

IN BRIEF

# Urban Toponymy in South African Sign Language (SASL): Patterns and Variations

Sara Siyavoshi and Patrick Sibanda

## Introduction

Onomastics, a field within the humanities, focuses on the study of proper names. It is closely intertwined with various broader disciplines, including linguistics, ethnography, philology, history, philosophy, and others. Names are “special words used to identify a person, an animal, a place, or a thing, each carrying significance. In many instances, this significance may be obscured within the name’s history, while in others, it remains apparent” (Redmonds 2007, IX). One subfield of onomastics is toponymy, which is the study of place names in language. Place names, or toponyms, serve as geographical markers in all languages. They are also artifacts of cultures and languages intimately tied to the human conceptualization of spaces.

The study of onomastics in sign languages has consistently been an aspect of both sign linguistics and deaf studies. This sustained interest arises from the unique system of personal naming through

---

Sara Siyavoshi, a sign language linguist, is a postdoctoral research fellow at the University of the Free State in Bloemfontein, South Africa. She is involved in the research project Survey of South African Sign Language Place Names. Patrick Sibanda, a practitioner in deaf education and senior lecturer in disability studies and inclusive education, currently serves as a postdoctoral research fellow at the University of the Free State in Bloemfontein, South Africa. He is involved in the research project Survey of South African Sign Language Place Names.

visual-gestural attributes, operating independently of conventional written and spoken names, and consistently drawing the attention of scholars. Within deaf communities across the globe, a common practice involves assigning names based on physical attributes, behavior, occupations, and life narratives and aligning with the morphological structures inherent to the respective sign language. Studying the system of assigning names and analyzing naming patterns in sign languages extends beyond personal names. Signers employ various strategies based on phonological or morphological patterns to name not only individuals but also places. Discussing spatial and geographical features constitutes a significant aspect of people's everyday conversations. In this study, we specifically investigate the toponymic system, focusing on urban place names in South African Sign Language (SASL). Our analysis is based on data collected from SASL signers residing in the city of Bloemfontein in Free State province.

## Background

Different studies have analyzed personal names within various sign languages of the world (e.g., Hedberg 1994; Padden and Humphries 2005; Paales 2010; Barros 2018; Cruz-Aldrete and González Muciño 2022). However, focusing on the distinctive naming patterns associated with geographical, urban, and environmental features within sign languages is a relatively novel and emerging topic. The scope of toponymy studies within sign languages is relatively limited regarding the number of languages explored. In the following paragraphs, an overview of these studies is provided.

Revilla (2009) studied sign place names in Israeli Sign Language and divided the place name etymologies into three main classes: environmental, historical, and names (based not only on other place names but also those based on people's names). In a study on Estonian Sign Language, Paales (2010) examined the influence of spoken Estonian language on sign place names. She, however, found out that most of the sign names in Estonian Sign Language can be categorized as *descriptive* place name signs, which are the sign names without the influence of surrounding spoken language. Nonaka (2015) analyzed toponymic signs in Ban-Khor Sign Language (BKSL), a village sign language in contact with Thai Sign Language and spoken/written

Thai. This study shows that patterns of the toponymic system have been shifting by borrowing from Thai Sign Language.

Hofer (2021) studied the toponymic system in Tibet Sign Language, a recently emerging sign language in Tibet and found minor semantic, morphological, and prosodic influences from classical Tibetan and the spoken Lhasa variety of Tibetan, as well as virtually no influences from the Chinese Sign Language (CSL) or Lhasa variety of Chinese Sign Language (LhCSL) systems of place names. Brazilian Sign Language (Libras) has been studied regarding toponymic signs more than other sign languages (e.g., Sousa and Quadros 2021; Faria-Nascimento 2009; Sousa 2019; Urbanski, Ferreira, and Xavier 2020; and do Carmo and de Sousa 2022). Faria-Nascimento (2009) analyzed the transliteration borrowing process in Libras, which is the representation of letters of a spoken language in the hand configuration of a sign language. Sousa (2019) categorized the motivational pattern of Libras toponymic signs into two categories: name signs that are exclusively based on the native language (of a visual-spatial nature) and place name signs that are conceived through hybridism, following loan processes based on lexicalized transliteration or initial letter transliteration. Studies have showed that 68 percent of the toponymic signs in Libras exhibit hybrid characteristics, incorporating at least one element of sign formation borrowed from the equivalent place name in the spoken language (Souza-Júnior 2012; Sousa and Quadros 2019; Urbanski, Ferreira, and Xavier 2020). In a study of name signs in Japanese Sign Language (JSL), George (2022) uses another categorization: exonyms, which are influenced by the source Japanese names, and endonyms, which are independent JSL names. The study shows that exonyms tend to emerge as compounds while endonyms conform more closely to canonical monomorphemic JSL lexemes.

A prevalent theme in the foregoing studies is examining how surrounding languages impact the toponymic system within sign languages. This is particularly significant because sign languages are mostly categorized as minority languages. The minority status can be attributed to either their association with a predominantly spoken language of the surrounding hearing community within a region or the context of being influenced by a more established sign language with stronger social support. The latter is evident in languages like Ban-Khor Sign Language and Tibetan Sign Language. Exploring to-

ponymic patterns and variations in minority languages provides valuable insights into language contact, shift, and sociolinguistic changes within communities.

### Toponymy in SASL

Blair (2014, 140) in her study on an electronic dictionary project for De la Bat School for the Deaf in the Western Cape Province of South Africa, briefly mentions two naming traditions in SASL for places: unique signs and abbreviated fingerspelled names like “WC” for Western Cape. Here, the term *unique* in reference to toponymic signs embodies the same concept as discussed with the terms *endonyms* or *descriptive signs* in various studies, indicating a pattern of sign formation that remains independent from the influence of surrounding spoken languages. The study did not include an analysis of the distribution of these types of place name signs in SASL. In another study focusing on toponymy in SASL, Lombaard (2020) examined place name signs linked to four major cities in South Africa: Cape Town, Pretoria, Bloemfontein, and Kimberley. She analyzed the phonological features of each place name sign based on the phonological elements that compose the manual signs: handshape, location, movement, and palm orientation. The study highlighted variations observed in these sign place names, showing that out of seven total signs analyzed, four incorporated the manual alphabet. Lombaard (2020) claims that the pattern in the assignment and use of place name signs in SASL has transitioned from the descriptive category to initialized name signs. She further attributes this shift to factors such as education and the influence of hearing teachers and interpreters within the deaf community. Beyond the phonological attributes, Lombaard also explored the semantic motivations underlying some SASL toponyms. For example, she discussed the signs used for the city of Bloemfontein, where two different variations of sign names coexist. One variation bears a resemblance to the sign FLOWER, aligning with the meaning of the city’s official name in Afrikaans language. Another variant emerges from fingerspelling the letters O and B, a reference to Bloemfontein’s vehicle number plates that used to include these letters. Although this vehicle plate system is no longer in use, it is preserved and reflected in the place name sign for Bloemfontein. This case highlights how linguistic influences from both spoken and written languages play a

significant role in the deaf community's environment. These influences not only affect the form of signs but also deeply influence their meaning, shaping the references associated with place names.

## Method

For this article, we relied on the findings of a pilot study involving deaf individuals residing in Bloemfontein, Free State, a province located at the heart of South Africa (figure 1). Participants were shown the names of nine provinces, seventeen cities and towns, and five well-known regions and landmarks in South Africa using fingerspelling. There are a total of nine provinces in South Africa; hence these nine provinces have been selected to be included in the list. The major cities of each province, along with those in closer proximity to Bloemfontein or those that are nationally well-known, were chosen. As for other places, a well-known national park, international airport, and similar landmarks were also incorporated into the list.

The participants were asked to produce the SASL place name sign corresponding to each fingerspelled name. In addition to the thirty-one listed cities and provinces, the participants were queried with biographical questions concerning place names, including questions about their birthplace and educational history. Responses to these questions revealed the emergence of sixteen additional place name signs during the interviews, which were subsequently subjected to analysis in this study. Overall, sixty-five different toponymic signs were collected and analyzed.

The study involved the participation of eleven deaf individuals residing in the Free State province of South Africa. To gather video data, participants were required to meet specific criteria. They needed to be deaf individuals residing in Free State province currently, regularly using SASL in their daily lives, and over the age of eighteen. Moreover, while it was not a prerequisite for participant selection, all eleven individuals had attended a school for the deaf for a certain period (altogether four different schools). Each participant also had to provide clear and explicit consent for the filming and publication of the collected material.<sup>1</sup> They were interviewed by a deaf research assistant. The elicitation task involved the research assistant fingerspelling the names of provinces and cities to the participants, who then signed the corresponding place names. The interviews were



FIGURE 1. Free State and other provinces in South Africa.

captured on camera and subsequently documented, glossed, and annotated using ELAN software. In accordance with the ethical guidelines of the research study, participant pictures are excluded from this article. Instead, images resembling the observed sign variants in the study have been sourced from the online public dictionary of SASL,<sup>2</sup> or the variations are simply described in the written text.

### Patterns of SASL Toponymic Signs

Much like the SASL signs used for personal names, many place names are produced on the basis of the distinctive features of the place they represent and according to the phonological aspects of the language. Take, for instance, the sign for “Cape Town,” which mirrors the contours of Table Mountain, created by moving both hands to the sides and then downward (figure 2). The iconic Table Mountain, with its distinctive shape, stands as a renowned geographical landmark in the

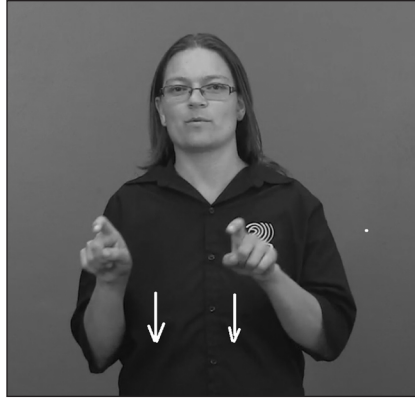


FIGURE 2. CAPE\_TOWN-1 (NID online SASL dictionary).

city of Cape Town (figure 3). In some instances, traces of a place's written and spoken names are subtly woven into the sign to varying degrees. For instance, the sign for "Cape Town," with the same movement, may also incorporate the T-handshape on both hands, which corresponds to one of the letters in the city's written and spoken name (figure 4).



FIGURE 3. Table Mountain located in Cape Town.



FIGURE 4. CAPE\_TOWN-2 (NID online SASL dictionary).

The impact of surrounding languages on place name signs is also observable in the adoption of calques. Calque, as a method of enriching vocabulary, involves borrowing the entire structure from one language and integrating it into another, albeit in a literally translated version. The sign *MPUMALANGA*, place name sign for the province of Mpumalanga, can be categorized as a calque or transliteration. In the Nguni language family, Mpumalanga translates to “where the sun rises.” *MPUMALANGA* involves a two-handed sign with the dominant hand depicting the sun rising, while the nondominant hand indicates the horizon (figure 5).



FIGURE 5. *MPUMALANGA* “where the sun rises” (NID online SASL dictionary).



One typical pattern observed in SASL place names involves using abbreviated forms of the written names, particularly for South African provinces. Six of the nine South African provinces are represented by fingerspelling abbreviations: FS for Free State, NW for Northern West, WC for Western Cape, EC for Eastern Cape, KZN for KwaZulu-Natal, and NC for Northern Cape. In the case of the Free State though, we observed both an abbreviated version (FS) and a nonabbreviated version, both of which coexist in the data. The nonabbreviated version is produced using a bent claw handshape with wrist movement.

In summary, the formation of name signs in SASL can generally be categorized into two main groups: those developed organically within the language itself, free from the influence of the spoken or written languages of the surrounding environment, and those influenced by the linguistic conventions of the spoken and written languages in the vicinity. The impact of these external languages can manifest in the phonological aspects of the signs (i.e., the sign forms). For instance, handshapes of the manual alphabet, either as abbreviations or in combination with specific hand movements, serve as one form of linguistic influence. Another form of influence from surrounding languages is semantic in nature, demonstrated through literal translations. For instance, one of the variations of the sign for the city of Bloemfontein incorporates the sign FLOWER under the influence of the meaning of the word *Bloemfontein*, which is an Afrikaans word, meaning “fountains of flowers,” or the sign MPUMALANGA, signifying “sunrise” under the influence of the Nguni language family, exemplify this semantic influence. Table 1 provides an overview of these place name sign patterns from the elicited data in this study.

It is worth noting that we could not provide clear explanations for all the place name signs collected in this pilot study. We consulted with our deaf research assistant and some individuals within the hearing community who have extensive experience with the deaf community to understand the motivations behind each place name. However, for many of them, we could not find any explanation. Consequently, we have excluded those place names from our analysis in this article, focusing instead on those with widely accepted background information.

TABLE 1. Patterns of SASL Urban Toponymic Signs

No Influence of Spoken-Written Language	FREE STATE-1 PRETORIA-F PRETORIA-W CAPE_TOWN-1 KIMBERLEY-2 POLOKWANE
Influenced by a Spoken-Written Language at the Phonological Level	<b>Manual alphabet alongside other sign features:</b> KIMBERLEY -1 CAPE_TOWN-2 DURBAN LIMPOPO GAUTENG KWAZULU_NATAL JOHANNESBURG THABA'NCHU
Influenced by a Spoken-Written Language at the Semantic Level	<b>Abbreviated Manual Alphabet:</b> OB - "BLOEMFONTEIN" FS - "FREE STATE" NW - "NORTH WEST" WC - "WESTERN CAPE" EC - "EASTERN CAPE" NC - "NORTHERN CAPE" PE - "PORT ELIZABETH" UP - "UPINGTON" QQ - "QWA QWA" EL - "EAST LONDON" BLOEMFONTEIN-2 MPUMALANGA

As indicated in table 1, toponymic signs in this study are predominantly influenced by written language, particularly at the phonological level. The impact of the manual alphabet is evident in the formation of abbreviations, where only two letters of the written name are fingerspelled. Another prevalent pattern involves incorporating a single-letter handshape with other phonological features, such as location and movement, as exemplified in the case of CAPE\_TOWN-2.

Within this context, it is worth highlighting the unique case of the sign BLOEMFONTEIN-1, which consists of the sequential use of the O and B handshapes. While it visually resembles fingerspelled

English letters, it does not directly correlate with the letters found in the written name of the city. Instead, it has been linked to a specific code once used on the license plates of cars in this city, where these letters were employed as a code on those plates. Therefore, while the manual alphabet's presence is apparent in this name sign, its significance is rooted in a visual and metonymic association with the city rather than directly representing its written name.

Regarding incorporating the manual alphabet into SASL place name signs, it is crucial to highlight a historical aspect. The manual alphabet commonly used in SASL today originates from the manual alphabet of American Sign Language (ASL). However, the two-handed British manual alphabet can also be observed in certain place names. For instance, the sign name GAUTENG assigned to the province Gauteng includes the two-handed British manual alphabet form for the letter G. Similarly, the sign QWA-QWA assigned to the town Qwa Qwa in the Free State province is formed by doubly producing the letter Q from the British manual alphabet. Historically, SASL has been influenced by educators who used Irish Sign Language and ASL at various points in history (Akach et al. 2009). The remnants of British Sign Language (BSL) manual alphabets in some sign names, such as GAUTENG and QWA-QWA, suggest that the deaf community in South Africa has also been exposed to BSL.<sup>3</sup> However, further examination of historical, racial, and sociological factors is needed for gaining a deeper understanding of this phenomenon. This shows the significance of the historical and linguistic heritage embedded within South African deaf society, evident in the place names that have endured over the years. It serves as a poignant reminder of the diverse history and cultural shifts intricately woven into SASL place names.

### Variations

Despite all eleven participants living in the same city and province, the findings reveal variations in signs for certain urban areas, such as cities and provinces. The rationale behind this variability can be traced to the field of sociolinguistics. Deaf individuals, shaped by their distinct social contexts and influenced by gender, age, occupation, and geographic location, may employ different variations for the same geographical area. These variations in sign names can be broadly

categorized into three distinct levels, each reflecting varying degrees of linguistic differentiation: phonological, morphological, and lexical.

Within phonological variations, it becomes apparent that different signers can produce the same sign differently, with alterations observed in specific phonological features. Among these variations, the most prevalent pertained to modifications in handshape. As mentioned earlier, in the case of *CAPE\_TOWN*, two distinct variations were observed based on different handshapes. Additionally, as is discussed below, there were distinctions in whether the movement was singular or double, serving as another significant phonological variation in the data. There was an observed instance of palm orientation variation as well.

Regarding morphological variations, we refer to the diverse forms of a place name sign, which can either stand as a single sign or be compounded by sequentially adding another sign. Lexical variations encompass distinct signs with different underlying motivations representing the same geographical place.

### Phonological Variations

An example of phonological variations involving the T-handshape has been previously discussed in relation to the place names for Cape Town: *CAPE\_TOWN-1* and *CAPE\_TOWN-2* (figures 2 and 4). Another example is evident in the signs *PRETORIA-F* and *PRETORIA-W*. The sole distinction between these two signs lies in the handshape used: *PRETORIA-F* employs the F-handshape, while *PRETORIA-W* employs the W-handshape. All other features of these signs remain identical. The sign is produced through a forward movement in the forehead location.

Regarding movement variations, we observed an example in the case of *JOHANNESBORG-1* and *JOHANNESBORG-2*, which are considered phonological variants. *JOHANNESBORG-1* is produced with a J-handshape single movement, while *JOHANNESBORG-2* is articulated with two rapid movements.

The sign names for the Limpopo province exhibited the only phonological variation regarding palm orientation in the data. The distinction between *LIMPOPO-1* and *LIMPOPO-2* lies in palm orientation. *LIMPOPO-1* employs a downward palm orientation, while

LIMPOPO-2 uses a configuration with two palms facing each other, both with the L-handshape and zigzag movement in neutral space, representing the Limpopo River.

### Morphological Variation

An example of morphological variation is evident in the signs GAUTENG-1 and GAUTENG-2. In GAUTENG-1, the sign involves one S-handshape contacting another S-handshape (altogether, the letter G in BSL), followed by the addition of the 1-handshape by the dominant hand. In contrast, GAUTENG-2 comprises only the initial part of the sign, omitting the second sequence.<sup>4</sup>

### Lexical Variations

Two distinct signs have been noted for referring to the Free State province. FREE\_STATE-1 is produced using a bent claw handshape with wrist movement, while FREE\_STATE-2 is represented through abbreviated fingerspelling with the letters F and S. Other examples that have already been discussed are the signs for “Bloemfontein”: BLOEMFONTEIN-1 and BLOEMFONTEIN-2.

An additional example noted in the data pertains to the signs representing the city of Kimberley. One variation involves the use of the K-handshape on both hands, accompanied by a downward movement outlining the Big Hole—an iconic, massive manmade excavation associated with diamond mining from past centuries (figure 6). In contrast, the other variation consists of a one-handed sign using a small C handshape with two beats in space, seemingly linked to the old license car plates in Kimberley.

### Additional Observations

In addition to conducting an analysis of toponymic signs and their variations, we also noted certain conversational practices among the deaf participants when discussing places. While these observations are not directly related to the structure of place names, we believe they are noteworthy, as they show some communicative strategies used in SASL to conceptualize and convey spatial concepts. One observation is related to complete fingerspelling of a place name. In situations where the signer is unfamiliar with or has forgotten the name sign

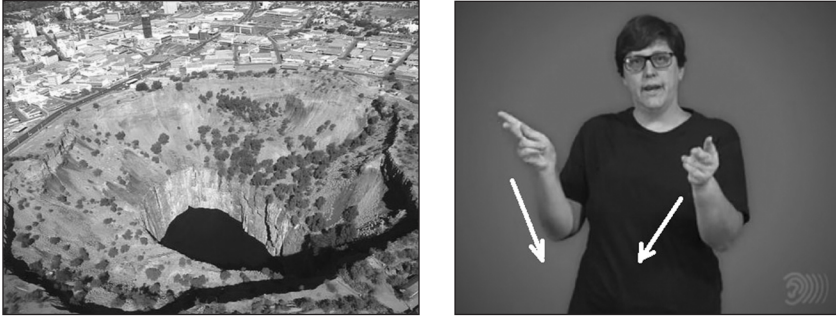


FIGURE 6. Big Hole in Kimberley and KIMBERLEY-1.

for a place, often due to limited interaction or infrequent visits to that specific area, the fingerspelling of the full written form of the name is commonly used in SASL. This approach may also be chosen when the signer is unsure whether the interlocutor would understand or recognize the place based solely on the sign. In such situations, the signer resorts to fingerspelling the written name of the place, either preceding or following the sign name, as a means of clarification. In certain instances, it is noted that signers may opt to initially fingerspell the name of a place, even if they are aware of the sign for it. This approach guarantees that the communication partner, especially if they are not from the same area, does not necessarily need to be acquainted with the sign name of a particular location. Furthermore, it can serve as a strategy to impart knowledge of the sign names to the interlocutor. This was noted particularly when discussing lesser-known and more local places.

Similar to findings reported in other sign languages such as BSL (Sutton-Spence and Woll 1999, 233), Adamorobe Sign Language (Nyst 2007, 119), and Ban Khor Sign Language (Nonaka 2015), observations in SASL data also indicate that in conversations, after signing the place name, signers commonly proceed to provide additional clarification about the precise location. If the conversation occurs in the same place, they use the deixis sign *HERE* immediately afterward. If the place is at a distance, they use the deixis sign *THERE* to indicate spatial remoteness. The deixis sign takes the form of *handshape-1*, a prevalent sign found in many sign languages.

## Conclusion

This article examines the formation patterns and variations of urban names within SASL. Our study shows that certain visual, historical, or geographical aspects of an urban area are reflected in place name signs. These aspects may be linked to specific natural geographical features or man-made structures such as mines or old car plates. However, a notable trend observed in our dataset is the inclination within the deaf community to predominantly use the manual alphabet or incorporate it into descriptive signs when representing place names.

Like other sign languages, SASL is influenced by the spoken and written languages surrounding it, particularly in place name signs. The number of place name signs utterly independent of the written form of the place name within our dataset of urban toponyms, including city and province names, was quite limited. These findings align with Lombaard's (2020) observation that there is a prevalent inclination to incorporate manual alphabet letters into the sign forms associated with place names in SASL.

Our study identified a prevalent practice known as *initialization* within toponymy in SASL. This practice was observed in numerous place name signs within our dataset. Initialization involves combining the first letter of the written name of a place, identified by specific hand configuration, with other phonological features inherent to sign language, creating a distinct sign. Furthermore, we also noted another form of incorporating manual alphabet letters into sign names as abbreviations. This practice often entails representing a place using just two manual letters as an abbreviated form.

The extent of influence from the surrounding spoken and written languages can be visualized as a spectrum. At one end of this spectrum, deaf individuals resort to completely fingerspelling the written form of a place name. This approach is typically employed when they are unfamiliar with the sign recognized by the deaf community for that region, indicating that they likely have limited daily interactions with deaf individuals from that area. Another scenario where fingerspelling of a place name may occur is when the signer assumes that the interlocutor is unfamiliar with the established sign for a particular place. Consequently, the place name is fingerspelled before or after the sign to ensure clarity.

Another form of linguistic influence is observed in signs that mirror the name of a region through calques or literal translations from other languages. Furthermore, our research sought to show and categorize different variations in toponymic signs for a given urban place into three categories: phonological, morphological, and lexical.

We must acknowledge that this study served as a preliminary study and, as such, its findings are not readily generalizable to the entirety of SASL. The participants were only eleven individuals, all residing in one city and province. Hence, one constraint of this study stemmed from the insufficient diversity among the participants in terms of sociolinguistic backgrounds. A more diverse participant pool is required to increase the likelihood of observing a wider range of variations for each toponym. Subsequent research endeavors must encompass broader demographic representation, necessitating interviews with deaf individuals residing in varied provinces to elicit a more comprehensive array of sign place names corresponding to each geographical place. Another notable limitation pertains to instances in which the motivations underlying specific sign designations could not be traced, leading us to forgo the classification task for those signs.

Concerning place names, individuals may articulate various motivations or explanations for iconicity based on their perceptions and linguistic intuitions. However, to establish reliable conclusions regarding each toponym and its classification, additional data is imperative. Further research involving a larger and more diverse participant pool is warranted to enhance our understanding of place names in SASL. This research should encompass an examination of the variations in place names, as well as an exploration of the historical and social motivations underlying their designation.

### Acknowledgment

This research is funded by the Department of Sport, Arts and Culture (South Africa) and conducted in collaboration with the Interdisciplinary Centre for Digital Futures (University of the Free State, South Africa) and with the support of the National Institute for the Deaf (South Africa). We would like to thank all the deaf participants in this study. Additionally, the following people made a notable contribution to the project: Annalene van Staden, Emily Matabane, Chrismi Loth,



Susan Lombaard, Jani de Lange, Donovan Wright, Anele Kotoyi, Lucia Mamote Mapeshoane, Kirsten de Villiers, Gloria Motshoeneng, Nhlanhla Simelane, and Kevin Cloete.

## Notes

1. Ethical clearance obtained from the General/Human Research Ethics Committee of the University of the Free State (South Africa). Ethical clearance number: UFS-HSD2023/1614.
2. The online SASL dictionary (<https://learnsasl.com/#/>), from which the pictures in this article were sourced, is operated by the National Institute for the Deaf (NID) in South Africa.
3. According to Akach (2002, 133), an influence from British educators in South Africa during the 1940s was the Page-Gorman system. This system of signs, originating in Britain, was implemented, with teachers and students instructed to speak while simultaneously using the Paget-Gorman signs.
4. Although discerning the semantic motivation behind each sign based solely on individuals' knowledge or intuition is difficult, in the case of the second sequence of GAUTENG-1, represented by the index finger, it could potentially signify a deixis referring to a distant place ("there"), denote the number 1, or hold some other unknown semantic implication, as indicated by our consultation inquiries. In contrast, in GAUTENG-2, the second component is deleted, which may explain why this is an example of morphological variation rather than a simple phonological reduction. However, determining whether this variation falls under morphological or phonological type warrants further investigation on the historical etymology of the (source) sign form.

## References

- Aarons, D., and P. Akach. 2002. South African Sign Language: One Language or Many? In *Language in South Africa*, ed. Rajend Mesthrie, 127–47. Cambridge: Cambridge University Press.
- Akach, P., E. Demey, E. Matabane, M. Van Herreweghe, and M. Vermeerbergen. 2009. What Is South African Sign Language? What Is the South African Deaf Community? In *Languages and Education in Africa: A Comparative and Transdisciplinary Analysis*, ed. B. Brock-Utne and I. Skattum, 333–48. Oxford, UK: Symposium Books.
- Barros, M. E. 2018. Taxonomia Antroponímica nas Línguas de Sinais—A Motivação dos Sinais Nomes. *RE-UNIR—Revista do Centro de Estudos da Linguagem da Universidade Federal de Rondônia de Administração, Contabilidade e Sustentabilidade* 5 (2): 40–62.
- Blair, H. F. 2014. Buitetekste in 'n elektroniese gebaretaalwoordeboek [Outer Texts in an Electronic Sign Language Dictionary]. *Lexikos* 24:116–54.

- Carmo, F. S. do, and A. M. de Sousa. 2022. Toponymy in Brazilian Sign Language: Analysis of Signs Naming Leisure Spaces in the City of Rio Branco (AC), Brazil. *The ESpecialist* 43 (2): 1–17.
- Cruz-Aldrete, M., and H. B. González Muciño. 2022. What's Your Sign? Personal Name Signs in Mexican Sign Language. *Onomástica desde América Latina* 3 (6): 235–55.
- Faria-Nascimento, S. P. 2009. Representações lexicais da Língua de Sinais Brasileira: Uma proposta lexicográfica. PhD thesis, Universidade de Brasília (UnB), Brazil.
- Fedatto, C. P. 2011. Um saber nas ruas: O discurso histórico sobre a cidade brasileira. PhD thesis, Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil.
- George, J. 2022. The Lexical Shift in Japanese Sign Language (JSL) Toponyms: Accounting for the Preference of Complex over Simple Toponym Outputs. *Sign Language Studies* 23 (1): 5–40.
- Hedberg, T. 1994. Name Signs in Swedish Sign Language: Their Formation and Use. In *The Deaf Way: Perspectives from the International Conference on Deaf Culture*, ed. C. J. Erting, R. C. Johnson, D. L. Smith, and B. D. Snider, 416–24. Washington, DC: Gallaudet University Press.
- Hofer, T. 2021. What's in a Place Name in Tibetan Sign Language? Iconicity and the Use of Signed Toponyms among Deaf Signers in Lhasa. *Senri Ethnological Studies* 107:133–75.
- Isquerdo, A. N., and A. P. T. P. Dargel. 2014. Hidronímia e toponímia: Interinfluências entre meio ambiente e história. In *As ciências do léxico: lexicologia, lexicografia, terminologia VII*, ed. A. N. Isquerdo and G. O. M. Dal Corno, 63–80. Campo Grande, Brazil: Ed. Universidade Federal de Mato Grosso do Sul.
- Lombaard, S. 2020. Place Names in South Africa: The Deaf Way. In *Recognition, Regulation, Revitalisation: Place Names and Indigenous Languages. Proceedings of the 5th International Symposium on Place Names 2019*, ed. C.-R. Loth, 113. Johannesburg: UJ Press. <https://doi.org/10.18820/9781928424697>.
- Nonaka, A. M. 2015. Toponyms in Ban Khor Sign Language. *Learning Communities: International Journal of Learning in Social Contexts [Special Issue: Indigenous Sign Language]*: 66–91. <https://doi.org/10.18793/LCJ2015.16.06>.
- Nyst, V. 2007. *A Descriptive Analysis of Adamorobe Sign Language (Ghana)*. LOT 151. Utrecht, the Netherlands: Netherlands Graduate School of Linguistics.
- Paales, L. 2010. On the System of Person-Denoting Signs in Estonian Sign Language: Estonian Personal Name Signs. *Sign Language Studies* 10 (3): 317–35.
- Padden C., and T. Humphries. 2005. *Inside Deaf Culture*. Cambridge, MA: Harvard University Press.

- Redmonds, G. 2007. *Names and History: People, Places and Things*. New York: Continuum.
- Revilla, B. 2009. Place Names in Israeli Sign Language. Master's thesis, University of North Dakota.
- Souza-Júnior, J. E. G. 2012. *Nomeação de lugares na Língua de Sinais Brasileira. Uma perspectiva de toponímia por sinais*. MA diss., Universidade de Brasília (UnB), Brasília.
- Sousa, A. M. 2019. Toponímia em Libras. Postdoctoral report, Universidade Federal de Santa Catarina (UFSC), Florianópolis, Brazil.
- Sousa, A. M., and R. M. Quadros. 2021. Toponymy in Libras (Brazilian Sign Language): Formal and Semantic-Motivational Analysis of the Signs that Name the Cities of Acre. *Sign Language Studies* 22 (1): 75–105.
- Sutton-Spence, R., and B. Woll. 1999. *The Linguistics of British Sign Language: An Introduction*. Cambridge: Cambridge University Press.
- Urbanski, Í. R. W., D. Ferreira, and A. N. Xavier. 2021. Contribuições aos estudos toponímicos da libras através da análise de sinais que designam cidades brasileiras. *Revista Grupo de Trabalho de Lexicologia* 6 (1): 234–67. <https://doi.org/10.14393/Lex11-v6n1a2020-13>.
- Wilbur, R. B. 2015. Word Formation and Sign Languages. *Word Formation: An International Handbook of the Languages of Europe*, ed. P. C. Müller, I. Ohnheiser, S. Olsen, and F. Rainier, 2225–51. Berlin: De Gruyter Mouton.