Nominal structures

Nominal structures in Katanga Swahili are more analytic than those in ECS and ad/substrate languages. Katanga Swahili has retained the typically Bantu noun class agreement system, but it has changed and has undergone influence from ad/substrate languages.

Table 7 lists the noun class prefixes of ECS and Katanga Swahili. Noun classes through 10 are arranged pair-wise where the even numbered class prefix denotes plurals and the odd numbered class prefix singulars (e.g. class 7 ki-tabu ‘book’ versus class 8 bi-tabu ‘books’). The number of noun class prefixes in Katanga Swahili has increased in comparison to ECS: although it has lost one (class 10
collapses with class 6) it has added three (classes 11, 12, 13) which have been borrowed from Luba-Kasai and Bemba. The differences in morphophonemic shapes of noun class prefixes 1, 2, 3, 5, 8, 11, and 14 can also be attributed to ad/substrate influence. The \textit{ri}- and \textit{li}- (Ferrari et al. 2014: 26–27) forms of class 5, for instance, are clearly reflexes of the Luba-Kasai and Bemba noun class prefixes for that class.

It should be noted that infinitives are morphologically marked as nouns by noun class 15 prefix \textit{ku}-. The locative classes 16, 17, and 18 have a different status than they have in ECS. In Katanga Swahili, \textit{pa}-, \textit{ku}-, and \textit{mu}-, occur as pre-prefixes and may function as prepositions, as shown in (2) where \textit{mu} is followed by an NP consisting of a demonstrative (\textit{ile}) and a plural noun (\textit{mashiku} ‘days’).

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
Noun class & ECS & Katanga Swahili & Luba-Kasai & Bemba \\
\hline
1 & m- & mu- & mu- & mu- \\
2 & wa- & ba- & ba- & ba- \\
3 & m- & mu- & mu- & mu- \\
4 & mi- & mi- & mi- & mi- \\
5 & ji-/∅- & ji-/ri-/li-/∅- & di- & li- \\
6 & ma- & ma- & ma- & ma- \\
7 & ki- & ki- & ti- & ti- \\
8 & vi- & bi- & bi- & fi- \\
9 & N-/∅- & N-/∅- & N- & niN- \\
10 & N-/∅- & N-/∅- & N- & niN- \\
10 → 6 & ma- & & & \\
11 & u- & lu- & lu- & lu- \\
12 & ka- & ka- & ka- & ka- \\
13 & tu- & tu- & tu- & tu- \\
14 & u- & bu- & bu- & bu- \\
15 & ku- & ku- & ku- & ku- \\
16 & pa- & pa- & φa- & pa- \\
17 & ku- & ku- & ku- & ku- \\
18 & mu- & mu- & mu- & mu- \\
\hline
\end{tabular}
\caption{Noun class prefixes in Katanga Swahili, ECS, Luba-Kasai and Bemba (some variants of prefixes not shown for reasons of clarity).}
\end{table}

(2) \textit{ (...) mais u-na-kufwa mu ile ma-shiku} \\
\textit{but 2SG-TMA-die LOC DEM 6-day} \\
‘(...) but you will die during that period.’ (Félicien/VDK1:8/38) \\
(de Rooij 2007: 127)
In ECS, on the other hand, locative phrases are formed by suffixing a general locative affix -ni to a noun, while pa-, ku-, and mu- can only be affixed to noun modifiers. The use of locative prefixes as pre-prefixes in Katanga Swahili must be attributed to ad/substrate influence, since it occurs in all Central Bantu languages (Grégoire 1975: 17). The semantics of Katanga Swahili pa-, ku-, and mu- is the same as in the ad/substrate languages and ECS where, roughly speaking, pa- expresses a general locative meaning (at), ku- expresses direction (toward), and mu- expresses being inside of (in).

Noun-adjective agreement has been simplified radically: most adjectives have only one generalized form that is used with nouns from different classes. Agreement is thus variable but marked most strongly in classes 1, 2, 7, 8, 12, 13, 14, especially in the plural classes 2 and 8 among these, but ultimately depends on the strength of the generalized form of the adjective. This phenomenon does not occur in neighboring languages and can, therefore, not be the result of borrowing.

Reduction and simplification are also found in subject and object agreement on the verb. In Katanga Swahili object concord markers co-indexing non-human objects are very seldom used, except for classes 7 and 8. The generalized, but not categorical (Bostoen 1997: 106), use of i-, as a subject marker in classes 3 through 10 is striking. This restructuring cannot be explained by invoking ad/substrate influence, because the ad/substrate languages make use of the same agreement system as ECS, where markers have roughly the same morphophonemic shape as the prefixes of the nouns they refer to. The use of marker i- seems to correlate strongly with the feature [-human]: it does not occur with nouns belonging to classes 1 and 2, denoting human beings while its use is favoured in all other classes except classes 7, 8 and 11 through 14. Noun class prefixes 11 through 14 stand apart from the others in that they are used productively to derive nouns with very specific meanings (e.g. diminutives).

5.3 Verbal structures

Katanga Swahili has the preverbal TMA affixes that are typical of Bantu languages. According to Schicho (1988, 1990) the ECS preverbal tense affixes that have survived in Katanga Swahili have lost much of their meaning as realizations of tense and may in many cases be regarded as a kind of dummy-elements that have to be realized for morpho-syntactic reasons. The most frequently used preverbal tense affixes in Katanga Swahili are: -na- marking present tense, -li- or -ri- marking past tense, and -ta- marking future tense. According to Schicho
(1988: 568), in a narrative sequence time reference needs to be marked only once by a tense affix on a verb, by sentence-initial adverbs, or may even be left unexpressed if time reference can easily be inferred from contextual information. Schicho claims that the following distinctions provide the basis for what he calls the Aspect-dominated TMA system of Katanga Swahili:

i. [+ anterior] (including [perfect/resultative])
ii. [-anterior, -posterior]
iii. [posterior/irrealis]
iv. [progressive] (including [habitual], [intensive], [durative], [iterative])

In Katanga Swahili, a number of lexical verbs followed by infinitival forms seem to be in a process of grammaticalization toward auxiliary verbs expressing aspectual meaning. [+ anterior] with perfective/resultative aspect can be expressed by using -toka + preposition mu- + infinitive ‘leave, quit from’, and -isha + infinitive ‘finish’, also shortened to -sha as shown in (3). -isha is also used in this way in ECS and several contact-induced varieties of Swahili (see Gilmore [2016: 119] for a listing of relevant studies) but -toka+mu is not. Note that while the inflected form of -isha is followed by an infinitival form in (3a) and (3b), a “bare”, i.e. uninflected, verb form follows in (3c).

\[(3)\]
\[\begin{align*}
\text{a Mi-na-isha ku-pakala vernis.} \\
&1SG-TMA-finish INF-apply varnish^8 \\
&‘I have already varnished it.’ \\
&\text{(Schicho 1988: 569)}
\end{align*}\]
\[\begin{align*}
\text{b Bote banaisha kuakikishiya.} \\
&PC2-tous 3P-PRS-finir INF-conformer \\
&‘They have already been certified.’ \\
&\text{(Ferrari et al. 2014: 64)}^9
\end{align*}\]
\[\begin{align*}
\text{c Bintu binaisha fika.} \\
&PC-choses PC8-PRS-finir arriver \\
&‘The goods have already arrived.’ \\
&\text{(Ferrari et al. 2014: 65)}
\end{align*}\]

---

8 Glosses in the examples from Schicho (1988, 1990) and from Ferrari et al. (2014) were left unaltered. Schicho and Ferrari et al. use different glosses for the same or similar morphemes.

9 All examples taken from Ferrari et al. (2014) are here translated into English; in the original French publication, French translations are provided.
The following examples of \textit{–toka+mu} are given by Ferrari et al. (2014: 63):

(4) \begin{enumerate}
    \item[a] \textit{Natoka mu ku-fika ku kipande umu.}
        \hspace{1cm} PRS-sortir de INF-arriver dans côté intérieur
        \hspace{1cm} ‘I just arrived from there.’
    \item[b] \textit{Tunatoka pa kula mpaka sasa.}
        \hspace{1cm} 1P-PRS-venir de manger\textsuperscript{10} jusqu’à maintenant
        \hspace{1cm} ‘We have just finished eating.’
\end{enumerate}

The category \textit{[posterior/irrealis]} can be expressed by \textit{-tafuta} ‘look for’ and by \textit{-enda} ‘go’ as in (5).

(5) \begin{enumerate}
    \item[(h)] \textit{a-ba-ta-enda ku-ra nani, ku-ra nkuku.}
        \hspace{1cm} NEG-3PL-TMA-go INF-eat FILLER INF-eat chicken
        \hspace{1cm} ‘They will not eat ehm, eat chicken.’ (Michel/M1:5/09)
        \hspace{1cm} (de Rooij 2007: 128)
\end{enumerate}

The categories \textit{[progressive]} with habitual, intensive, durative, or iterative aspects\textsuperscript{11} can be expressed by the verb \textit{-anza} ‘start, begin’, as in (6) and (7), or by the copulative element \textit{-ko-} used as a preverbal affix, as shown in (8).

(6) \textit{Oke oke, tu-na-anza ku-enda mu pori tu-na-tembeya tii.}
    \hspace{1cm} Okay okay 1PL-TMA-start INF-go into bush 1PL-TMA-walk IDEO.long
    \hspace{1cm} ‘Okay okay, we went into the bush and walked for a long time.’
    \hspace{1cm} (Ferrari et al. 2014: 141)

(7) \textit{A-na-anza ku-fan(ya) ma-bêtise.}
    \hspace{1cm} 3SG-TMA-start INF-do 6-stupidity.
    \hspace{1cm} ‘He started (and went on) doing foolish things.’
    \hspace{1cm} (de Rooij 2007: 129)

(8) \textit{Disons be-ko-na< be-ko-na-soigner eh?}
    \hspace{1cm} Let’s say 3PL-COP-TMA< 3PL-COP-TMA-care.for TAG
    \hspace{1cm} ‘Let’s say they provide medical care, don’t they?’
    \hspace{1cm} (de Rooij 2007: 129)

\textsuperscript{10} This gloss provided by Ferrari et al. (2014) should be ‘INF-manger’ for ‘ku-la’
\textsuperscript{11} Habitual and intensive aspects can also be expressed by the prefinal affix \textit{–ak-} in combination with a TMA marker.
The use of –anza ‘start’ to mark habitual/durative aspect and –enda ‘go’ or –tafuta ‘look for’ to express inchoative aspect can be traced to semantically similar verbs in Luba-Kasai (Bostoen 1997: 121).

In ECS as well as the ad/substrate languages, negation is expressed by a verbal prefix. In Katanga Swahili this strategy is still used with one important difference: in most cases, a sentence-final second negation element is added (cf. Schicho 1992: 84). In (9) we find (h)apana, originally a negative locative copula in ECS, but nowadays used almost exclusively as a negative answer to a yes/no question meaning.

(9) Mais zamani (h)a-ba-ku-anz-ak-e ku-rima
    but long.ago NEG-3PL-TMA-start-INT-FIN INF-cultivate
    vile (h)apana.
    thus NEG
    ‘But long ago they didn’t cultivate (the fields) like that.’ (Papa Tshibangu/VT3:1/04)
    (de Rooij 2007: 129)

Periphrastic constructions, however, do also occur making use of Swahili verbs with an inherently negative meaning as in (10) and (11).

(10) Kama u-na-kosa kwenda ku-bar hii.
    if 2SG-TMA-refuse INF-go LOC-bar DEM
    ‘If you don’t go to that bar.’
    (Schicho 1990: 478)

(11) a-na-acha ku-tumika.
    3SG-TMA-discontinue INF-work
    ‘He doesn’t work anymore.’
    (Schicho 1990: 478)

This use of negative verbs does not occur in ECS but has been attested in the following ad/substrate languages: Bemba, Luba-Katanga, Luba-Kasai, Lala, and Lamba (Kamba Muzenga 1981: 5–6).

5.4 Conclusion

Comparing Katanga Swahili with East Coast Swahili and other migrant (and non-migrant) languages in Katanga presents specific problems. It is not always
possible to identify one language as the source language because of the strong structural similarities between potential source languages. It is clear, however, that structural innovations in verbal morphosyntax can all be described as analytic. This change from an agglutinative morphosyntax to a more analytic structure is all the more striking since all of the languages involved are closely related Bantu languages, characterized by agglutinative morphology (de Rooij 2007).

The mining industry was a crucial factor in the genesis of Katanga Swahili but Katanga Swahili is not a miners’ language sensu stricto; it is not exclusively a miners’ language because it was (and still is) the urban social environment that made this language into what it is. Katanga Swahili’s broad adoption by the urban populations finds its origin in mining industry policies, aimed at ousting Fanakalo and English speaking mining personnel, and installing Swahili as a medium of communication in the mining industry.

From a local emic perspective Swahili is seen as divided in two. There is a popular variety (with differing degrees of influence from recent migrants’ first languages) which is widely perceived as indexical of urban identity next to a ‘refined’ variety used in education, religious publications, which is widely seen as “hard” to understand, and indexical of the north where people speak “pure” Swahili.

What makes the history of Katanga Swahili interesting is that its present status and use is to large extent due to the strong political intervention “from above” in the 1910s and 1920s, in the form of favouring this language above all others and ousting other languages, actually the speakers of these languages, from Katanga.

Although quite a lot of studies of Katanga have been published from the 1970s onward, its older stages remain largely undocumented as is common for languages that are used mostly in an oral mode.

### 6 Eastern Mine District: Language underground and language policy

What language was used underground in the Eastern Mine District is not documented. The former miners, born and raised in Heerlen, who Cornips recorded at the end of 1980s told her spontaneously that they spoke dialect in the pit. The mining companies never formulated an explicit language policy. A
former officer working in the administration informed Cornips during her fieldwork in 1989 that: “Well, we had various nationalities [...] and that caused some problems. Yes eh restricted language courses were given, I believe even from the employment office, but I’m not sure. But I know certainly that the mining companies provide language courses to the unmarried men living as private tenants together in one house so that they weren’t bored too much.”

The mining terminology started out to be a hodgepodge of French, Walloon, Dutch and German whereas the latter language dominated quickly. The supervisors underground learned the mining terminology at the mining school in German Bardenburg which moved to Aachen in a later stage. Heerlen got its own mining school since 1913. Only in the Domaniale Mine in Kerkrade (near Heerlen) where small-scale mining was present since medieval times, mining terminology was more influenced by dialect. Jo Bischoff (1986) published a list of functional mining terms based on the knowledge of M. J. Busch, a miner who worked in the Dominiale Mine. Some lexemes show the influence of the dialect of Kerkrade, that is, the voiced correlate of the palate-velar fricative /ç/ is realized as the palatal glide /j/ in jesjos /jesjos (Dutch: ‘explosive powder’) (Hinskens 1993: 149) and palatalization of the /s/ in /jesjos/ /je/sos. Other lexemes based on dialect are: roetsje-toeër ‘the length of the couloirs’, stijar ‘scaffold’, kiette ‘lubrication of the passage from and in a mine through which air passes’, and der püs krieje ‘to be resigned’. “Boots” was the term to refer to the foremanhewer.

One of the most striking characteristics of the mining terminology underground in the Eastern Mining District was the huge amount of borrowings from German which were replaced by Dutch ones over time, especially after World War II when miners even tried to abandon the greeting glück auf (Van de Wijngaard and Crompvoets 1989). However, the replacement of German terms by Dutch was a slow process since there were no official handbooks available in Dutch whereas all leading handbooks were in German. According to Van de Wijngaard and Crompvoets (1989), the language spoken by the Eastern European miners (kompels ‘buddies’) played no role of any significance in the development of a mining terminology. Only in 1952, the Centrale Taalcommissie voor de Techniek [the central committee for technics] composed a list of mining terminology with the aim to ban German out of professional language underground, that is, to Dutchify the mining terminology: dak ‘roof’ instead of hang ende ‘hanging’ and winning ‘exploitation of the coal underground’ instead of

12 Nou we hadden wel verschillende nationaliteiten [...] en dat gaf ook wel problemen. Ja eh taalcursussen werden gegeven, ik geloof zelfs van de arbeidsbureaus uit ook, dat weet ik niet. Maar ik weet zeker van de bedrijven uit werden taalcursussen [gegeven] voor die mensen die werden opgevangen in die gezellenhuizen dat ze zich niet al te veel verveelden.
process of banning German was more successful in the state mines than in the private owned mines. In the latter, the German term steiger ‘scaffold’ was common, which is a nominalisation of the verb steigen ‘to raise’ that got special semantics in the pit: from the underground to above ground.

6.1 Linguistic outcomes of the process of language shift

The major linguistic outcomes of the language shift from dialect to Dutch in Heerlen are clearly visible in two empirical domains. First, the use of the auxiliary doen ‘do’ has become an aspectual marker expressing habitual aspect, and second the reflexive zich as an aspectual morphological marker has spread throughout various predicates. The data stem from recordings (33.5 hours) of sociolinguistics interviews of 67 speakers in which two men spoke with each other for an hour about self-selected topics (Cornips 1998a).

6.1.1 Auxiliary used as an aspectual marker

The Heerlen dialect differs from Dutch in all its linguistic aspects: lexical, phonological, morphological and syntactical. It is for this reason, that syntactic interference due to language shift may well result in syntactic constructions that are marginal and stigmatized in standard Dutch. The declarative doen+infinitive construction with the frame NP₁-doen-(NP₂)-V in (12) is an illustration of this. Note that in (12) doen ‘do’ is not an auxiliary in the strict sense since it does not select a past participle but an infinitive and that doen carries all agreement and tense features (D = Dutch, HD = Heerlen Dutch) (Cornips 1998b):

(12) a. Zij doet werk-en /*ge-werk-t. ?D/HD
    she do.3SG-PRS work-INF /worked.PTCP
    ‘She is working’

b. Zij doet haar huiswerk mak-en. ?D/HD
    she do.3SG-PRS her homework make-INF
    ‘She is doing her homework’

Note that doen in (13) can never be considered as causative doen since no second NP as object is present:
Heerlen Dutch:

(13) a. ...die doet ook nou in de tuinen werk-en... (2: Wybe)
   he do.3SG-PRS also now in the garden-PL work-INF
   ‘he works in the gardens at present’

   b. ...die doen veel hobby-en hier boven ..(14: Gijs)
   they do.3PL-PRS a lot pursue.hobbies-INF here upstairs
   ‘they pursue their hobbies here upstairs a lot.’

In (12) and (13) the *doen+infinitive* construction in Heerlen Dutch expresses activities of the agents that have a regular pattern and, in contrast, do not have an incidental reading, that is, *doen* determines the aspectual properties of the entire sentence in bringing about an event structure in which an event is depicted as habitual (presentational aspect).

More evidence in support of this analysis can be found in the minimal pairs with and without *doen* in (14) (cf. Cornips 1994/1998b). The (a) sentence indicates a plurality of events (habitual aspect) whereas the (b) sentence without *doen* expresses an incidental activity:

Heerlen Dutch:

(14) a. ... een jongen (...) doet ook vis-sen... (19: Cor)
   a boy do.3SG-PRS also fish-INF ...
   ‘he fishes on occasion’

   b. ... hij vist ook wel eens... (19: Cor)
   he fish.3SG-PRS too well once...
   ‘he is fishing once in a while’

Finally, the *doen+infinitive* construction combines only with adverbial phrases that suggest a plurality event reading, that is, adverbial phrases that intensify the habitual reading of the action already expressed by the predicate. Consider, for example, the *doen* constructions in (15) with adverbials, such as ‘s zaterdags en vaak ‘s zondags ‘on saturday and often on sunday’, *alleen maar ‘only’* and *altijd ‘always’* appear:

Heerlen Dutch:

(15) a. ... deed ik ‘s zaterdags en vaak ‘s zondags (...) m’n huiswerk
   did.1SG-PST I on saturday and often on Sunday my homework
   make-INF
   ‘I often did my homework on Saturday and on Sunday’
b. ... *ik deed alleen maar sport-en...* (20: Jeroen)
   I did.1SG-PST only just sport-INF
   ‘doing sport, that is all I did’

   c. ... *ik doe dan altijd kijk-en* (26: mr Bon)
   I do.1SG-PRS then always look-INF
   ‘I then watch always’

6.1.2 Spread of *zich* as an aspectual morphological marker

Heerlen Dutch differs from standard Dutch in the possibility of forming various reflexive constructions. A first example is presented in (16) which includes inchoative meaning from transitive change-of-state verbs, such as *bewijzen* ‘to prove’, *krullen* ‘to curl’ and *veranderen* ‘to change’, *buigen* ‘to bend’. Constructions as (16) are in fact ergative constructions in which *zich* acts as an aspectual marker that focusses on the endpoint of the action (Cornips and Hulk 1996).

(16) *Het riet buigt zich.*
    the reed bend.3SG-PRS REFL
    ‘The reed is bending completely.’

In Heerlen Dutch the presence of *zich* has been regularized compared to the local dialect and standard Dutch. In contrast to Heerlen Dutch, the presence of *zich* with the verbs *bederven* ‘to decay’, *slepen* ‘to drag’, *drogen* ‘to dry’ and *breken* ‘to break’ are not acceptable whereas in standard Dutch the verbs *krullen* ‘to curl’, *buigen* ‘to bend’ and *veranderen* ‘to change’ are not acceptable with the reflexive *zich* (cf. Cornips 1994).

Another type of reflexive construction that may occur in Heerlen Dutch is the dative *zich* construction in (17). Similar to the reflexive construction in (16), the dative *zich* construction in (17) denotes a state of affairs that can be described as the endpoint of the action (Cornips and Hulk 1996):

(17) *Jan eet zich een boterham.*
    Jan eat.3SG-PRS REFL a sandwich
    ‘Jan eats a (whole) sandwich completely,’

The reflexive as a morphological marker indexes telicity in the constructions (16) and (17). Various types of reflexive middle constructions constitute more examples, namely, the transitive, impersonal and adjunct middle, illustrated in (18a), (18b)
and (18c), respectively. The reflexive constructions in (18a and 18b) are also possible in the Ripuarian dialects spoken in Germany across near Heerlen (Cornips 1996):

(18) a. Dit boek lees-t zich gemakkelijk.
   this book read.3SG-PRS REFL easily
   ‘It is easy to read this book,’

b. In deze zaal zing-t ‘t zich goed.
   in this hall sing.3SG-PRS it REFL well
   ‘One can sing well in this hall.’

c. Deze zaal zing-t zich goed.
   this hall sing.3SG-PRS REFL well
   ‘This hall has good acoustics.’

Finally, impersonal passives may show up with a reflexive as illustrated in (19), which is not part of standard Dutch at all:

(19) Er word-t zich gewassen.
    there is.3SG-PASS REFL wash.PTCP
    (Cornips and Hulk 1996)

In conclusion, the language shift from dialect to Dutch has brought along a wider option of reflexive uses in the emerged regional variety of Dutch labeled Heerlen Dutch. Heerlen Dutch differs from standard Dutch and dialect in that (a) the use of the reflexive in most cases is a morphological marker expressing telicity which is optional and obligatorily as in the dialect and (b) the presence of the reflexive has been regularized in the class of intransitive counterparts of transitive change-of-state verbs.

As was the case in Katanga for Katanga Swahili, the mining industry was a crucial factor in the genesis of Heerlen Dutch but like Katanga Swahili, Heerlen Dutch is not a miners’ language in the strict sense of being spoken by miners in a mining context because here too it was (and still is) the urban social environment and demographic effects caused by industrialization that made this language into what it is.

7 Conclusion

In this article, we have explored two cases of contact-induced language change in the context of rapid urbanization and industrialization in an African and a
European mining region. Although, our comparison may, at first blush, seem a bit far-fetched, we think that political-economic and socio-historical similarities between both settings do warrant the comparison. The Dutch and Congolese mining regions provide comparable cases of contact-induced language change under conditions of exploitation and colonization. Thinking about colonization, one is inclined to think about the West colonizing the non-West during the sixteenth to twentieth centuries. But we should stop and ponder similar racializing and colonizing projects within the West:

Most importantly, we need to see how imperial centers, in particular those of western Europe, created relations between centers and peripheries, whether within the boundaries of their states or beyond them. The role of the periphery is to supply the center with human and material resources as needed, and to act as a frontier for economic expansion, absorbing surplus population and providing new spaces for investment. State centralization produced peripheries as potentially exploitable and explorable spaces.

(Heller et al. 2016: 67)

Heller et al. (2016: 68) characterize this process as “internal colonization”. Although one should be careful to equate the European and African cases discussed here, it is clear that in both cases, severe economic exploitation took place during the beginnings of the twentieth century. There is no doubt that in the African case, exploitation took on much more brutal forms but in both regions workers must have felt scrutinized, disciplined and exploited. After World War II, however, miners in both regions were economically prosperous compared to other labourers.

In such difficult circumstances as in the beginnings of the mining industries, miners from very different cultural and linguistic backgrounds actively worked toward constructing new language varieties that diverged in interesting ways from the “target” languages. Developed by workers’ in their new living and working environments, these new codes took on strong indexical values of professional pride and solidarity, as well as local pride and community belonging (Auer and Cornips 2018; Cornips and de Rooij 2018).

The language contact situations in Limburg and Katanga resulted in structural innovation of Dutch and Swahili respectively. The most interesting innovation we identify in both cases can be characterized as the regularization of grammatical properties, and the expansion of aspect marking. This may be explained by looking at what is known from the first and second language acquisition literature, stating that aspect marking is acquired before tense marking (Andersen 1991: 306).

The striking innovation and expansion of aspect marking in both Heerlen and Katanga can be further explained by the fact that both languages are spoken
languages. The absence of an influential written norm, codified on the basis of
traditional model grammars that emphasize tense over aspect, may also help to
explain these findings. One could say that these speakers could engage in
“languaging” relatively unfettered by language authorities. Since in spoken
interaction, speakers share more contextual knowledge, especially concerning
the temporal relation between the ongoing event and other external talked-
about events, tense marking may be less prominent. Aspect marking on the
other hand is much more prominent in oral discourse in which the dramatic
aspects of talked-about events is more important than their already transparent
temporal sequencing. Heerlen Dutch as well as Katanga Swahili are contact-
induced varieties created in and through face-to-face interactions, and, there-
fore, the expansion of aspect marking may not be very surprising.

Another possible explanatory factor may be that aspect marking by analytical
or periphrastic means, i.e. not making use of inflectional morphology but rather
relying on lexical items, may help the second language learner to acquire a
communicative competence in the target language quicker and more efficiently.

In both the Limburg and Katanga cases, a focused contact-induced variety was
established within a very short period of time. This is evidence of man’s capability
to collaboratively construct new codes if there are strong enough motivations to be
able to communicate with others from different language backgrounds, and if there
are strong motives for mutual social identification. Through lack of historical
documentation, we can only partly reconstruct these processes in Limburg and
Katanga, but similar contemporary situations abound and should be studied in real
time in order to expand our understanding of social identification through language
practices under conditions of migration and language contact.

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