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Nickname formation in West Germanic: German *Jessi* and *Thomson* meet Dutch *Jess* and *Tommie* and English *J-Bo* and *Tommo*

Abstract: German, Dutch, and English nickname formation is examined using a contrastive corpus of nicknames which were found in the online profiles of amateur athletes and are compared with the same individuals' first and last names. We study the word formation and word creation of nicknames, either based on the athletes' legal names or coined freely, pointing out parallels and divergences between the three languages. Two prototypes are identified crosslinguistically as relevant bases for output schemas: disyllabic trochees ending in *-i* (cf. German *Conni*, Dutch *Passie*, English *Thanny*) and monosyllabics ending in a closed syllable containing a single sonorant (*Sash*, *Bous*, *Maze*). These structures are then interpreted in terms of preferred sound patterns and sex marking. Dutch turns out in many respects to hold an intermediate position between German and English.

Zusammenfassung: Anhand kontrastiver Daten zum Deutschen, Niederländischen und Englischen wird der Bildung von Spitznamen nachgegangen. Grundlage des Korpus sind Spitznamen von Amateursportlerinnen und -sportlern, die internetbasiert anhand von Steckbriefen erhoben wurden und mit den Ruf- und Familiennamen der betreffenden Personen abgeglichen werden. Anhand der Wortbildungen und -schöpfungen auf Basis der offiziellen Namen sowie der freien Schöpfungen werden Parallelen und Divergenzen von Spitznamen in den drei Sprachen herausgearbeitet. Zwei Prototypen werden sprachübergreifend als Grundlage von Output-Schemata identifiziert: zweisilbige, trochäische Namen auf *-i* (vgl. dt. *Conni*, nl. *Passie*, engl. *Thanny*) sowie Einsilber auf geschlossene Silbe mit einfachem Sibilanten (*Sash*, *Bous*, *Maze*). Die Daten werden in Hinblick auf Lautstrukturpräferenzen und Geschlechterkennzeichnung interpretiert. Das Niederländische nimmt dabei in vielerlei Hinsicht eine mittlere Stellung zwischen Deutsch und Englisch ein.

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1 Introduction

In addition to a legal name, people usually bear a couple of unofficial names, some of which may be characterized as nicknames.[1] In this chapter, we examine personal nicknames based on first names such as German *Jessi* < *Jessica* or *Thomson* < *Thomas*, and nicknames based on last names such as Dutch *Hoegie* < *Hoegarts*, *Siem* < *Simons*. We also consider freely coined nicknames, cf. English *Ders*, *Loofa*.

The objective of this chapter is to identify parallels and divergences in the formation of nicknames in three closely related West Germanic languages, viz. German (G.), Dutch (D.), and English (E.), based on a comparable set of data. The data stems from amateur athletes' internet profiles and was gathered analogously for the three languages. We compare the data in terms of the broad variation and the distribution of frequencies where the patterns observed in nickname formation are concerned.

As the examples in the title show, different kinds of nicknames are formed based on first names. G. *Jessi* and *Thomson*, D. *Jess* and *Tommie*, and E. *J-Bo* and *Tommo* are all based on *Jessica* (in the case of *J-Bo* also integrating the beginning of the last name *Bowden*) and *Thomas* or *Tom*, respectively. There is thus variation in the formation of nicknames between these languages. However, most of these forms could just as likely stem from the other two languages, thereby indicating parallels between them as well.

Our knowledge of nicknames differs between the three languages: While monograph studies and other publications exist regarding G. (cf. Kany 1992; Naumann 1976, 1977) and E. (cf. Morgan/O'Neill/Harré 1979; Busse 1983; de Klerk/Bosch 1996, 1997; Starks/Leech/Willoughby 2012), our main insights into D. stem from studies on specific dialects (cf. Leys 1968; Mennen 1994; Van Langendonck 1978), while no systematic studies on Standard Dutch have been found. The present study seeks to tackle this deficiency. At the same time, contrastive studies of nicknames are rare, and we therefore wish to provide new information on nicknames in the three languages and their current relation from a contrastive perspective. We focus entirely on phonological and morphological aspects, since these have proven particularly relevant in earlier studies (cf. Naumann 1976, 1977 for G.; Taylor-Leech/Starks/Willoughby 2015 for E.).

1 Thanks are due to two anonymous reviewers, to Pia Fischl, Erik Lutz and Patricia Rawinsky for their valuable help in data collection and preparation, and to Paul Gahman and Torsten Leuschner for comments and proofreading.

2 Nicknames: definitions and characteristics

Nicknames are usually defined as being a) bound to an individual in addition to her or his legal name, b) specific to a certain group of people with which an individual regularly interacts (e.g., a school class, a sports team, a choir, etc.), c) not suitable for legal or outsider use, and d) usually chosen by other people, i.e., not self-given (cf. Nübling/Fahlbusch/Heuser 2015: 171–172). Apart from these main characteristics, no consensus has been reached for the definition of nicknames (cf. Brylla's 2016 handbook chapter discussing the lack of a common terminology in Germanic linguistics and even within the linguistics of specific Germanic languages). In certain definitions, for instance, the use of the term *nickname* is restricted to bynames, which usually stem from the lexicon and are based on a relation to the name bearer's person, physique, lifestyle, etc. (e.g., *Smiley*, *Angry*), while formations based on the individual's legal name are regarded as so-called pet names.[2] Other definitions offer different categories. Lawson (1973) separates so-called short names (such as *Dave* < *David*) from what he calls nicknames with an affective suffix (such as *Davey*), and corroborates this separation by asserting that different stereotypes of the two types of names exist: While most short names are associated with positive values ('good', 'active', 'strong') even more than the corresponding full forms, the derived nicknames are rated comparatively low according to these values.[3]

While problems in the definition of nicknames will remain, we use a broad definition of the term, following a recent G. textbook on onomastics (Nübling/Fahlbusch/Heuser 2015: 172). We define a nickname on emic grounds as what is defined as such by G., D., and E. language users. As will be shown below, the data reveals that a very comparable and broad definition of nicknames is accepted among language users, including bynames, modifications of existing (legal) names, and

2 As shown below, this definition does not match what linguistic laymen consider nicknames. This is corroborated by other students of nicknames such as Starks/Leech/Willoughby (2012: 140), who suggest "that researchers who ignore variants of names as nickname types fail to consider the views of large numbers of individuals who see variants of names as nicknames". In fact, in many of the existing studies on G. and E. approximately 50–60% of the nicknames collected in sample and survey studies are based on the individuals' legal names. This tendency is in line with our data, see section 4.

3 Note that a repetition of the study might result in different outcomes given the changes in society over the past 44 years. Other distinctions, like that of Van Buren (1977), further contribute to the terminological confusion: in his terms, forms like *Dave* are nicknames and forms like *Davey* are affectionate nicknames. Cf. the discussion in Wierzbicka (1992: 225–237) who sheds doubt on the appropriateness of such classifications.

newly coined names without an overt basis in existing words or names. With our emic definition, we provide a widely comparable set of nicknames that are based on a commonly accepted (and mostly parallel) concept of nicknames in the societies from which the data stems.

Note that the term nickname (or G. *Nick* for short) also appears in names specific to internet uses in forums, chats, games, etc. (cf. Gkoutzourelas 2015; Kaziaba 2016). These names are different from nicknames according to our definition, mainly because they are specifically chosen by the individuals themselves for use online.

3 Data and methodology

To provide comparable sets of data, samples of nicknames were collected from websites in an analogous fashion for G., D., and E. We found that clubs connecting a group of people such as sports clubs, choirs, youth associations etc. often offer lists of their members' personal profiles. Such personal profiles provide a common source of nicknames, particularly in sports teams since nicknaming in team sports is "one way of fostering team spirit" (Chevalier 2004: 128). Nicknames thus serve a special integrating function within teams and are often uniquely used by the team members. In-group interaction through nicknames was similarly reflected in online communication via internet profiles. Since this observation held for all three language communities examined, we chose to collect nicknames from athletes' online profiles.

Personal profiles usually consist of systematic information collected in a team-internal survey. The athletes are asked to provide personal information about specific categories usually including first and last name, age, occupation, position played, and other personal information like hobbies. For this study, only personal profiles that had "nickname" as a category were considered. Such profiles and the corresponding teams were identified via online queries containing the term *nickname* in the respective language (G. *Spitzname*, D. *bijnaam*) in combination with search terms like *team*, *soccer*, *basketball* etc. Per profile, information on the nickname, first name, last name, sex, and location were extracted into a database.

In order to obviate nicknames from children,[4] we ignored nicknames from children's teams and used nicknames from young adult (starting from approxi-

4 Studies with individuals at differing ages showed that the bases and forms of nicknames change with age during childhood and adolescence, cf. Kany (1999), Morgan/Leech/Willoughby (1979), Naumann (1976, 1977).

mately age 16) and adult teams only. Professional teams were also left out of consideration because they may employ nicknames that were not coined within the team but in the media. Additionally, only nicknames that deviated from the official first and last name were included in the dataset. We included only one token per nickname type, unless the nickname type referred to differing legal names; thus *Em* is listed twice as the short form of either *Emma* or *Emily*, whereas four other cases of *Em* for *Emily* were deleted from the list. For each language, several hundred nicknames were collected as equally as possible across men and women. Table 1 shows the exact number of nickname types collected for each language.

Table 1: Number of nicknames per language and across sexes

	German			**Dutch**			**English**		
	Sex		All	Sex		All	Sex		All
	M	F		M	F		M	F	
Number of Nicknames	415	335	750	323	320	643	567	413	980

Since the data were collected using major internet search tools such as Google, they constitute a random collection of names.[5] This is also reflected in the variation of the number of nicknames per team, the variation of sports included (with soccer teams being the main source in all three samples), and the regional and national distribution (German and Austrian for G.; Dutch and Belgian for D.; US and UK for E.).[6]

The analysis is predicated on the assumption that the athletes provided their nicknames themselves or at least gave consent to publishing them on their team's website. The collection therefore consists of nicknames that the bearers were

5 The specific algorithms in such search tools provide the basis of the URLs returned. Therefore, the collection may not be fully random. However, we used several different search tools and a broad variation of search terms, and the results reflect no identifiable patterns related to the use of specific search engines. We therefore assume that biases caused by the algorithms are negligible.

6 Note that the data is not suitable for comparing national distributions to the same extent. The G. sample stems mainly from Germany, with only 39 of 750 entries from Austria. The D. sample is mainly from the Netherlands, with only 31 of 643 entries from Belgium. The E. data, by contrast, is distributed more or less equally across British (462 entries) and US websites (518 entries).

aware of and accepted as positive nicknames. Derogatory names or nicknames evaluated negatively by their bearers for any other reason are unlikely to appear in the material and would demand a different approach.

Despite the limited number of nicknames in the database, the data can be considered representative of (positive) nicknames in current amateur sports teams. They provide the foundation for studying structural characteristics of nicknames and comparing them across the three languages. Unlike many other studies on nicknames (most of which were based on survey or experimental data), we will be able to discuss the social aspects behind nicknames to a limited extent only since background and context information about the nicknames' origin and use was not on hand. However, apart from geographical information, we have reliable information about the nickname bearer's sex, which has been identified as particularly relevant in earlier studies.

Section 4 will introduce the spectrum of nicknames in our data and identify those parts of the dataset that are suitable for identifying structural characteristics. The structural analyses themselves are presented in the subsequent sections 5–7.

4 The spectrum of nicknames

Whereas some nicknames are based on a person's legal name, others do not formally resemble their legal name at all; both types are found in the data. Within these two categories more specific subtypes may be differentiated as shown in Figure 1.

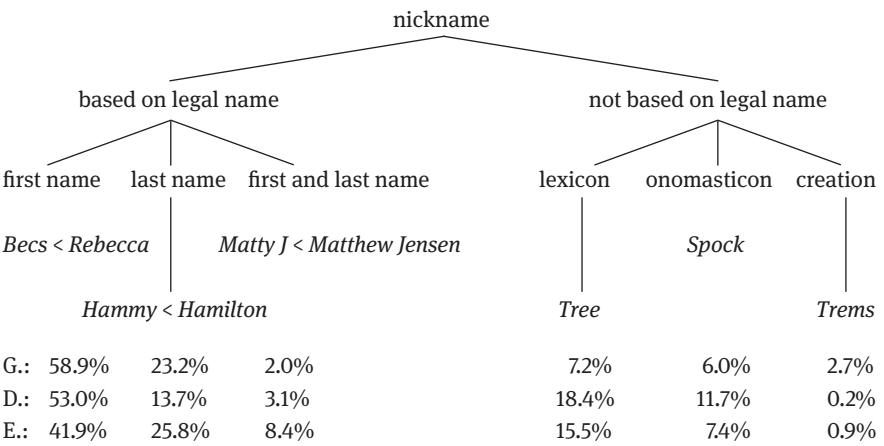

Fig. 1: The spectrum of nicknames

The relative frequencies per language show that the number of nicknames based on legal names is higher than that of freely coined nicknames in all three languages, with most nicknames being based on first names. The legal name as a base is particularly strong in G. (84.1%) while D. and E. leave more room for other types (69.8% and 76.1% based on legal names, respectively). The simultaneous use of both parts of the legal name as a basis for the nickname is notably more frequent in E. (8.4%) than in G. and D., with a high number of nicknames formed as acronyms of the legal name (e.g., *AB < Alex Brown*).

First names form the predominant base for nicknames in all three languages. By contrast, the use of last names as a base for nicknames varies among the three languages: D. uses such nicknames to the lowest extent (13.7%), while G. (23.2%) and E. (25.8%) exhibit higher frequencies. Interestingly, last names are used far more frequently as a base for male than for female nicknames in all three languages (G.: M 34.0% F 9.9%; D.: M 19.8%, F. 7.5%; E.: M 32.3%, F 16.9%).[7] This is, of course, not an inherent characteristic of nicknames but an effect of culture: last names are more strongly associated with males rather than females in all three language communities because of a long patriarchal history of familial names being inherited along the male line.[8] An additional sex-based difference is observed regarding the use of nicknames that are not based on legal names: these are consistently associated more frequently with men than with women (G.: M 21.0% F 9.6%; D.: M 39.0% F 21.3%; E.: M 31.6% F 13.3%).[9]

7 M = male, F = female.

8 There is a striking difference between the British and the American data concerning the use of first and last names. While in the British data nearly as many nicknames are based on first names (34.0%) as on last names (33.5%), first names as a base of nicknames are clearly dominant in the US (49.0% vs. 18.9%). The difference in nicknames based on last names with respect to sex, however, is more pronounced in the American data (M 27.2% F 11.2%) than in the British data (M 36.3% F 27.6%); this is in conformity with American studies by Busse (1983), amongst others. Note that a parallel sample of Swedish nicknames showed that last names are used more or less equally as a base of nicknames for both sexes in Swedish (cf. Kürschner 2014). This is in contrast to the languages considered here.

9 De Klerk/Bosch (1996) found that female nicknames are much more often coined by family members or retained from childhood and then adopted by fellow peers. This is in stark contrast to male nicknames, which are much more often coined within specific peer groups. Since nicknames within families are often coined based on the individual's first name, this could explain why such nicknames are more often found among women than among men. Among men, in contrast, there is a higher chance for newly coined nicknames to be based on personal, physical, or contextual characteristics or on the person's last name.

In subsequent sections, parallels and divergencies in the formation of nicknames are analysed according to phonological and morphological characteristics. We describe what new, freely coined nicknames look like, assuming that nearly anything is possible in the formation of nicknames. In order to prevent the results from reflecting inherent characteristics of lexemes, we restrict ourselves to cases in which the product of nickname formation is truly free from the limitations of the lexicon. For this reason, we base our analyses on nicknames that stem from the processes of word formation or word creation only, ignoring all nicknames that are transferred from the existing lexicon or onomasticon. We therefore exclude nicknames that are homonymous with lexical items (like *Son* or *Bird*), unless they are the result of formation processes such as clipping (e.g., *Mass* < *Massey*).[10] Also excluded are nicknames that are overtly identical to existing lexical items (e.g., *Lizard* < *Liz*, *Strudel* < *Strudwick*) or include the legal name in a syntagmatic construction (*Geiger the Tiger* < *Geiger*). Additionally, we exclude nicknames homonymous with existing names (*Spence* < *Spencer*), including those of well-known people (*Tom Hanks*), figures (*Ali Baba*), products (*Q-tip*), and the like. Table 2 shows the resulting number of nicknames used for the analyses provided in the subsequent chapters.

Table 2: Reduced data used for phonological and morphological analyses

	German			**Dutch**			**English**		
	Sex		All	Sex		All	Sex		All
	M	F		M	F		M	F	
Number of nicknames	249	207	456	126	149	275	249	224	473

In sections 5–7, we provide an exploratory analysis of the data. We elaborate observations derived from a thorough review of the data, including frequency measures of observed patterns. Section 5 first examines syllabic characteristics to illuminate which syllable numbers, syllable types and segmental features shape nicknames in the three languages. Next, in section 6 we investigate the morphological mechanisms behind nickname formation. The creation of free forms is described in section 7. Finally, section 8 presents the results of the contrastive analysis.

10 In such cases, the relation to the lexicon is considered secondary, without knowing whether it was intended in the first place.

5 Syllabic characteristics of nicknames

Nickname formation is a very creative process in language which enhances our understanding of the shape of possible words:

> Nicknames, because they act as an avenue for creativity and the expression of some of the pure enjoyment that the sounds and meanings of words can give, provide name-users and name-bearers with considerable freedom in manipulating and bending linguistic resources. They provide evidence of the ongoing enjoyment that human beings find in playing with language and creating new words which experiment with patterns of sounds. (de Klerk/Bosch 1997: 293)

In other words: nicknames show what words can look like without (or nearly without) the restrictions imposed by lexical patterns. Changes in other lexical items, by contrast, reflect general constraints on processes of language change; loan words fail to be revelatory in this respect, and new word-formation products are restricted by word formation processes. Nicknames therefore provide insights into the potential structure of entirely new words (cf. Kürschner 2018).[11] In order to determine the spectrum of nicknames in the three languages, their identifying characteristics, and whether they differ between the sexes,[12] their syllabic characteristics will now be explored. An in-depth study of more specific sound patterns would be valuable for each of the languages examined, but cannot be provided here.

The mean length of the nicknames in our sample is two syllables or less in all three languages (G: 2.0; D.: 1.7; E.: 1.8 syllables). The legal names from which nicknames are derived are on average longer than the associated nicknames (G.: 1.2; D. and E.: 1.3 times longer than the corresponding nicknames), with female names on average being more readily shortened than male ones. The reason for this distribution is that male first names are generally shorter than female first names (cf. Whissell 2001: 108 on E.; Nübling 2012 on G.). In D. and E., female nicknames also tend to be slightly shorter than male ones (D: F 1.6; M 1.9; E.: F 1.7; M 1.8 syllables). In fact, there are more monosyllabic female nicknames in D. and E. than disyllabic ones, whereas disyllabic structures are more clearly favoured in male nicknames (cf. Table 3, which compares the number of syllables in nicknames). This tendency in D. and E. not only contradicts many earlier studies which found

11 Other valuable data of this kind are provided by short words (Ronneberger-Sibold 1995) and product names (Ronneberger-Sibold/Wahl 2013).

12 Cf. Cutler/McQueen/Robinson (1990) on E., Oelkers (2003) and Nübling (2012) on G. Their work has shown that sound patterns assist in the association between names and their possible bearers' sex, which might be relevant for nicknames, too.

that shorter names (specifically monosyllabics, cf. Elsen 2016: 121) are typically masculine and longer names feminine (cf. de Klerk/Bosch 1996: 536–539), but also contrasts starkly with G.: while a tendency towards disyllabic nicknames can be observed across all three languages, D. and E. use monosyllabic nicknames much more readily than G., where disyllabic nicknames are used extensively. In the following sections, the structures of the two frequent groups, viz. mono- and disyllabics, are presented in detail.

Table 3: Syllable length in nicknames

Syllable length	German			Dutch			English		
	Sex		All (456)	Sex		All (275)	Sex		All (473)
	M (249)[13]	F (207)		M (126)	F (149)		M (249)	F (224)	
1	10.4%	11.6%	11.0%	20.6%	49.0%	36.0%	30.9%	47.5%	38.8%
2	80.7%	78.3%	79.6%	65.1%	46.3%	54.9%	59.4%	42.6%	51.5%
3	6.0%	7.7%	6.8%	13.5%	3.4%	8.0%	6.8%	6.7%	6.8%
4	2.8%	2.4%	2.6%	0.8%	1.3%	1.1%	2.4%	1.8%	2.1%
5 or more	–	–	–	–	–	–	0.4%	1.3%	0.8%

5.1 Structural aspects of monosyllabics

Monosyllabic nicknames are mostly products of shortening. Since the sound patterns specific to nicknames are of particular interest here, the parts of the names that do not simply reflect the characteristics derived from the legal names form the core of the current discussion. In shortening processes, the number of clipped sounds is unpredictable. Since shortening mostly affects the end of the respective base (end clippings, cf. section 6.2 below), we focus on final sounds.[14] The three languages show a parallel tendency towards closed, i.e. consonant-final, sylla-

13 Percentages are used in this and the following tables to assure comparability. The number of items analyzed per category is provided in parentheses with the column names.

14 Final sounds often reflect a sound provided by the base (unless a suffix is added) and thus a characteristic thereof. However, when a nickname is coined, a choice is made with regard to a new final sound, which is reflected in the nickname. For instance, for *Kerstin* back clippings can result in, among others, *Kersti*, *Kerst*, *Kers*, and *Ker.* These each provide a different final sound,

bles in monosyllabic nicknames, cf. Table 4. This tendency is more pronounced in D. and E. than in G., where open syllables are more often used. However, we find a sex-based distribution in G., as closed syllables are especially frequent in male monosyllabics (*Det* < *Detlef*), while female nicknames of this kind much more often appear with a final vowel (*Co* < *Corinna*, *Bo* < *Borton* vs. *Ker* < *Kerstin*). This corroborates studies on first names showing that male names tend to end in closed syllables, while female names tend to end in open syllables (cf. Nübling 2012: 333–334; Oelkers 2003: 185–189) and that monosyllabics generally bear a male connotation (cf. Nübling 2012: 345–346; Oelkers 2003: 145–151, for E. also Cutler/McQueen/Robinson 1990: 475–478).

Table 4: Syllable types in monosyllabics

Syllable type	German			Dutch			English		
	Sex		All (50)	Sex		All (99)	Sex		All (183)
	M (26)	F (24)		M (26)	F (73)		M (77)	F (106)	
Closed	80.8%	58.3%	70.0%	84.6%	84.9%	84.8%	88.3%	79.2%	83.1%
Open	19.2%	41.7%	30.0%	15.4%	15.1%	15.2%	11.7%	20.8%	16.9%

Final sounds in closed monosyllabic nicknames are predominantly fricatives. While this predominance is readily observable in E. (67.8%), a greater divergency in the use of final sounds is evident in G. (42.9%) and D. (38.1%). In E. (52.6%)[15] just as in D. (25.0%), *-s* is used most often as the final sound (D. *Rens* < *Renske*, *Jikks* < *Jikke*; E. *Becs* < *Rebecca*, *Klepps* < *Kleppe*). G. uses a greater variety of sounds, with /ʃ/ and /f/ being the predominant choice (17.1% each, cf. *Jänsch* < *Janina*, *Scheuf* < *Scheufler*). Fricatives are slightly more common as final sounds in G. and E. male nicknames than in female ones (G.: M 47.6% F. 35.7%; E.: M 72.1% F 64.3%). The opposite tendency can be found in D. (M 18.2% vs. F 45.2% fricatives), where 45.5% of all male nicknames end in a sonorant and 36.4% in a stop; this

amongst which the nickname creator can freely choose. By contrast, when considering the beginning of nicknames, only the structural characteristics of bases' initial sounds would be reflected.

15 *-s* is realized as [s] or [z] in E., depending on the sonority of the previous sound. In G. and D., it is always pronounced as [s] in the final position.

difference coincides with a stronger presence of final *-s* in female nicknames in D. (M 9.1% F 30.6%), while *-s* is slightly more frequent with male names in E. (M 58.8% F 47.6%).

Studies of sound symbolism have found obstruents to be associated with masculinity, sonorants with femininity (cf. Whissell 2001: 106). As for nicknames, however, our results contradict these associations with respect to D. and E. Not only are many female nicknames monosyllabic, D. in particular often uses obstruents to create female nicknames, possibly as a playful way to subvert common sex-role based associations. This is supported by Wierzbicka (1992: 375–383), who describes the onymic suffix *-s* in Australian English as having an "anti-diminutive" function that is often used by adolescent girls: "the speaker wishes to dissociate himself or herself emphatically from the kind of emotional attitude associated with diminutives" (Wierzbicka 1992: 378). In Wierzbicka's study, the diminutive function is associated with names ending in /i/ which are often retained from childhood. Considering that many of the names in our data stem from adolescents, nicknaming can be interpreted as a playful manner of dealing with adolescence and sex roles.

The three languages also differ in the number of final consonants in closed syllables. In G. and E., monosyllabic nicknames end in a single consonant about as often as they end in a two-consonant cluster (G.: 51.4% vs. 48.6%, E.: 52.0% vs. 48.0% for single vs. two consonants, respectively), while D. shows a clear tendency towards single final consonants in monosyllabic nicknames (82.1% vs. 17.9%). Across the three languages, clusters appear particularly often with final *-s* and, in G., /ʃ/. In most cases, these sounds provide clusters that run counter to the sonority hierarchy. For example, in G. *Sabs* < *Sabrina*, D. *Rox* < *Roxanne*, and E. *Lyds* < *Lydia*, the order of sounds in the syllable coda contradicts expectations based on sonority: although /s/ is more sonorous than the stop, it is placed behind the stop in the syllable coda and thus forms an extra-syllabic element. This may evoke an expressive effect, enhance salience, and subvert sex-role stereotypes as suggested above.

Considering vowel-final monosyllabic nicknames, E. shows a strong preference for final /i:/ (*Si* < *Sierra*), and /i:/ and /o:/ for G. (*Fi* < *Fiona*, *Flo* < *Florian*), whereas D. does not show any specific tendency at all.

5.2 Structural aspects of disyllabics

As Table 5 shows, disyllabic nicknames prototypically end in an open syllable in G. Open syllables are also characteristic of, though not as frequent in, the other two languages.

Table 5: Syllable types and frequent final sounds in disyllabics

syllable type – final sound	German			Dutch			English		
	Sex		All (363)	Sex		All (151)	Sex		All (243)
	M (201)	F (162)		M (82)	F (69)		M (148)	F (95)	
closed	12.9%	14.8%	13.8%	25.6%	23.2%	24.5%	18.2%	34.7%	24.7%
- fricatives	5.0%	0.0%	2.8%	8.5%	7.2%	7.9%	6.8%	14.7%	9.9%
- sonorants	7.0%	13.0%	9.6%	14.6%	11.6%	13.2%	8.1%	14.7%	10.7%
- stops	1.0%	1.9%	1.4%	2.4%	4.3%	3.3%	3.4%	5.3%	4.1%
open	87.1%	85.2%	86.2%	74.4%	76.8%	75.5%	81.8%	65.3%	75.3%
- *-i*	50.2%	61.7%	55.4%	43.9%	49.3%	46.4%	58.1%	38.9%	50.6%
- -[ə]	21.4%	8.6%	15.7%	17.1%	15.9%	16.6%	–	–	–
- *-o*	8.0%	4.3%	6.3%	4.9%	5.8%	5.3%	13.5%	12.6%	13.2%
- *-a*	5.0%	9.3%	6.9%	6.1%	4.3%	5.3%	3.4%	4.2%	3.7%

With respect to the specific final vowel, /i/ is dominant in all three languages (G. *Fabi* < *Fabienne*, D. *Winski* < *Elwin*, E. *Welly* < *Llwelyn*). While *-i* is more commonly present in female nicknames in G., it is particularly predominant among male names in E.,[16] with D. showing no such tendency. G. and D. also frequently have the schwa vowel ([ə]) as final sound, whereas this is not used in English (G. *Tobse* < *Tobias*, D. *Ceke* < *Cedric*). In G., male nicknames end in final schwa much more frequently than female nicknames, whereas the schwa is used equally for both sexes in D. In all languages, *-o* and *-a* are next in the list of frequent final vowels (G. *Mazlo* < *Mazalovic*, D. *Roffa* < *Rovers*, E. *Haylbo* < *Haley*), both with a much lower frequency than *–i*. However, the frequency of *-o* is comparatively high in E. Section 6 shows that the presence of these final vowels results either from clipping (*Emi* < *Emily*) or from suffixation (*Emi* < *Emma*).

In E., female nicknames are much more often found with closed syllables than male ones, again contrasting with findings on the structure of first names from earlier nickname studies (see discussion above in section 5.1). Across the three languages, closed syllables in nicknames mostly end in sonorants and only very seldom in stops. Sonorants predominate abundantly in G. (*Heinzen* < *Hein*), and the fricative *-s* is also strongly represented in D. and E. (D. *Laris* < *Larissa*, E. *Meggers* < *Megan*), as indeed with monosyllabics. Any fricatives apart from *-s* are very rare.

16 This contrasts strongly with the findings of de Klerk/Bosch (1996) for South African English, where final -i is regarded as prototypically feminine.

Summing up the results from the analysis of mono- and disyllabics with regard to final sounds, G. generally seems to prefer sonorant endings for nicknames, while D. and E. tend to end in *-s* (sonorants apart). In G., a final fricative evokes a masculine connotation in nicknames, especially monosyllabics.

Apart from the final sound, it is interesting to observe how the two syllables are linked in disyllabics. The tendency is for the link to consist of a single consonant that is either the onset of the second syllable or ambisyllabic. Consonant clusters are found in a number of nicknames, most often in D. (36.3%), less so in E. (30.0%), and least often in G. (21.2%). Most clusters are remnants from the legal name on which the nickname is based. While such clusters are often reduced in G. (54.2% of all cases in which the legal name contains a cluster, cf. *Wale* < *Walter*) and D. (48.9%, cf. *Possie* < *Postulart*), this is somewhat less often the case in E. (36.4%, *Shelly* < *Shelbi*). Cluster reduction is particularly frequent in female nicknames in G. and D., where it can be interpreted as a simplification of syllable structure resulting in a CVCV-nickname. Although consonant clusters are a typical phenomenon of G. lexical items generally, nicknames clearly deviate from this characterization. As a result they appear softer and, if sonorants are involved, more sonorous.[17]

On the other hand, when no cluster is present in the legal name, new clusters are occasionally created, potentially contributing to expressivity. Clusters appearing more than once are combinations of a voiceless stop and a sibilant in G. (*Britschi* < *Britta*, *Natze* < *Nadine*, *Robser* < *Robin*), combinations of a nasal and a voiceless stop in D. (*Dompie* < *Dom*, *Jonko* < *Jon*), combinations of a consonant and a sibilant in E. (*Bailzo* < *Baillie*, *Natson* < *Natalie*); G. and E. thus share the use of sibilant-final clusters. Apart from these clusters, G. and D. form clusters that are also typical of diminutives; these reflexes of morphology are discussed below in sections 6.3–6.4.

6 Processes of nickname formation

In this section, we examine morphological and extra-grammatical processes that are applied in the creation of nicknames. In analysing these processes, we only consider nicknames that are based on legal names. Table 6 provides an overview of the fundamental processes found in the data.

17 As Nübling (2012: 342–343) notes, consonant clusters in popular German first names have been diminishing since 1945, resulting in softer names. If sonorants are involved, their sonorous quality is even more obvious in the absence of other consonants (ibid.: 336–338).

Table 6: Nickname formation processes with examples (per process type, first example based on first name, second example based on last name)

process type	German		Dutch		English	
	base	nickname	base	nickname	base	nickname
acronym formation	*Marion Peter*	*MP*	*Patricia*	*Pe*	*Helen*	*H*
	Florian Kienberger	*Floka*	*Hannah Bikker*	*HB*	*Alex Brown*	*AB*
clipping						
– back	*Julia Kleefeld*	*Jul Klee*	*Marianne Touten-hoofd*	*Mari Tout*	*Riley Primmer*	*Ri Prim*
– fore	*Janine*	*Nine*	*André*	*Dré*	*Rebekah*	*Bekah*
– edge	–	–	*Simone*	*Moon*	*Natasha*	*Tash*
– middle	*Georg*	*Gorg*	–	–	*Garret*	*Gart*
suffixation	*Maik Schulz*	*Maiker Schulzi*	*Jorrit Mik*	*Jorrito Mikkie*	*Tom Berg*	*Tommo Bergie*
clipping + suffixation	*Tobias Ulbrich*	*Tobse Ulle*	*Arthur Duijkers*	*Arti Duiky*	*Jordyn Hocknell*	*Jordo Hockers*
reduplication	*Teresa*	*Tete*	*Jolanda*	*Jojo*	*Cole*	*Coco*
compounding	*Karl Kock*	*Partykarl Keilriemen Kock*	*Loes Maas*	*Loesbal Maaskantje*	*Kayla Bower*	*Kaylabug Bower Power*
blending	*Alexander*	*Skandalex*	*Romboud*	*Rombocop*	*Mika*	*Mikattack*
	Miriam Schmitz	*Schmiri*	–	–	*Fuller*	*Fulldog*
defamiliarization and word play	*Marco Sarah*	*Darco Särah*	*Nico Flendrie*	*Nocci Flen3*	*Shannon Donagan*	*Shewan Dank-sho*
other	*Ulf*	*Mulf*	*Van de Kreeke*	*Kreeke*	*Ben*	*Been*
free forms	–	*Pötzi*	–	*Sjiemelle*	–	*Udzy*
	–	*Tuff*	–		–	*Guence*

In order to compare nickname formation in the three languages more closely, several processes will be examined in detail along with the frequency with which they are applied.[18] Table 7 outlines the relative number of items associated with each of the processes introduced above.

Table 7: Processes involved in nickname formation

process type	German			Dutch			English		
	Sex		All (456)	Sex		All (275)	Sex		All (475)
	M (249)	F (207)		M (126)	F (149)		M (251)	F (224)	
acronym formation	1.6%	1.4%	1.5%	4.0%	4.0%	4.0%	20.5%	11.7%	16.3%
clipping	18.1%	21.3%	19.5%	19.0%	49.7%	35.6%	16.5%	29.9%	22.9%
– back	16.9%	17.4%	17.1%	15.9%	46.3%	32.4%	14.5%	25.6%	19.7%
– fore	–	3.9%	1.8%	3.2%	–	1.5%	1.2%	2.2%	1.7%
– edge	–	–	–	–	3.4%	1.8%	0.4%	1.8%	1.1%
– middle	1.2%	–	0.7%	–	–	–	0.4%	0.4%	0.4%
suffixation	11.9%	10.1%	11.2%	23.0%	4.7%	13.1%	21.3%	8.5%	15.3%
clipping + suffixation	52.2%	48.8%	50.9%	35.7%	29.1%	32.4%	28.1%	37.7%	32.6%
– reduplication	0.8%	1.0%	0.9%	–	1.3%	0.7%	1.2%	3.6%	2.3%
compounding	1.6%	–	0.9%	0.8%	2.0%	1.5%	1.2%	3.1%	2.1%
blending	1.2%	1.9%	1.5%	0.8%	–	0.4%	2.8%	2.7%	2.8%
defamiliarization and word play	6.8%	11.6%	9.0%	11.9%	9.4%	10.5%	5.2%	3.6%	4.4%
other	0.4%	1.9%	1.1%	4.0%	0.7%	2.2%	1.2%	2.2%	1.7%
free forms	6.0%	2.4%	4.4%	0.8%	–	0.4%	3.2%	0.4%	1.9%

18 Free forms are described separately (cf. section 7) because they do not result from the manipulation of a base and therefore cannot be described as a product of morphological or extra-grammatical processes. They are listed in Tables 6 and 7 for purposes of comparison with the other processes in terms of form and frequency.

6.1 Acronym formation

Acronyms are most commonly formed by reducing names to initials based on the first letters of the legal name or parts thereof (G. *MP* < *Marion Peter*). Whereas G. and D. use such initialisms less frequently (1.5% and 4.0%, respectively), they are relatively frequent in E. (16.3%). Furthermore, acronyms from E. names are used much more often in forming male nicknames than female ones. In the three languages, they are found in multitudinous forms: i) A single initial based on the first or last name (*J* < *Jack*, *G* < *Gibbons*; uncommon in G.); ii) two initials based on double first names or the first and last names (*HW* < *Hans-Werner*; *AG* < *Alex Gilbert*); iii) three or more initials (*ABC* < *Alex Benjamin Carr*; in Dutch, the last name *van den Tol* is clipped to *VDT*); and iv) initials in combination with a full name or shortening (*JYau* < *Jason Yau; D-Mo* < *David Mott*). Letters are sometimes written as pronounced (*Flo**ka*** (see Table 3), with *ka* /ka:/ as the pronounced form of the letter <k>; cf. also Dutch *Pe* < *Patricia*).

Certain cases of nicknames in which clippings are combined by using sounds or syllables instead of letters are quite similar to many acronyms, especially when the first and last names are merged (G. *MiGrü* < *Michael Grünwedel*; D. *Snoord* < *Sander Noordink*). We will, however, treat them as clippings, see section 6.2 immediately below.

6.2 Clipping

Clipping is a major process of shortening words in all three languages and equally used to form nicknames. In this section, we discuss "pure" clipping (for combined clipping and suffixation, see section 6.4 below), starting with the observation that D. employs pure clipping the most (35.6%), followed by E. (22.9%) and G. (19.5%).

The most frequent type of clipping is back-clipping, which is expected in Germanic languages due to their word-initial accent. Back-clipping varies in the number of sounds deleted and usually involves a reduction in the number of syllables. We first calculated the back-clipping frequency with respect to the number of syllables: in D. (81.6%) and E. (89.8%), most of the resulting nicknames are monosyllabic (D. *Tout* < *Toutenhoofd*, E. *Ri* < *Riley*), whereas in G., most are disyllabic (66.3%). The last sound of many disyllabic G. nicknames is a vowel homonymous with one of the many suffixes that are popular in nickname formation, namely, schwa (*Ale* < *Alexander*), *-a* (*Katha* < *Katharina*), *-o* (*Karo* < *Karolin*), and, most frequently, *-i* (*Fabi* < *Fabian*), cf. section 6.3 below.

Other types of clippings are rather marginal in all three languages. Interestingly, fore-clipping in G. is only found in female nicknames, while the situation in D. is the exact opposite. On the other hand, fore-clippings are restricted to first names in both languages and reflect first names whose first syllable is unstressed (G. *Nine* < *Janine*, *Resa* < *Maresa*, *Bekka* < *Rebekka*, *Nessa* < *Vanessa*; D. *Dré* < *André*, *Thieu* < *Matthieu*, *Mon* < *Ramon*). Female nicknames with this structure in D. are occasionally clipped at both ends (edge clipping, *Les* < *Celeste*, *Ris* < *Mariska*, *Moon* < *Simone*).

Pure clipping is used less often for male nicknames than for female nicknames in D. This is probably a reflection of female first names being longer on average (2.4 syllables) than male first names (1.9 syllables). The fact that the opposite holds in first name suffixation (cf. section 6.3 below) supports this view: female names generally tend to be shortened, while male names occasionally undergo lengthening. The length of first names shows the same asymmetry in G. and E., yet there is no sex-based asymmetry in clipping vs. suffixation; instead, these languages make more use of a flexible combination of clipping and suffixation (cf. section 6.4 below).

In summary, clipping is productive in all three languages, especially D., with back-clipping being most productive across the three languages. Clipping mostly results in monosyllabics in D. and E., while G. shows many disyllabic clippings. D. exhibits a strong distinction in sex-based use, with clipping being most productive in female rather than male nicknames.

6.3 Suffixation

With percentages ranging from 11 to 15, suffixation is not a predominant process of nickname formation in any of the three languages (unless combined with clipping, see section 6.4 below). While clipping is primarily employed with rather long first and last names in our data (on average G. 3, D. 2.5, E. 2.4 syllables), suffixation mostly affects short legal names (average G. 1.7, D. 1.4, E. 1.1 syllables) and is thus mostly a means of lengthening. This may be why D. and E. apply suffixation mostly with male names, as male first names are generally shorter than female.

Various types of suffixes are involved in suffixation. Some suffixes are homonymous with derivational suffixes like *-er*, which is typically used to construct agent nouns (G. *Maiker* < *Maik*, D. *Schrager* < *Schrage*; E. *Lopper* < *Lopp*) or inflectional suffixes like *-(e)s* (G. *Rammes* < *Ramm*; E. *Pontins* < *Pontin*).[19] We also find existing

19 In E. *Youngen* < *Young*, *-en* may have been inspired by the unproductive plural suffix *-en* (*oxen*), but could just as well have arisen by mere chance.

onymic suffixes, predominantly loan suffixes, being used in the formation of last names (G. *Klausson* < *Klaus*; E. *Wayneski* < *Wayne*, *Jordanovic* < *Jordan*) and the Portuguese diminutive suffix *-inho* which is well-known from the names of various Brazilian soccer players like *Ronaldinho* (G. *Nansyinho* < *Nansy*, D. *Robinho* < *Robin*).[20]

While E. has no productive diminutive suffix, G. and D. do. Compared with G. and its diminutive suffix *-chen*, D. takes much more advantage of the equivalent suffix *-je* in nickname formation (D. 27.8% and G. 15.7% of all names in this category, respectively). The allomorphy rules of D. mostly apply: the allomorph *-tje* is used if the legal name ends in an alveolar sonorant or a vowel (*Carooltje* < *Carola*, *Guytje* < *Guy* vs. *Rikje* < *Rik*). In G., umlauts are employed in established names or homonyms of lexical items (*Simönchen* < *Simone*, *Wölfchen* < *Wolff*, a last name homophonous with *Wolf* 'wolf'), although not necessarily (*Julchen* < *Julia*, *Karlchen* < *Karla*).

The use of diminutive suffixes fits well with the hypocoristic nature of positive nicknames. The most frequent suffix in all three languages is *-i* (G. 51.0%, D. 41.7%, E. 72.2%), mostly realized graphically as <i>, <ie> or <y> (G. *Schulzi* < *Schulz*, *Kimmi* < *Kim*, D. *Mikkie* < *Mik*, *Derkie* < *Derk*, E. *Bergie* < *Berg*, *Quinny* < *Quinn*). This extremely popular suffix is clearly associated with prototypical nicknames in all three languages. It has been described as hypocoristic in all three languages and is also used productively in shortenings in G. (*Compi* < *Computer* 'computer', *Studi* < *Student* 'student'; cf. Köpcke 2002). While *-i* is slightly more popular in female nicknames than male ones, but nevertheless highly frequent with both sexes, the suffix *-o* is reserved for male nicknames (G. *Daniello* < *Daniel*, D. *Jorrito* < *Jorrit*, *Kanto* < *Kant*, E. *Tommo* < *Tom*, *Willo* < *Will*).[21] The suffix *-o* is also used in G. shortenings, where it carries a pejorative meaning (*Anarcho* 'anarchist', cf. the full form *Anarchist*). This connotation may account for its preference for male nicknames, supporting the stereotype of roughness and toughness.

Apart from derivational, inflectional, and onymic suffixes, a few infrequent suffixes are nickname-specific. Largely extensions of *-i* and *-o* (G. *Timbo* < *Tim*, D. *Jonko* < *Jon*, E. *Taitso* < *Tait*), these suffixes help form expressive consonant clusters (cf. section 5.2 above) and may be regarded as allomorphs of vowel-based suffixes.

20 Cf. also the G. feminization suffix *-ine* (*Olafine* < *Olaf*) and the E. suffix *-ers* from last name formation (*Lovers* < *Lovegrove*).

21 For Australian English, Taylor (1992) reports that *-o* and *-i* are used for distinguishing between first and last names as bases of nicknames, cf. *Stevie* < *Stephen* vs. *Stevo* < *Stephenson*. There is no such distribution with *-o* and *-i* in our data.

6.4 Clipping and suffixation combined

The two processes introduced above are often used in combination. While suffixation can only lengthen names and clipping only shorten them, both processes in combination are able to produce nearly any kind of desired output. In G., their combination is by far the most frequent source of nicknames (G. 50.9%); in D. (32.4%) and E. (32.6%), the two processes are combined less frequently, but still quite often.

The variety of suffixes is much stronger when combined with clipping. In G. and D., the *i*-suffix is equally as dominant as in pure suffixation (55.6% and 43.8%, respectively; only 26.6% in E.). By contrast, E. exhibits a strong preference towards suffixes with *-s* when combined with clipping. The *-s* suffix (30.5%) is most commonly used for creating monosyllabic nicknames (*Tins* < *Tina*, *Bex* < *Becca*) while syllabic forms ending in *-s* (most frequently with *-ers*, 7.1%) are found in disyllabic ones (*Hockers* < *Hocknell*, *Meggers* < *Megan*, *Strudders* < *Strudwick*). The *-s* suffixes constitute the most frequent type for forming female nicknames in E., with *-i* being the most frequent type for male nicknames.[22] It should be noted that *-i* occurs more frequently in male rather than female nicknames, the opposite of which holds true for G. and D.; cf. the frequencies of final sounds in sections 5.1 and 5.2. Both syllabic and unsyllabic types of *-s* suffixes are found in G. and D., too, but are used rather marginally.

All languages use the suffix *-o* in combination with clipping (although only marginally in D.), without being fully restricted to male names (G. *Julo* < *Julia*, E. *Kelso* < *Kelsey*). However, its frequency with male names in G. is considerably higher (M 7.7% F 1.0%).

G. and D. also use two types of suffixes that do not exist in English. 1) Diminutive suffixes are found in a stronger variety of forms than in pure suffixation. Apart from the Standard G. *-chen*, the dialectal *-le* (*Djole* < *Djordje*) and *-(e)l* are also used (*Xandl* < *Alexandra*, *Resel* < *Theresa*) in addition to the written dialectal pronunciation *-sche* [ʃə] for *-chen* (in *Sofflsche* < *Sophia* even in combination with an *-l* suffix). In D., the standard form *-je* is accompanied by dialectal or Frisian forms as *-(e)ke*, cf. *Miranneke* < *Miranda*, *Ceke* < *Cedrik*. Diminutive forms provide 2.6% of all G. and 13.5% of all D. nicknames of this type. 2) The schwa suffix is rather strong in both languages (G. 9.5%, D. 5.6%) and primarily used for the formation of male nicknames (G. *Sebbe* < *Sebastian*, *Lense* < *Lensing*; D. *Joene* < *Jeroen*).

22 This is in stark contrast to earlier nickname studies where *-i* was clearly more frequent in female names, cf. Cutler/McQueen/Robinson (1990: 478), de Klerk/Bosch (1997: 298).

Reduplication occurs more frequently in English (2.3%) than in the other two languages (E. *Lele* < *Leia*, *Du-Du* < *Du Frane*), but is still rather marginal. Occasional rhyme pairs have also been found (G. *Reusel Meusel*[23] < *Reusing*, D. *Ellebel* < *Ellen*).

We finally consider the frequency of the suffixes when no distinction between regular suffixation and suffixation combined with clipping is made. Table 8 provides an overview of the most frequent suffixes with their percentage values.

Table 8: Suffixes and their frequencies in pure suffixation and in clipping combined with suffixation (percentage among all suffixed nicknames in the database)

Type	**German**			**Dutch**			**English**		
	Sex		All	Sex		All	Sex		All
	M	F		M	F		M	F	
-i	51.9%	58.5%	54.8%	45.9%	39.2%	43.2%	50.4%	30.1%	41.2%
-o	6.9%	0.8%	4.2%	5.4%	–	3.2%	12.2%	6.8%	9.7%
-[ə]	13.1%	3.3%	8.8%	5.4%	2.0%	4.0%	–	–	–
-s	0.6%	0.8%	0.7%	–	5.9%	2.4%	14.6%	30.1%	21.7%
-ers	–	–	–	–	–	–	4.1%	7.8%	5.8%
Diminutive suffixes	1.9%	16.3%	8.1%	16.2%	21.6%	18.4%	–	–	–

We can derive a number of general tendencies from the distribution: a) The *-i* suffix is dominant across the three languages. b) While G. and D. mainly use syllabic suffixes, E. uses the non-syllabic suffix *-s* with greater frequency. c) The *-s* suffix is marginal in G., and in D. and E. it is much more frequent with female nicknames than with male ones. d) Diminutive suffixes are mostly reserved for female names in G. but appear more often and with both sexes in D. e) The *-o* and schwa suffixes have a male connotation and are rare in female names.

23 *Meusel* might be a diminutive form of *Maus* 'mouse' (*Mäusel*) in which the umlaut is obscured in writing. Thanks to an anonymous reviewer for this observation.

6.5 Compounding

In compounding, the legal name is used in combination with a lexeme to form a compound, a strategy which is rather infrequent in all three languages (G.: 0.9%, D.: 2.0%, E.: 2.1%). Interestingly, G. compounds are usually formed with the legal name in final position (*Partykarl* 'party' + *Karl*, *Keilriemen Kock* 'fan belt' + last name *Kock*, *Drogen Marc* 'drugs' + *Marc*, etc.), while English displays the reverse order (*Clare Bear*, resembling *care bear*, *Cole World*, *Zoebug*, *Danny Boy*, *Kayla Bug*, *Bower Power*, *Mika-mouse*, resembling *Mickey Mouse*, etc.). In terms of traditional, i.e. standard, determinative compound formation, in G. the name is determined by a lexical item (*Partykarl* 'Karl is frequently found at parties'), while in E. the name determines a class of items (*Kayla Bug* 'a bug of the Kayla type'). Nicknames are interpreted differently, of course, but the relative position of the items in compounds may account for G. allowing a greater variety of words in first position, whereas E. mainly has terms for animals and human beings in final position. In D., both types are found with similar frequencies (*Boemboem Mikey*, *All-in Adam* vs. *Loesbal* "*Loes* + 'ball'", resembling *voetbal* 'soccer', *Maaskantje* "last name *Maas* + *kantje* 'edge'", *Tonygoal*).

6.6 Blending

Blending is rather marginal in all three languages. While D. has just one blend in the entire dataset, 1.5% of all G. and 2.8% of all E. nicknames are blends. While there are blends from both parts of the legal name (G. *Schmiri* < *Miriam Schmitz*, E. *Wex* < *Alex Wendler*), most blends consist of a name and a noun (or another personal name). The parts derived from the legal name may come first in the blend (G. *Ankaninchen* < *Anika* + *Kaninchen* 'rabbit'; D. *Rombocop* < *Romboud* + *Robocop*; E. *Mikattack* < *Mika* + *attack*, *Eveready* < *Everett* + (*ever*) *ready*, *Fulldog* < *Fuller* + *bulldog*) or last (G. *Promillhard* < *Promille* 'ppm (alcohol level)' + *Gebhard*, *Skandalex* < *Skandal* 'scandal' + *Alex* < *Alexander*; E. *Zeustas* < *Zeus* + *Ustas*). While G. uses both types, E. nickname blends are mostly of the former.

Regarding the formation of the blends, we use Ronneberger-Sibold's (2006) typology. According to this typology, most blends in the sample are transparent, viz. so-called complete blends: both parts are maintained in full and coalesce, with the end of the first part overlapping with the beginning of the second (a so-called telescope blend), cf. *Mika* and *attack* in *Mikattack*. Additionally, so-called contour blends are frequent: in *Machinez* < *Martinez*, for instance, the trisyllabic form and rhythmic structure of *Martinez* is used as a matrix word which incorporates *machine*. Shortened forms are sometimes used for such processes,

cf. *Rombocop*, which incorporates the shortened form *Romb* < *Romboud* into the matrix word *Robocop*, or *Promillhard*, combining the matrix word *Promille* with the shortened form *hard* < *Gebhard*.

6.7 Defamiliarization

On occasion, names are found in a deliberately defamiliarized forms. Defamiliarization that results in homonymy with an existing noun or name (G. *Aldi*, otherwise a supermarket chain < *Altmann*; D. *Kaas*, otherwise 'cheese' < *Keesjan*) is not part of the present study (see the restrictions mentioned in section 4 above). However, some kinds of defamiliarization occur without resulting in homonymy with an existing name or lexeme. In some cases the outcome is clearly related to the base but cannot be assigned to any of the categories introduced above (G. *Tiffi* < *Stephanie*, *Tinna* < *Tina*). Some defamiliarization affects only the written form (cf. D. *Flen3* < *Flendrie*, with *drie* 'three'), in other cases it affects the pronunciation. While many instances of defamiliarization appear to be rather idiosyncratic (E. *Shewan* < *Shannon*, *Dank-sho* < *Donagan*), a degree of systematicity can be identified, e.g. in the use of specific variants (G. dialectal *Kerschdin* < *Kerstin*) or languages: G. *Särah* < *Sarah*, *Änna* < *Anna*, *Däif* < *David*, likely inspired by corresponding E. first names with a fronted /a/; G. *Darco* < *Marco* may be a blend of E. *dark* and *Marco*; D. *Rows* < *Rosan* with a graphic indication of the diphthong as pronounced in English. Curiously, the umlaut <ä> is frequently used in the creation of G. nicknames even when they are not related to an English form (*Päskä* < *Pascal*, *Säb* < *Sabrina*, *Jänsch* < *Janina*, *Mäthe* < *Mathias*).

In D., there are cases where the onset consonants of the first and the last name are switched (*Wim Tielns* < *Tim Wielens*, *Raaf Doelofs* < *Dave Roelofs*), again suggesting the highly creative and playful character of nickname formation. This is also evident in D. nicknames swapping vowels (*Nocci* < *Nico*) and E. nicknames using letters from parts of a name or mere syllables, cf. *B-Ry* < *Bryan*, *B-ren* < *Brenna*, *Ba-la-ke* < *Blake*. Defamiliarization and word play are used more frequently in G. (9.0%) and D. (10.5%) than in E. (4.4%).

6.8 Other cases

There are certain nicknames in all three languages (G. 1.1%, D.: 2.2%, E.: 1.7%) that do not correspond to any of the formation types listed above. For example, a few nicknames are formed by changing the beginning of the base, somewhat like prefixation although no prefixes are involved, occasionally including shortening

(G. *Mulf* < *Ulf*, *Spritta* < *Britta*, D. *Flaris* < *Caris*, E. *Crim* < *Tim*). In D., a number of last names incorporating a preposition and an article of the *van de*(*r*) *X* type are reduced to forms lacking these parts, cf. *Sluis* < *van der Sluis*, *Kreeke* < *van de Kreeke*.[24] Other cases are again rather idiosyncratic and do not show any recognisable pattern (cf. E. *Been* < *Ben*).

7 Word creation in nicknames without a base

The dataset contains a number of nicknames that do not resemble the corresponding legal names, but are not homonymous with other lexical or proprial items either. They do not seem to have any recognizable base and are therefore likely to represent entirely innovative name creations.[25] Strikingly, the D. data contain just one name of this kind (*Sjiemelle*), whereas E. has nine cases of such freely formed nicknames (1.7%) (cf. (1) below) and G. 20 (4.4%) (cf. (2) below), with considerably higher frequencies of male nicknames.

(1) English nicknames without a base
   a. male: *Chegs*, *Ders*, *Guence*, *Joogs*, *Nandy*, *Stoff*, *Udzy*, *Walzy*
   b. female: *Patoonch*

(2) German nicknames without a base
   c. male: *Babba*, *Bane*, *Buggi*. *Ji-C*, *Knusterich*, *Negaaaaa*, *Nosti*, *Palo*, *Patzi*, *Piwi*, *Pötzi*, *Quixxen*, *Rasi*, *Zaern*, *Zotze*
   d. female: *Issi*, *Sagankl*, *Tudt*, *Tuff*, *Vogal*

24 Whether these kinds of names are regarded as nicknames or not is a matter of definition. Since names starting in *van de* (similar to names starting only with a determiner like *de* or a preposition like *van*) are characterized by a clear pattern with only one variable part, nicknames based on the only truly individual part of the name may conceivably be regarded, not as nicknames, but rather as simply the relevant part of the last name. Their linguistic status is therefore unclear. However, since such names were provided as nicknames in the internet profiles, they were included as such in the database.

25 These items were identified as freely coined, but we cannot be fully certain whether this is invariably correct. Nicknames that look as if they had been created from scratch may in fact reflect words from varieties or names that were unknown to the team of linguists working on the database. Although internet searches were conducted for all words that were not clearly categorisable, some uncertainty remains because of the great variety of vernaculars and styles on which the coinages may conceivably be based.

Despite strong idiosyncrasies, some tendencies can be identified, and certain general characteristics of nickname formation as described above are reflected in freely formed nicknames. In G., most such names (15 of 20 names) are disyllabic, whereas in E. monosyllabics (5 of 9) outweigh the disyllabics (4 of 9). E. monosyllabic nicknames end in *-s* in 4 of 5 cases (*Ders*, *Joogs*), whereas G. monosyllabic nicknames end in closed syllables. In both languages, many disyllabic nicknames end in a full vowel. While *-i* is a popular ending in both G. (7 of 15 disyllabic free nicknames, cf. *Nosti*, *Buggi*) and E. (3 of 4 names, cf. *Nandy*, *Walzy*), *-a* and schwa each occur twice at the end of G. nicknames (*Babba*, *Bane*). The number of nicknames containing consonant clusters in *-s* is conspicuous (E. *Chegs*, *Udzy;* G. *Patzi*, *Pötzi* (players from different teams), *Quixxen*, *Zotze*). On the other hand, there are also nicknames with simple, ambisyllabic consonants (*Babba*, *Buggi*, *Issi*).

Occasionally, such nicknames resemble existing lexical items, either formally (cf. *Babba*, reminiscent of *Papa* 'dad') or by using word formation elements such as diminutive (*Sagankl*) or moving suffixes (G. *Knusterich*). This again underscores the uncertainty of categorization associated with this type of nickname (cf. footnote 25).

In sum, while the free formation of nicknames is generally unrestricted, most such nicknames conform to the syllabic characteristics as outlined above for nicknames based on legal names. Others reflect the general characteristics of lexical items.

8 Results

Our data show that nicknames are formed in a great variety of ways in the three languages under consideration. Given the narrower scope of data that is not homonymous with lexical items or existing names, the diversity is even greater than it appears here. And yet, there are clear, highly frequent patterns in the data. While nearly anything is possible in nickname formation in principle, nickname formation does seem to be governed by prototypes. Actual nicknames may instantiate the prototypes entirely or in part, or an ad-hoc solution may be applied.

As Köpcke (2002) has suggested for *i*-shortenings in G., the prototypes are organized according to cognitive schemas. Such schemas are defined by bundles of phonological-prosodic and semantic characteristics which together circumscribe a prototype structure. Nicknames may be coined with reference to such schemas, whose prototypical characteristics they instantiate either entirely or to a given degree. Two schemas can be identified as particularly relevant in the data: the schema of disyllabic nicknames ending in *-i* (*Conni*) and the schema of monosyllabic nicknames ending in a fricative (*Megs*).

In all three languages, nicknames most frequently instantiate disyllabics with final *-i* (cf. Fig. 2). They are all hypocoristic, suggesting a positive, friendly relationship between name giver and bearer, and associated with softness and tenderness rather than roughness and toughness (cf. Wierzbicka 1992: 378).[26] Although prosody cannot be read off the names in their written form, earlier studies and our experience with nicknames in the three languages suggests that a great majority of the disyllabics form trochees, i.e. they are stressed on the first syllable. The link between the two syllables usually consists of a single consonant.

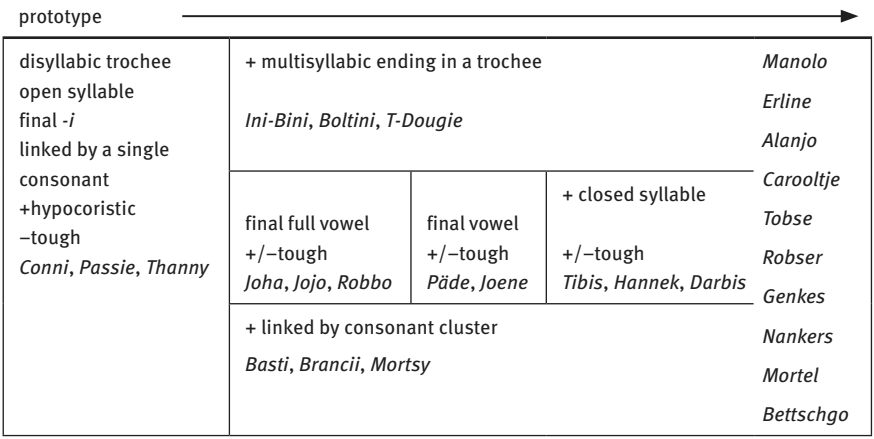

Fig. 2: The schema of disyllabic nicknames ending in *-i*

Many nicknames that refer to this prototype instantiate all its characteristics, while others diverge to a certain extent, e.g. in terms of the number of syllables, the final sound, or the link between the syllables. In Figure 2, such more peripheral items are placed on the right. To save space, only the diverging features are mentioned; any unmentioned characteristics are in line with the prototype. Divergences from the prototype can also result in changes in the connotation of nicknames. For instance, final *-o* or schwa[27] can produce a 'toughness' interpretation in addition to hypocorism. At the right-hand side of Figure 2 are also names

26 Although we avoid using 'feminine' and 'masculine' in this context, the associations are clearly linked to sex role stereotypes.

27 *-o* is used as a pejorative suffix in G., for example. Schwa endings have been interpreted as augmentative in D. (historically *-en* with *n*-apocope), e.g. in Van Langendonck (1978: 6; 1999: 249).

that diverge from the prototype in various ways at once. The idea behind this representation is that nicknames are formed with reference to this specific prototype, with broader schemas (e.g., ending in a full vowel) at hand that allow for the formation of nicknames still resembling the main prototype to a certain degree.

Conjecturing why this specific schema has become so popular across the three languages, an initial consideration may be that the prototype diverges from the structure of "normal" lexical items and therefore produces salient words.[28] For example, "normal" lexical items in West-Germanic languages are usually mono- or disyllabic and either end in a closed syllable or (often in G., more rarely in D.) in schwa. Full vowels are infrequent in unstressed syllables because of the weakening of unstressed vowels that all three languages underwent during the medieval period. As shown above, when language users are free from the restrictions of the lexicon, words that are very different from traditional lexical items seem attractive. On the other hand, the less a nickname resembles the main nickname prototype, the more it tends to resemble traditional lexical items (cf. the types *Päde*, *Robser*). Such items often have a strikingly sex-based distribution, e.g. disyllabics ending in schwa in G. male nicknames. Any resemblance to traditional lexical items seems to be acceptable when such a connotative effect is to be obtained.

A second schema that can be observed in the three languages produces monosyllabics ending in a sibilant. This type, which is very productive in D. and E. but barely in G., carries a connotation of toughness and roughness in E. according to earlier studies (cf. Wierzbicka 1992: 378) and stands in a complementary relationship with its disyllabic counterpart. Figure 3 again shows the distribution of nicknames in accordance with this prototype. Nicknames that diverge from the prototype end in, e.g., a consonant cluster or other types of consonants, with fricatives and other obstruents being closest to the prototype. While the disyllabic prototype shown in Figure 2 is represented across all three languages, the individual languages show different preferences here: D. and G. prefer monosyllabics ending in any kind of fricative rather than specifically in a sibilant. The principle of organization, however, is the same.

28 In her comparison of German shortenings with other, more typical lexical structures, Ronneberger-Sibold (1995) similarly identifies a prototype which is maximally dissimilar from the traditional lexicon; cf. also Kürschner (2018), where nicknames and product names are added to the comparison. Note that disyllabics ending in *-i* are also far from the usual structures of legal first names, at least in G. and D., thus distancing the nicknames from traditional lexical items as well as from the legal names on which they are based.

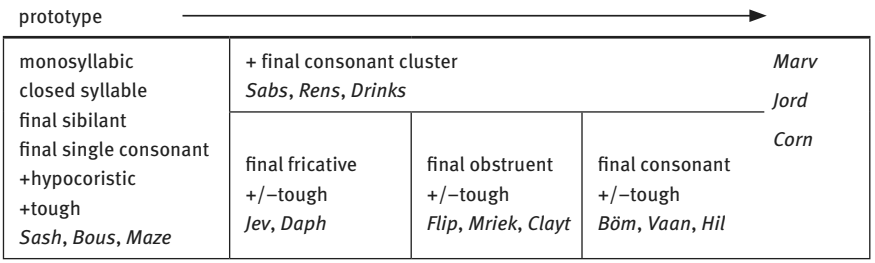

Fig. 3: The schema of monosyllabic nicknames ending in a sibilant

Having introduced the two main prototypes, let us recapitulate how nicknames are formed. Firstly, formation seems to be output-oriented rather than input-oriented. As found by Köpcke (2002) in his analysis of *i*-formations in G., the orientation towards the output described by the schemas can be achieved by differing morphological means such as clipping, suffixation, or (particularly useful) combinations of both. It is not the morphological process itself but rather the conformity of the output with the schema that is at the core of nickname formation. This accounts for the flexibility of nickname formation. Given the base form *Dominik* in G., likely output forms are *Mini* (by clipping), *Domi* (by suffixation) and *Niki* (by clipping and suffixation together), as are *Dome*, *Mino*, *Nika* (all by clipping and suffixation) and many others. Alternatively, language users may coin more individual, less schema-oriented nicknames using other types of name manipulation such as compounding or blending. Despite overall orientation towards the schemas, the phonetic and morphological freedom in the coining of nicknames is considerable.

In contrast to E. and D., G. makes strikingly little use of the second schema. A reason may be this prototype's relation to sex-role stereotypes, which seems to be reflected less in nicknaming in G. than in the other two languages. In her comparison of the sound structure of G. nicknames with the sound structure of regular first names, Nübling (2014) finds that the typical differences between male and female first names (final sound, number of syllables, word accent, relative number of vowels/consonants) are only marginally reflected in nicknames. Trochees in *-i* are mainly associated with femininity in first names, but in nicknames this structure is as productive with men as it is with women (as indeed confirmed by our data). Nübling suggests that the in-group character of nicknames makes the phonological marking of sex unnecessary: while first names are used when introducing new people and can be used without any knowledge of the referent (thus making the marking of sex more necessary), nicknames are usually coined among groups of users who know each other well. Nicknames

therefore do not need to carry sex-related information, whereas more subjective information such as the positive attitude suggested by a hypocoristic form, for instance, is highly relevant.

Nevertheless, certain patterns in our data are related to the sexes. Although specific patterns are rarely reserved exclusively for either sex, some are clearly preferred in male over female nicknames or vice versa. Frequency distributions in our data suggest that patterns may indeed evoke at least a vague sense of femininity or masculinity. For example, disyllabics in *-o* have an analogous tendency to occur in male names across all three languages. Where specific patterns are concerned, however, the apparent sex-orientation of nickname patterns is cross-linguistically far from rigid. A final schwa in disyllabics, for instance, often occurs in male names in G., but with no gender-related distribution in D. Final *-s* occurs in female monosyllabic nicknames in D., but is more or less sex-neutral in E. Monosyllabic nicknames (specifically of the second prototype) tend to be female in D. and E., male in G. This runs counter to existing studies of sound symbolism and suggests that otherwise "male" structures are used for women's nicknames as a playful way of breaking the mould of sex-based role expectations.[29] As we saw, structures associated with any particular sex also vary and there is no clear association of specific patterns with any one sex. Culture- and language-specific patterns do arise, even in such closely related languages as G., D. and E.

Summarizing the contrastive results from this study, there are a great number of parallels between the three Germanic languages, confirming their close linguistic ties, but also numerous divergences. What do the parallels and divergences suggest about the relationship between the three languages? For example, does the picture of D. between G. and E., as proposed by van Haeringen (1954) on the basis of morphosyntactic properties, hold for the formation of nicknames? Table 9 lists a few parallels and divergences between all three languages or pairs of them.

The table shows that D. shares some characteristics with E. and some with G. The strong use of monosyllabic output is characteristically absent in G., whereas E. similarly lacks the phonological characteristic of allowing schwa suffixes and the morphological use of diminutive markers that are shared by G. and D. A few features are shared between G. and E. but not D., for instance the dominant use of monosyllabics ending in final fricatives for male nicknames. Mostly, however, features are shared between G. and D. or between D. and E. Based on these observations, it is indeed appropriate to say that D. occupies an intermediary position

29 Since our data stems from sports teams, the factor that most of them are single-sex teams might play a role here.

between G. and E. in terms of the main characteristics of nickname formation. In certain respects it clusters with both languages, while G. and E. tend to be keep more distance from one another.

Table 9: Parallels and divergences in the formation of German, Dutch, and English nicknames (dashed line and empty cell: phenomenon much rarer in the language with the empty cell)

	German	**Dutch**	**English**
Frequent Output 1	disyllabic trochees in final *-i* / full vowel		
Frequent Output 2		monosyllabics in final *-s* / fricative	
Endings	schwa, diminutive suffixes		–
Processes	defamiliarization and word play		
Acronym formation	seldom	occasional	often
Monosyllabics in fricative	male	female	male

In summary, despite the considerable phonetic and morphological freedom with which nicknames can be coined in G., E. and D., they seem largely to be formed according to just two prototypical schemas. These schemas may serve as a starting point for future studies, for instance by including diachronic data to examine the historical development of the schemas described in our study. The main schema for positively connotated nicknames in our data, viz. the disyllabic trochee in *-i*, is unlike typical lexical items and therefore well-suited to makes nicknames recognizable as such. Various (mostly language-specific) patterns allow the nicknames to bear sex-based connotations.

Between them, the three languages in focus exhibit clear parallels in the formation of nicknames but also diverge from each other in various respects. D. shares a number of features with E. and others with G., but E. and G. only rarely cluster together against D. Based on these observations, it is fair to conclude that a Germanic sandwich, with Dutch between German and English, exists in the realm of nicknames.

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