Between audio and visuality – on the difficulties of learning sign languages on the basis of culinary lexis in the Polish Sign Language

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Abstract

The article focuses on the issue of audio and sign bilingualism – a topic that has not yet been thoroughly covered in Polish source literature. The most frequent research in the field of glottodidactics (understood as a specially developed plan that aims to implement literacy in the youngest children, by adapting to their mental, physical and emotional abilities.) focuses on bilingual people who use phonic languages (unimodal bilingualism – phonic). In terms of bilingualism of the deaf, one can speak of either unimodal bilingualism (communicating in two sign languages) or bimodal, sign-print bilingualism, in which a deaf person communicates both in a sign language and a phonic language (Polish) in its written form[1]. Different modalities between phonic-modality Polish and the sign language, which is based on visual and spatial modalities, constitute difficulties both for people with hearing impairments, as well as hearing Poles willing to learn a sign language. The further section of the text examines difficulties involved in the acquisition of culinary lexis that may be experienced by hearing people attempting to learn a sign language, as well as deaf people who want to learn Polish.

Keywords: false beginners, Polish language, sign language, deaf, foreing language

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[1] This type of bilingualism (*sign-print bilingualism*) was described in English-language literature of the subject. Cf. Grosjean 1992.

1. METHODOLOGY AND DATA

The objective of the paper is an attempt at describing a selected semantic field from within the lexis of the Polish Sign Language and showing its specificity in relation to a phonic language. To this end, the authors applied a comparative method, known in both synchronous and diachronic studies. In addition, yet another goal was to also draw attention to these aspects of signs that are typical only for visual and spatial languages. For this purpose, the lexical material was analysed in terms of the presence of iconicity and imitativeness symptoms therein.

The linguistic image of the world, as a method to describe linguistic phenomena, demonstrates methods for interpreting reality by users of a given language. The collected lexical material has been described taking into account the cognitive mechanisms, which enable indicating an iconicity element in signs. Furthermore, findings from the field of linguistic semantics, or reference semantics to be more precise, have also been employed.

The native language of the Deaf in Poland started taking shape at the beginning of the 19th century. In 1817, Fr. Jakub Falkowski established the first educational institution that enabled the deaf to study in their natural language. This facility was called the Institute for the Deaf and was founded in Warsaw. It was first located at Kazimierzowski Sq., in Krakowskie Przedmieście Street 24/26. Since 1827, its address has remained the same -Plac Trzech Krzyży *[Three Crosses Square]* 4/6.

For decades, Polish Sign Language (PJM) was not a subject matter of linguistic interest. The lack of scientific research and description of this linguistic system resulted in the emergence of numerous, unconfirmed beliefs. The most common of these are that sign language is limited to a set of gestures similar to pantomime that can convey only the simplest content, without the possibility ofexpressing abstract concepts and ideas . Sign language was also considered a primitive[2], grammar-less system[3]. Moreover, for years, speech therapists and teachers working with the deaf perceived sign language as limiting the intellectual development of deaf pupils[4]. This belief persisted in many countries, as confirmed by the history of the education of the Deaf. In 1880, during the International Congress on Education of the Deaf, a resolution adopting a ban on using sign language in schools for the deaf was adopted. It was revoked only after a hundred years, resulting in the period between 1880 and 1980 called a "century of shame" in the history of the Deaf.[5]

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[2] The stereotypic perception of the Deaf was addressed by Ewelina Moroń, Grzegorz Zarzeczny, "Głuchy – językowe podstawy stereotypu", in *Edukacja głuchych*, ed. Mariusz Sak (Warsaw: Biuro Rzecznika Praw Obywatelskich, 2005). See also: Wiktor Eźlakowski, "Aksjologiczna analiza słowa głuchy w języku polskim (na podstawie materiału korpusowego)", *Poradnik Językowy* 2 (2021).

[3] More on the myths concerning the language used by the Deaf in Poland can be found in Piotr Tomaszewski, "Polski Język Migowy – fakty i mity", *Poradnik Językowy* 6 (2004), pp. 59-72, Piotr Tomaszewski, "Czy Polski Język Migowy jest prawdziwym językiem?", in *Człowiek wobec ograniczeń. Niepełnosprawność, komunikacja, terapia*, ed. Grażyna Jastrzębowska and Zbigniew Tarkowski (Lublin: Instytut Psychologii Akademii Bydgoskiej, 2002).

[4] The oralistic trend in the education of the deaf was addressed by, among others, Dorota Podgórska-Jachnik, "Historia wychowania i edukacji głuchych z perspektywy surdopedagogiki początku XXI wieku", in *Historyczne dyskursy nad pedagogiką specjalną*, ed. Jacek J. Błeszyński, Ditta Baczała, Józef Binnebesel (Łódź: Wydawnictwo Naukowe Wyższej Szkoły Edukacji Zdrowotnej, 2008).

[5] Dorota Podgórska-Jachnik*,* "Historia wychowania i edukacji," 182.

A growing interest in Polish Sign Language and the construction of new educational facilities for the Deaf entails not only increasing the awareness of how the deaf function, but also constitutes a continuous development of linguistic, glottodidactic or socio-cultural studies, which primarily focus on the linguistic and cultural minority of the Deaf, their identity, their fundamental communication system, namely, Polish Sign Language, and the acquisition of spoken Polish as a foreign language[6].

Today, no doubts remain that Polish Sign Language is a natural language used by the Deaf in Poland. It is now absolutely clear that it has its own grammar[7] (completely different from the Polish grammar system) and is based on visual and spatial modalities. Studies show that it is a language that has developed and is developing naturally, and that it is diversified geographically[8] and socially[9]. It is a system made up of, similarly tospoken languages, two-class, arbitrary signs. However, it is distinguished by the fact that grammatical elements also include facial expressions, body position or pantomime[10]. Its phonological features include such sign language elements as hand arrangement, articular location (hand position relative to the body), movement, hand orientation (palm location) and non-manual elements (facial expressions). Active articulators (i.e., those that make a movement) in sign languages (not only PJM) are the hands, the head and the face, while passive articulators include the torso, other body elements or space. These constitute the point of reference for the signing person[11]. What distinguishes PJM from spoken Polish is the fact that a single sign can have several grammatical functions (i.e., can be assigned to different word classes).

1.1. CORPUS-BASED DICTIONARY OF POLISH SIGN LANGUAGE

The Corpus-based Dictionary of Polish Sign Language is the first lexicographic work recording dictionary units, included in the lexicon of the Deaf – native users of Polish Sign Language. Previous dictionaries recorded linguistic data of uncertain origin due to the fact that the authors of the previous works did not provide information on the source of their lexicographic material and whether it originated from native sign language users[12].

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[6] See, among others, Marek Świdziński and Tadeusz Gałkowski, "Studia nad kompetencją językową i komunikacją niesłyszących", (Warsaw: Polski Komitet Audiofonologii, 2003), "Stan badań nad Polskim Językiem Migowym", ed. Ewa Twardowska, (Łódź: Polski Związek Głuchych Oddział Łódź, 2008), Karolina Ruta-Korytowska, "Poziom sprawności czytania i pisania u studentów z dysfunkcją słuchu", (Poznań: Wydawnictwo Rys, 2018), Marta Wrześniewska-Pietrzak, "Aksjologiczne wyznaczniki tożsamości w wypowiedziach głuchych i czasopiśmie środowiskowym Świat ciszy", (Poznań: Wydawnictwo Rys, 2017), Wiktor Eźlakowski, "How Does Polish Sign Language Affect the Way in Which Deaf Poles Write in Polish?" in *Cultural Conceptualizations in Translation and Language Applications. Second Language Learning and Teaching*, ed. Barbara Lewandowska-Tomaszczyk (Springer, Cham, 2020): 249-261, doi.org/10.1007/978-3-030-43336-9_14.

[7] See: Wiktor Eźlakowski, "Grammar of Polish Sign Language as Compared to Grammar of Polish Language: Selected Themes", *Sign Language Studies* 20 (2020), doi: 10.1353/sls.2020.0011.

[8] See: Olga Romanowska, "Regionalizmy w polskim języku migowym", in *Tożsamość społeczno-kulturowa głuchych*, ed. Elżbieta Woźnicka, (Łódź: Polski Związek Głuchych Oddział Łódzki, 2007).

[9] See: Piotr Tomaszewski, P. and Tomasz Piekot, "Język migowy w perspektywie socjolingwistycznej", *Socjolingwistyka* 29 (2015).

[10] Sylwia Fabisiak, "Przejawy imitacyjności w systemie gramatycznym polskiego języka migowego", *LingVaria* 1 (2010).

[11] Fabisiak, „Przejawy imitacyjności," 184-185.

[12] Detailed analyses of PSL dictionaries can be found in the following papers: Karolina Ruta and Marta Wrześniewska-Pietrzak, "Rzecz o nieobecnych. O słownikach polskiego języka migowego", *Prace Filologiczne*

The lexicographic material *The Corpus-based Dictionary of Polish Sign Language* contains originates from the corpus of the Polish Sign Language, which was created as part of a project aimed at documenting and analysing communication among Polish Deaf people. It was conducted by a team from the Section for Sign Linguistics at the University of Warsaw. What is extremely important is the fact that the corpus-based recordings involved native PJM users from different regions of Poland, diverse in terms of gender, age, education and profession. The main goal of the PJM corpus team was to build a general language corpus, meant to contain a sufficient, representative sign language sample. With a view to achieving this aim 150 deaf people were invited to take part in the recordings. Authors of the corpus point out that besides the lexicographic material itself, the recordings provide other valuable information on the use of grammar, as well as culture and life of the Deaf in Poland[13].

Further sections of the article discuss lexical items from the semantic field of the culinary art that can be found in the *Corpus-based Dictionary of Polish Sign Language* (KSPJM). It is a lexicographic work available only online, which results from the specificity of the lexical units recorded there. which require not only a text description, but, on top of that, they are presented in the form of short videos displaying how they should be signed. The dictionary is available at www.slownikpjm.uw.edu.pl

Homepage of the *Corpus-based Dictionary of Polish Sign Language*
https://www.slownikpjm.uw.edu.pl/

For the sake of further discussion, it is important to briefly characterize the principles adopted by KSPJM authors for the purposes of developing dictionary entries. The moment within the annotation process (which is the assigning of a specific lexical and grammatical interpretation to individual fragments of the recording) when an annotator conducts a glossing procedure is vital for further considerations. This action involves assigning every sign extracted from the recording with a gloss that corresponds to the meaning of the given word in Polish. A gloss is a label and a sign identifier, written in small caps as a spoken language lexeme entry form. The dictionary contains only these PJM signs that appeared in the corpus at least 4 times.

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65 (2015), Karolina Ruta and Marta Wrześniewska-Pietrzak, "Słownik mimiczny dla głuchoniemych i osób z nimi styczność mających – próba analizy leksykograficznej", *Język Polski* 94 (2014).

[13] For more information on the corpus itself, its development process and the sign annotation system see: "Lingwistyka przestrzeni i ruchu. Komunikacja migowa a metody korpusowe", ed. Paweł Rutkowski and Sylwia Łozińska, (Warsaw: Wydział Polonistyki Uniwersytetu Warszawskiego, 2014).

### 1.2. CULINARY LEXIS IN THE KSPJM – GENERAL INFORMATION

The study is based on 170 lexical signs listed in the KSPJM dictionary under the "cooking" category. Comparing this number to the phonic Polish language, the set is rather modest. By contrast, *The Dictionary of food and drink names in contemporary Polish*, contains approx. 5 thousand lexemes[14]. The differences arise from, among others, the fact that certain signs in KSPJM have been classified to a semantic field other than culinary art. Such examples include names of fruits and vegetables that are included in a separate category in this dictionary, while M. Witaszek-Samborska's lexicon includes these lexemes in this group. Undoubtedly, the numerical difference is also the consequence of the fact that the authors of KSPJM have adopted a principle that a single sign is included in the dictionary only once, in the form of a single dictionary entry, even when it has several meanings, often unrelated to each other[15]. A good example is the following sign:

Source: https://www.slownikpjm.uw.edu.pl/gloss/view/975

which has been assigned with the following meanings: Czech Republic, Czech, soup, odour, smell.

On the other hand, it is not uncommon for a sign language gesture to have several equivalents in a spoken language. As an example, the authors of the dictionary state that a single sign, e.g.,

Source: https://www.slownikpjm.uw.edu.pl/gloss/view/12
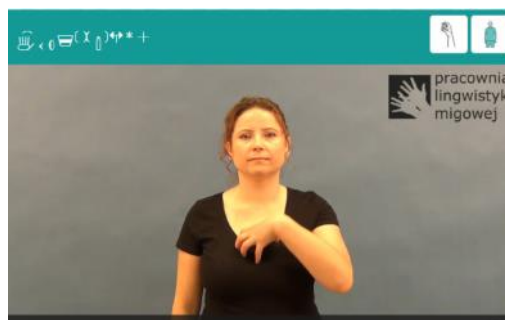
in Polish, can be used as 'funny', 'that's funny!', 'Is this supposed to be funny?!', 'joke', 'comedy', 'humour', 'wit', 'witty', 'good mood'[16].

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[14] This dictionary is an integral part of the monograph by Małgorzata Witaszek-Samborska entitled "Studia nad słownictwem kulinarnym we współczesnej polszczyźnie", (Poznań: Wydawnictwo Naukowe PWN: 2005).

[15] Details regarding selection and the set of entries in the *Corpus-based Dictionary of Polish Sign Language* can be found at its website: https://www.slownikpjm.uw.edu.pl/page/pomoc#jak_korzystac [access: 15 November 2021].

[16] https://www.slownikpjm.uw.edu.pl/page/pomoc#jak_korzystac [access: 15 November 2021].

It should also be noted that sign definitions in KSPJM dictionary entries are definitions based on the ones found in the *Inny słownik języka polskiego*[17] ed. by Mirosław Bańko (2000). Therefore, these are semantic, context-based definitions. As an example, the aforementioned sign can be used, whose definitions in the KSPJM are as follows:

I. o opowiadaniu (przejdź do przykładu ▼)
A. w użyciu rzeczownikowym:
<<odnosi się do opowiadania nieprawdziwej historii lub do tej historii>>
bajka
B. w użyciu autonomicznym:
<<służy do wyrażenia tego, że nadawca nie wierzy w to, co mówi jego rozmówca lub poprzednik >>
bajka

II. o humorze (przejdź do przykładu ▼)
A. w użyciu autonomicznym:
1. <<służy wyrażeniu, że nadawca uważa jakąś sytuację za zabawną>>
ale śmieszne
2. <<służy ironicznemu wyrażeniu tego, że nadawca uważa jakąś sytuację za niedobrą, niewłaściwą>>
To ma być śmieszne?!
B. w użyciu rzeczownikowym:
1. <<odnosi się do śmiesznej historyjki>>
żart
2. <<odnosi się do jednego z trzech literackich gatunków dramatycznych, obok tragedii i dramatu>>
komedia
3. <<odnosi się do pogodnego samopoczucia>>
humor
4. <<odnosi się do tego, co wywołuje śmiech>>
dowcip
C. w użyciu przymiotnikowym:
<<odnosi się do tego, co śmieszne i zabawne>>
dowcipny

III. o stanie psychiki (przejdź do przykładu ▼)
w użyciu rzeczownikowym:
<<odnosi się do stanu dobrego samopoczucia>>
dobry humor

I. about a story (go to example)
A. *as a noun:*
<< refers to telling an untrue story or to this story >>
a fairy tale
B. *autonomously:*
<< used to express the fact that the author does not believe what the interlocutor or predecessor is saying>>
a fairy tale

II. about humour (go to example)
A. *autonomously:*
1. << used to express that the author believes a given situation to be funny >>
well, that's funny
2. << used to ironically express the fact that the author believes a given situation to be bad, improper >>
Is this supposed to be funny?
B. *as a noun:*
1.<< refers to a funny story ..
a gag
2.<< refers to one of three literature dramatic genres, besides tragedy and drama>>
comedy
3.<< refers to a cheerful mood>>
Humour
4. << refers to what raises a laugh >>
a joke
C. *as an adjective:*
<< refers to what is funny and amusing>>
funny

III. about the mental state (go to example)
as a noun:
<< refers to a good frame of mind >>
good mood

Source: https://www.slownikpjm.uw.edu.pl/gloss/view/12

The analysis of 170 signs grouped in the "culinary art" semantic field within the KSPJM enables drawing several interesting conclusions from the perspective of a researcher studying contemporary Polish language, in particular sign linguistics. The selection of this semantic field results from the fact that culinary art lexis appear in the everyday life of every language user, which enabled forming a research hypothesis assuming that the need for frequently calling consumption-related objects and activities will translate to the number of signs exhibiting a large degree of iconicity.

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[17] According to Piotr Żmigrodzki, the most important features distinguishing this dictionary from the previously developed lexicographic work include its contextual nature, analyticity, non-encyclopedic character, clarity and naturalness. See: Piotr Żmigrodzki, *Wprowadzenie do leksykografii polskiej* (Katowice: Wydawnictwo Uniwersytetu Śląskiego, 2009), 92-93.

2. RESULTS

Three issues seem to be dominant in the analysis of *Corpus-based Dictionary of Polish Sign Language* culinary lexis – one is typical for the specificity of sign languages based on the visual and spatial modality, while the other two are associated with lexicological problems.

2.1. ICONICITY

Iconicity that is well-attributed to sign languages is present significantly more often when denoting language signs in visual and spatial rather than phonic systems. The relationship between sign meaning and form has not always been the subject matter of linguistic studies, especially in the light of the dominance of Ferdinand de Saussure's belief that signs are of arbitrary nature. Indeed, it was only the division of signs proposed by Peirce[18] that introduced, among others, icons showing a sign's resemblance to the extra-linguistic world.

All sign languages are attributed with a high level of iconicity, which probably results from the very modality of such a linguistic system. However, today we already know that, although being indeed largely based on iconicity, these are languages also built of signs of arbitrary nature (Fabisiak 2010)[19]. Iconicity itself has already been addressed by numerous research papers[20], among which some concern Polish Sign Language[21]. Sylwia Fabisiak, for example, suggested a division of iconic signs based on the similarity of their appearance, size and denotation, as well as a division into metaphorical and metonymic type signs[22]. Such metonymic signs are based on substitutions and associations – there is a semantic relationship between the designatum (a referred object or concept in question) and the signs[23]. In the case of Polish Sign Language, names of colours are considered to be signs based on metonymic iconicity. The abstract nature of these terms makes colour-describing signs in PSL assigned to them to be based on associations. Here, the motivation behind creating a sign for a given colour is an object that is associated with the colour.

These signs, as well as metaphorical signs, form a set of signs based on non-imitative iconicity, expressing main abstract concepts[24].

In the case of the analysed research material, the set of signs exhibiting iconicity elements is rather broad. Based on the classification of iconic signs related to the manner in which a sign shape refers to a designatum[25], I have distinguished the following categories:

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[18] Hanna Buczyńska-Garewicz, *Semiotyka Peirce'a*, (Warsaw: Polskie Towarzystwo Semiotyczne, 1994).

[19] See. Sylwia Fabisiak, "Imitacyjność w polskim języku migowym", *Poradnik Językowy* 6 (2010).

[20] See, i.a., work by Sarah F.Taub, *Language from the body: Iconicity and metaphor in American Sign Language*, Cambridge: Cambridge University Press, 2001), "Iconicity and metaphor", in: *Sign language: An international handbook*, eds. Roland Pfau and Markus Steinbach and Bencie Woll, (Berlin: De Gruyter Mouton, 2012.

[21] The Sign Linguistics Workshop has received funding under the Harmony program of the National Science Centre, for a research project entitled *Ikoniczność w gramatyce i leksyce polskiego języka migowego (PJM)*. The outcome of the research is a publication of the same title, edited by Paweł Rutkowski.

[22] It should be noted that iconicity is visible not only at lexical level, but also in other sign language subsystems (phonology, word-formaton, syntax). See Fabisiak, "Imitacyjność w polskim," 67-68.

[23] See Sylwia Łozińska and Paweł Rutkowski, "Nazwy kolorów w PJM, czyli o ikoniczności nieimitacyjnej", in *Ikoniczność w gramatyce i leksyce polskiego języka migowego (PJM)*, ed. Paweł Rutkowski, (Warszawa: Wydział Polonistyki Uniwersytetu Warszawskiego, 2017), 59.

[24] Sylwia Łozińska and Paweł Rutkowski, "Nazwy kolorów," 58.

[25] This classification created by Sylwia Fabisiak. See Sylwia Fabisiak, "Imitacyjność w polskim," 70.

a) **Locative signs** – The group contains signs, whose iconicity is expressed through locating the sign where the designatum appears, e.g., liver, breast/fillet.


liver/*wątróbka*   breast/fillet/*pierś/filet*

b) **Signs expressing how a designatum is used** – This group encompasses numerous lexemes. Here, iconicity of the signs is based on imitating an activity within which a given designatum is used, e.g., *ice cream/lody* (eating), *bread/chleb* (cutting), *sausage/kiełbasa* (biting), *soup/zupa* (eating with a spoon), *cutlet/kotlet* (tenderizing), *salt/sól* (sprinkling), *apple/pear/jabłko/gruszka* (biting), *egg/jajko* (cracking), *butter/masło* (spreading), *candy/cukierki* (unwrapping), *hen/kura* (pecking in the ground), *chewing gum/guma balonowa* (bubble making), *champagne/szampan* (popping on opening):

bread/chleb   *soup/zupa*
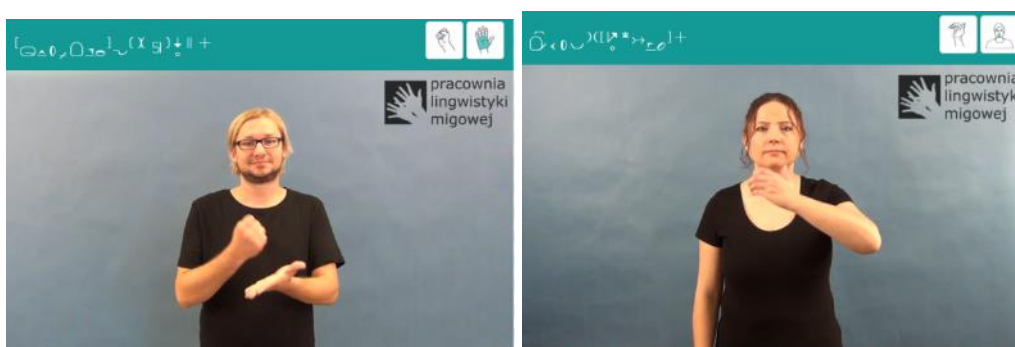
cutlet/kotlet   *apple/pear/jabłko/gruszka*
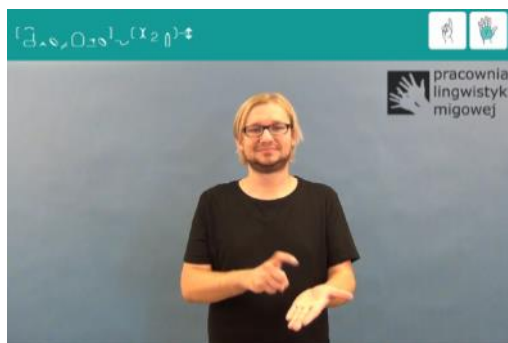
hen/chicken/kura/kurczak

or activities resulting in the formation of a designatum, e.g., *cake/cookie/ciasto/ciastko* (resulting from kneading a mass of flour, water and other additives), milk (obtained through milking a cow), *meat patty/meat balls/kotlety mielone/pulpety* (created after forming minced meat into balls).

cake/cookie/ciasto/ciastko

milk/mleko

meat patty/meat balls/kotlet mielony/pulpety

It should also be noted that nouns are the most frequent items in this group, however, the group also contains signs of verb function, e.g., the aforementioned *cutlet* also means *to tenderize meat*, while *milk* means *to milk*. Other examples include *to spread butter*, which can also mean *milk* or the sign *coffee* meaning *to drink coffee*. The last of the examples are the evidence for the existence of an incorporated verb group in sign language[26]. These are verbs that, through a specified articulator (most usually the hand), designates an object and activity that the object performs.

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[26] SLs contain a group of signs that have a modified hand arrangement and/or signing parameters, depending on what object (or its motion) they express. This group includes numerals, the sign of which includes information on what they refer to (e.g., signs calling kilograms, days, building floors, grade). The incorporated class, besides numerals, includes some nouns (e.g., the sign *fat belly* (*gruby brzuch*) that incorporate an adjective. Object incorporation is typical of verbs. The *to drink coffee* (*pić kawę*) verb referred to in the article incorporates an

butter/to spread butter/masło/smarować   coffee/to drink coffee/kawa/pić kawę

Quite often, the signs in this group act as nouns or verbs, depending on the context of the sentence.

c) **Morphic signs** – this is the most frequent lexeme group in the entire sign language lexicon, not only in the category of names related to cooking. Such signs imitate the designatum shape. It should be noted that the imitation may reflect the overall image of such a designatum or only its part or properties[27].

d)   Morphic signs among the collected research material in the field of the culinary art include *egg/jajko*, *tomato/pomidor*, hamburger, pizza, layer cake/*tort*, *ice cream/lody*, *groats* (type of grain), *beef/wołowina* and *pig/świnia*.
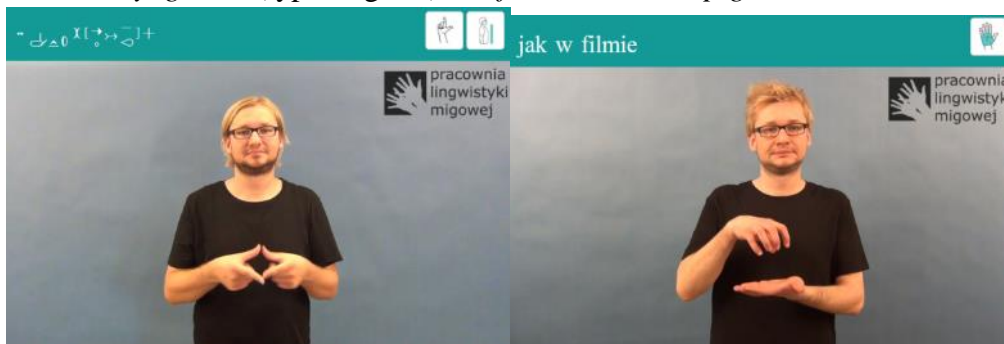
egg/jajko   tomato/pomidor
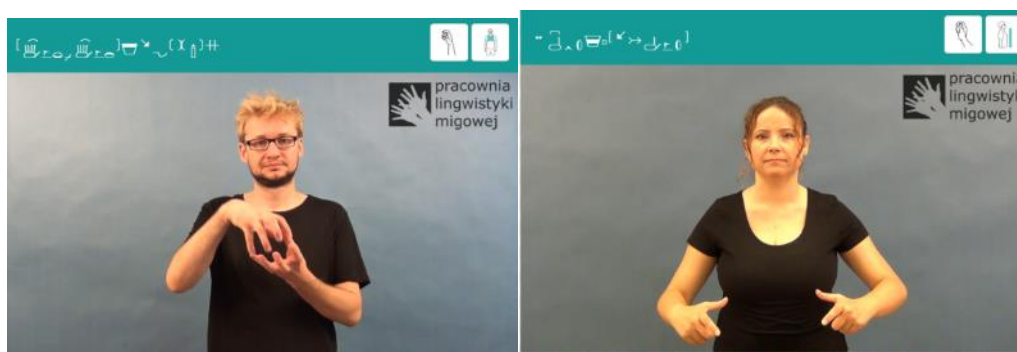
hamburger   pizza

object. Other incorporating verbs include *to wash one's face* (*umyć buzię*), *to wash one's body* (*umyć ciało*), *to brush one's teeth* (*umyć zęby*), *to pluck flowers* (*zrywać kwiaty*), etc. See: Sylwia Fabisiak, "Ikoniczność znaku w polskim języku migowym – wstęp do badań" in: *Stan badań nad Polskim Językiem Migowym*, ed. Ewa Twardowska, (Łódź: Polski Związek Głuchych Oddział Łódź, 2008).

[27] As examples of signs reflecting the entire designatum, S. Fabisiak gives the sign for *PLATE*, while *HOUSE* serves as a sign that reflects a certain designatum feature (it is signed by forming a roof of a building). An example of a sign reflecting a specific feature of a designatum is *FLOWER*, which is signed as blooming or the fact that it smells nice. See Sylwia Fabisiak "Imitacyjność w polskim," 73.

layer cake/tort   *ice cream/lody*

beef/wołowina
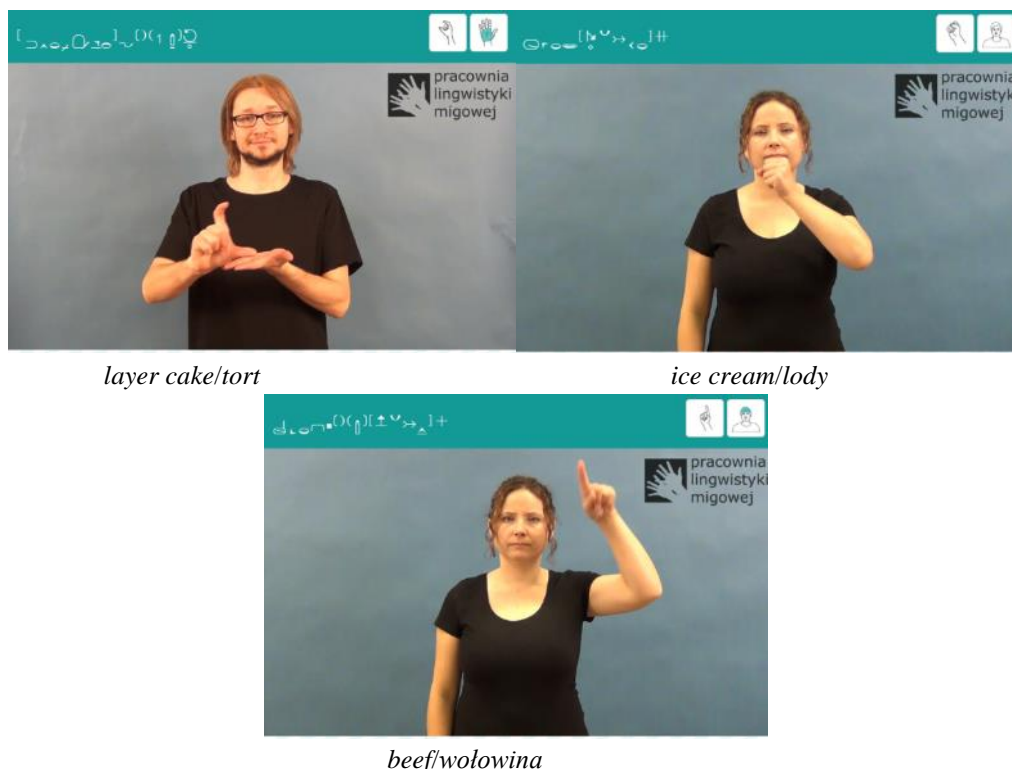
e) **Metonymic signs** – This group contains lexemes that are of iconic and conventional nature [28]. In other words, these are signs relating to a certain designatum feature that is attributed to it on the basis of associations (e.g., the sign for *woman*/*kobieta* refers to a trait of the sex that often decorates ears with earrings, while the sign for *grandfather*/*dziadek* refers to moustache that is associated with this person). Within the collected research material, another such a sign is that for *vodka*, which is signed as a reference to a commonly known gesture (in colloquial language, a gentle tap with the hand on the neck means *get hammered*/*dać w palnik*, *pour down one's throat*/*wlewać do gardła*).
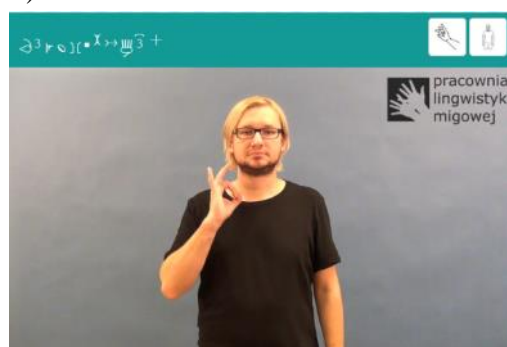

vodka/wódka

The oldest dictionary-recorded sign language lexical units also contain a similar sign etymology:

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[28] Sylwia Fabisiak, "Imitacyjność w polskim," 75-76.

Vodka. Strongly hit the throat by sliding the index finger from under the thumb (as a sign of sharpness and swallowing), adding the sign for *drinking*[29].

f) **Historical signs** – also called quasi-imitative, the meaning of which is not clear to people unfamiliar with signing or ones that do not know the etymology of a given sign. I classify *sugar/cukier* in this group.
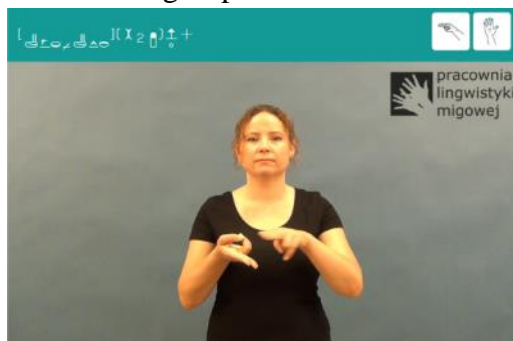
sugar/cukier

The origin of this sign can be found in the dictionary by Hollak and Jagodziński:

Sugar. Hit the left index finger with the right several times, imitating sugar chopping, adding the sign for *sweetness*[30].

Another example of a sign from this category can be "cheese".

cheese/ser

The etymology of this sign relates to how this food product is obtained.

Cheese. Signed by imitating the squeezing of curd in one's hands while touching the fingertips, which adds the element of the item's oblong shape[31].

It should be noted that the given definition contains a direct indication that a sign is to be an **imitation** (*by imitating*) of the designatum that it refers to. The lexeme *cheese/ser* can also be classified as a historical sign due to the fact that the shape of the designatum itself has changed. Today, cheese is not always oblong-shaped..

g) **Dactylographic borrowings from Polish** – This group contains signs of secondary iconicity based not only on similarity to the designatum, but rather to its name in written Polish. Examples include the lexemes for Coca-Cola and *cabbage roll/gołąbki*.

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[29] Józef Hollak and Teofil Jagodziński, "Słownik mimiczny dla głuchoniemych i osób z nimi styczność mających", (Warszawa: Instytut Głuchoniemych i Ociemniałych, 1879), 375.
[30] Józef Hollak and Teofil Jagodziński, "Słownik mimiczny," 27.
[31] Józef Hollak and Teofil Jagodziński, "Słownik mimiczny" 277.
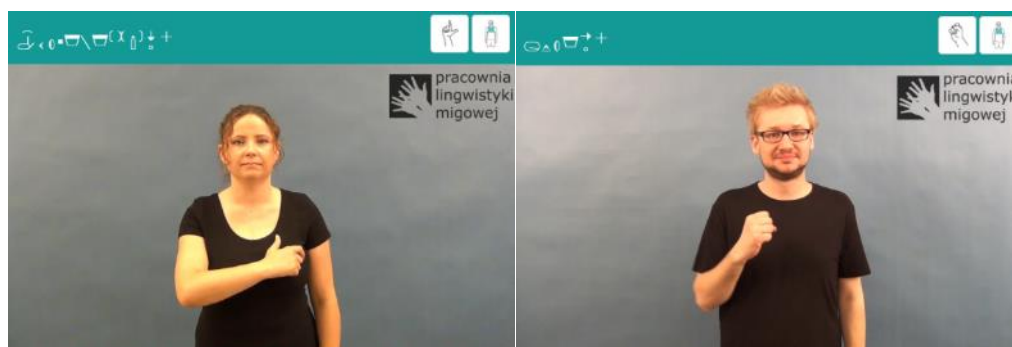
Coca-cola   *cabbage roll/gołąbki*

The sign for "coca-cola" refers to the first letters of this beverage – the hand is shaped into a "c".

If we look at the sign for *cabbage roll*, we can notice imitation based on the similarity of the name of the dish to a name of a bird (*pigeon* in Polish). The hand motion mimics a flapping wing.

2.2. HOMONYMY AND POLYSEMY

Apart from iconicity, an important feature of sign lexis is the presence of homonymy and polysemy. Such a feature is evident when analysing KSPJM dictionary entries. However, these phenomena are more difficult to indicate and describe than in the case of spoken Polish lexemes. The authors of the KSPJM point out that the following:

the iconic origin of many signs makes it hard to decide whether there are two terms that are signed in exactly the same way but their meanings are not related in any way or if it is a sign of many meanings. The iconic character of signs also makes it difficult to speak of coincidental correspondence, even if unrelated meanings are attributed to a single sign[32]
(https://www.slownikpjm.uw.edu.pl/page/pomoc#metodologia)

Difficulties with distinguishing such lexical units also result from the fact that the meanings of lexemes in a sign language are often more general than in phonic Polish (cf. e.g., *bridge/footbridge/little bridge and viaduct- most/kładka/mostek, wiadukt* have the same sign, as *grandfather/grandmother/grandson/granddaughter/grandma (dziadek/babcia/wnuk/wnuczka/babka* do).

Within the collected research material, I distinguished a group of homonyms and polysemes based on the way these terms function in Polish. Thus, I consider homonyms to be lexical units that have the same form – but no semantic relationship, while I list polysemes as ambiguous words – but ones that exhibit similar semantic elements[33].

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[32] https://www.slownikpjm.uw.edu.pl/page/pomoc#metodologia [access: 15 November 2021]
[33] *Encyklopedia językoznawstwa ogólnego*, ed. (1999), s.v. "polisemia."
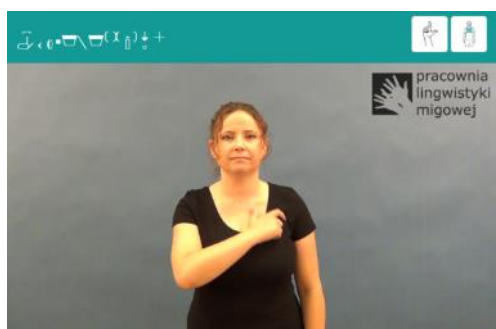
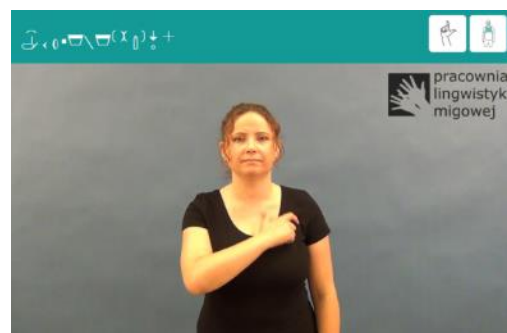Examples of homonymic forms within the analysed material include:
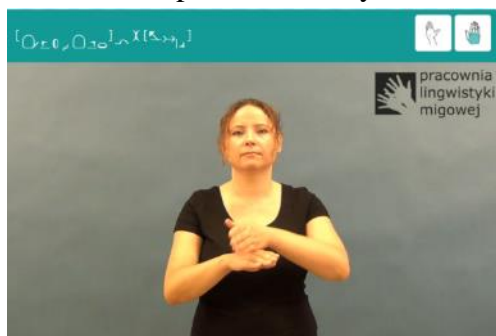
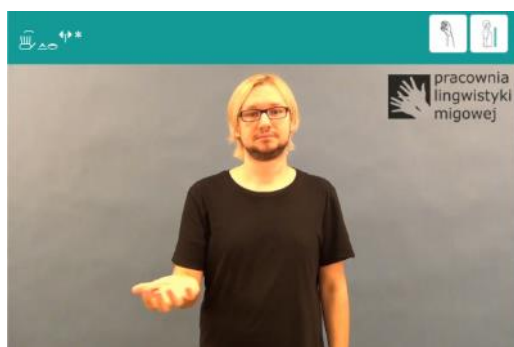*bread/drop in on someone - chleb/wpaść do kogoś*

tea/crisis – herbata/kryzys
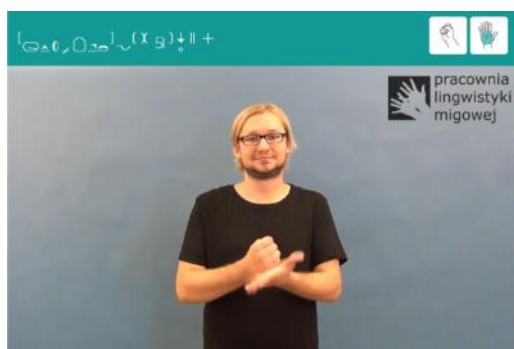

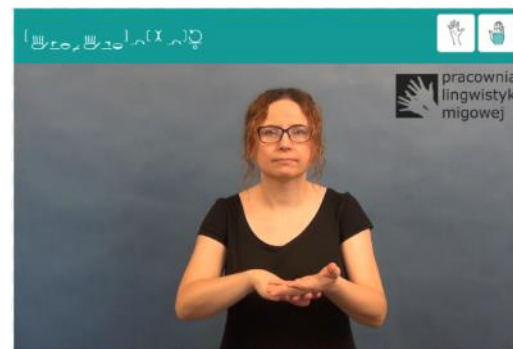*heart/Coca-cola – serce/Coca-cola*

soup/Czech Republic – zupa/Czechy
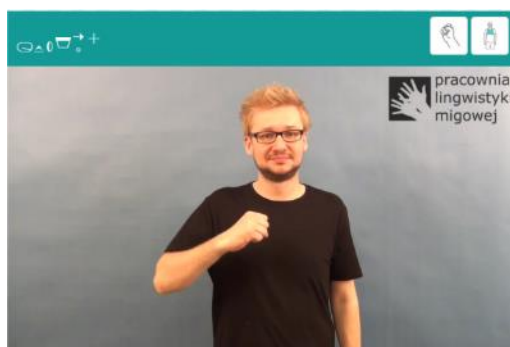

beg/groats – żebrać/kasza

shoes/borscht/beetroot – buty/barszcz/burak

cutlet/address – kotlet/adres

tea/cheat/lie/false – herbata/oszukać/kłamać/fałszywy

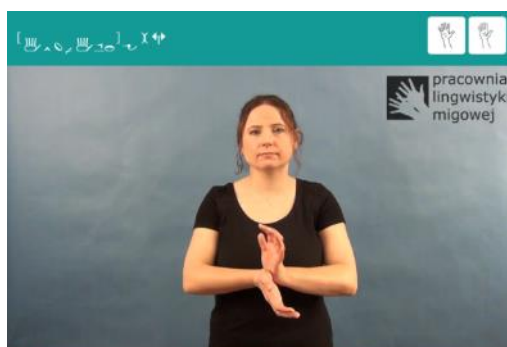*cabbage roll/pigeon/Scotland – gołąbki/gołąb/Szkocja*

This group also includes homonyms, whose meanings in Polish sound similar:

mug/Cuba – kubek/Kuba
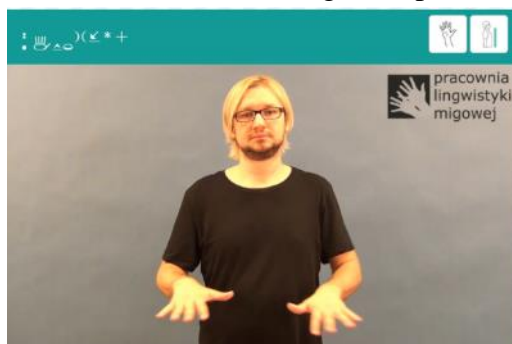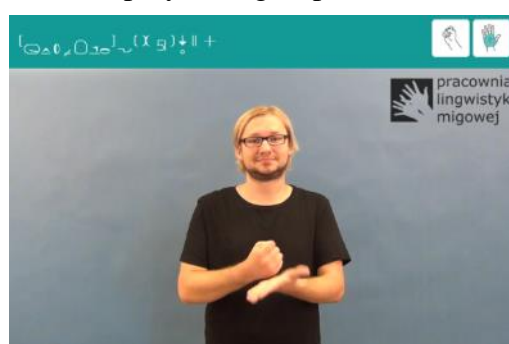

cheese/Serbia – ser/Serbia

bread roll/Bulgaria – bułka/Bułgaria

Meanwhile, the following examples can be pointed to in the polyseme group:

jelly/shaking – galaretka/trzęsienie

cutlet / meat malleting – kotlet/rozbić mięso

face cream / cake cream – krem do twarzy/krem do ciasta

champagne / volcano – szampan/wulkan

3. CONCLUSIONS AND DISSUCION

The undertaken analysis of sign lexemes shows that, first of all, this set is less broad than the one in phonic Polish. The limitations to the set of signs stem from not only the fact that certain semantic fields (that which could be considered when analysing culinary art terms) were not included in this semantic category within the KSPJM for unknown reasons. This includes the names of fruits and vegetables (among others), which form a separate category of the KSPJM that can be used to search the resources of the dictionary.

The most important feature of culinary art names is their iconicity, which is gradual in nature and is definitely more evident in signs than in spoken language lexis. Intensification of this feature in sign lexis is a consequence of, among others, modality of sign languages, where hand motion-based articulation enables showing extra-linguistic objects in a more direct way than possible in spoken languages[34]. Signs imitate numerous designatum aspects (its shape, appearance, behaviour, activity it is performing), but there can also be signs with blurred iconicity. Such is the situation with historical iconicity lexemes. Iconicity may be based on metonymy and metaphor.

The results of research on the iconicity in Polish Sign Language are also noteworthy. They clearly demonstrate that this feature of sign languages does not translate to their pantomimic nature, in that they demonstrate independence from a specific communication code. In other words, persons unfamiliar with sign language are unable to indicate the right meaning of a sign based only on how it is articulated[35]. Therefore, it should be concluded that the iconicity of sign language signs does not exclude their arbitrariness.

What is more, sign language specificity makes it difficult to talk about lexis in terms of the same categories that are applicable in the case of a spoken language. A case in point in this respect is the problem with defining and distinguishing between homonymic and polysemic forms.

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[34] Anna Kuder, "Ikoniczność sygnałów niemanualnych", in *Ikoniczność w gramatyce i leksyce polskiego języka migowego (PJM)*, ed. Paweł Rutkowski, (Warszawa: Wydział Polonistyki Uniwersytetu Warszawskiego, 2017), 205.

[35] One of the studies involved a group of 50 people that were not familiar with sign language. Their task was to make out and write down the meaning of 25 signs that were signed to them. The study was divided into several stages. In the first, the subjects were not given any sign context (e.g., word-formation category, semantic field the sign belonged to, etc.). As many as 95.2% wrong answers were given in this part of the experiment. See Joanna Filipczak and Anna Kuder and Piotr Mostowski and Paweł Rutkowski, "Ikoniczność leksykalna w PJM: badanie eksperymentalne", in *Ikoniczność w gramatyce i leksyce polskiego języka migowego (PJM)*, ed. Paweł Rutkowski, (Warszawa: Wydział Polonistyki Uniwersytetu Warszawskiego, 2017).

Sign language specificity makes it difficult to talk about the lexis in terms of the same categories that are justified in the case of a phonic language. This is embodied by the difficulties in defining and distinguishing between homonic and polysemic forms.

More advanced corpus-based research is undoubtedly necessary. This will enable creating a database. The absence of detailed descriptions of the Polish Sign Language studies means that there are still no comprehensive studies of its grammar system. A database would be an excellent source of such knowledge. The lexical material discussed in the paper distinctly shows the challenges faced by hearing people who want to study a sign language, and vice versa – deaf people who want to learn a phonic language. All this, because lexis is an inherent element of the glottodidactic process. It is these words that contain language meaning carriers, and the key to perceive the world, establish understanding and acquire knowledge on the culture of the society that uses it. It goes without saying that, despite the difficulties arising from sign language specificity, the glottodidactic process requires taking care of improving the lexical skills of a student, making sure that the dictionary component is an element that organizes the said process.

Bearing in mind the presence of other grammatical categories, it seems reasonable to accept a stance that it is the vocabulary that is the axis around which the organized glottodidactic is centred. Therefore, specific thematic fields would introduce certain communication-related situations and grammatical structures. Sign language specificity, even if based on iconicity and imitativeness, entails the need to look at the language from a different perspective. Sign language signs – as demonstrated by research – are often multifunctional, and can appear in various use context, as well as have different – relative to phonic languages – grammar functions.

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