

Roots, Naming, and Locality: The Structure of Name Predicates

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1. Introduction

This paper analyzes the structure of names in a framework where lexical items decompose into category-free roots and categorizing heads (Marantz 1997; Arad 2003, 2005; Embick & Marantz 2008; Acquaviva 2009; Embick 2010; Harley 2014). The proposal is inspired by the semantic theory of predicativism, which claims that names, like nouns, are property-denoting expressions (Burge 1973, Bach 1981, Geurts 1997, Thomsen 1997, Elbourne 2005, Matushansky 2008, Ghomeshi & Massam 2009, Izumi 2012, Fara 2015, Muñoz 2019). Concretely, I argue that names are more structurally complex than nouns in that they involve two nominalizers, one that is responsible for namehood and another that converts the name into a predicate. Not only does this account predict the inflectional regularization that characterizes names crosslinguistically, but it also captures the intuition that any individual can bear any name, no matter its morphological form or any content that may be associated with the root.

Since names are often homophonous with nouns and other lexical items in a given language, it is not trivial to ask whether they share roots (Faust 2019, Resende 2020, Saab & Lo Guercio 2020). For instance, many names have the same form as nouns that relate to nature, occupations, and physical traits, suggesting that these are not accidental homophones. If such name-noun pairings have the same roots, one would expect them to display the same inflectional behavior, yet all of the family names in (1–4a) have regular plural forms in contrast to the nouns in (1–4b).

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|--------------------------------------|--------------------------------------|
| (1) English (Kim et al. 1994: 184) | (2) German (Marcus et al. 1995: 229) |
| a. Child → Childs | a. Wiese → Wieses |
| b. child → children | b. Wiese → Wiesen ‘meadow(s)’ |
| (3) Hebrew (Berent et al. 2002: 459) | (4) Hungarian (Pinker 1999: 233) |
| a. Barak → Barakim | a. Ló → Lók |
| b. barak → brakim ‘lightning(s)’ | b. ló → lovak ‘horse(s)’ |

In English and German, the names *Child* and *Wiese* appear with the elsewhere form of the plural morpheme (-s), not with the form that corresponds to the irregular noun. In Hebrew and Hungarian, the names *Barak* and *Ló* do not exhibit root allomorphy in their plural forms, unlike their noun counterparts. The generalization that emerges is that, across languages, names regularize in their inflection. I argue that regularization stems from converting a name (a phonological string) into a predicate (the property of bearing this phonological string), a process that prevents contextual allomorphy by interrupting locality.

The path to the structure of name predicates is as follows. In section 2, I introduce predicativism and the distinction between names as phonological strings and names as predicates, and in section 3, I explore the various incongruities that exist between names and the individuals who bear them. In section 4, I show that previous syntactic accounts do not explain the regularization of names, and in section 5, I present a structure that addresses this shortcoming, one that allows names that are masculine or feminine in form to be borne by any individual. Finally, in section 6, I summarize the proposal.

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In summary, names have internal structure, as indicated by gender, number, and case morphology and the presence of determiners. At the same time, any feature values related to these elements can be overridden when an individual bears the name, suggesting that a second extended projection is involved. Previous work does not consider these types of data, especially the distinction between the form of a name and the gender identity of its bearer.

4. Name predicates are complex

There is consensus in the literature that names are of the category N rather than D (Longobardi 1994, Thomsen 1997, Borer 2005, Longobardi 2005, Matushansky 2008, Ghomeshi & Massam 2009, Faust 2019, Resende 2020, Saab & Lo Guercio 2020). In a framework where lexical items consist of roots and categorizers, however, the need for a more nuanced approach becomes apparent (Marantz 1997; Arad 2003, 2005; Embick & Marantz 2008; Acquaviva 2009; Embick 2010; Harley 2014). For instance, if the name *Jewel* and the noun *jewel* both decompose into the same root categorized by *n*, it is unclear how the conceptual-intentional system distinguishes one type of expression from the other (pace Resende 2020, Saab & Lo Guercio 2020).²



Should one claim that *Jewel* as a name in (13a) and *the jewel* as a definite description in (13b) do not form a minimal pair, the contrast in Greek between (20a) and (20b) still requires explanation.

- (20) a. O Apóstolos den éinai apóstolos.
the Apóstolos not is apostle
'Apóstolos is not an apostle.'
- b. #O apóstolos den éinai apóstolos.
the apostle not is apostle
'The apostle is not an apostle.'

It is only when *apóstolos* 'the apostle' is interpreted as a definite description that it gives rise to a contradiction. These examples confirm that the conceptual-intentional system differentiates between names and nouns even in languages where they have the same distribution.

If, as Acquaviva (2009) and Harley (2014) argue, roots are devoid of all features, the categorizer is the first piece of structure that can distinguish names from nouns. One option is a feature on *n*, such as Ghomeshi & Massam's (2009) [NAME] feature.



In their proposal, [NAME] alters the semantics of *n*: *n* identifies sets of individuals that have the same properties, while *n*_[NAME] identifies sets of individuals that have the same name. The [NAME] feature addresses the question of how the conceptual-intentional system recognizes namehood but does not account for the regularization of names.

It is essential to note that even the most canonical occurrences of names as bare arguments regularize in their inflection. In Hungarian, for example, the names *Ló* and *Madár*, which correspond to the irregular nouns *ló* 'horse' and *madár* 'bird', have regularized declensions (Pinker 1999: 233; András Bárány and Angelika Kiss, p.c.).

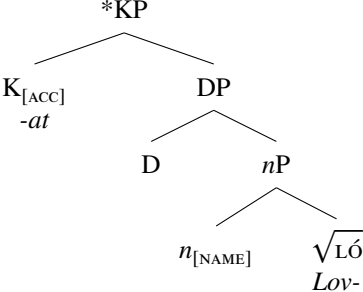
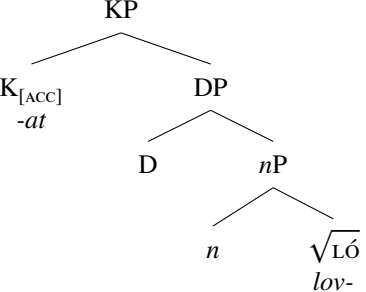
² I subscribe to the view that roots are individuated by an abstract system of indices before insertion but use the notation $\sqrt{\text{JEWEL}}$ for clarity (Acquaviva 2009, Harley 2014).

- (22) a. A ló követte Ló-t.
 the horse.NOM followed Ló-ACC
 ‘The horse followed Ló.’
- b. Ló követte a lov-at.
 Ló.NOM followed the horse-ACC
 ‘Ló followed the horse.’

- (23) a. A madár látta Madár-t.
 the bird.NOM saw Madár-ACC
 ‘The bird saw Madár.’
- b. Madár látta a madar-at.
 Madár.NOM saw the bird-ACC
 ‘Madár saw the bird.’

In both pairs of sentences, the nominative forms of the names and nouns are identical, but the accusative forms of the names (*Lót* and *Madárt*) lack the root allomorphy that is found in the accusative forms of the nouns (*lovat* and *madarat*). Since even bare names regularize in Hungarian, there is reason to suspect that all occurrences of names have the same underlying structure.

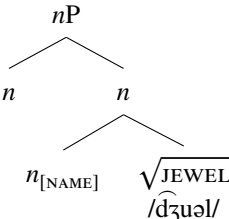
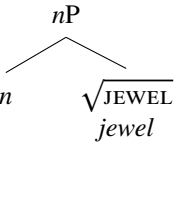
To illustrate the problem for previous syntactic accounts, consider the architecture of the noun phrase in (24) and three arguments from the literature on contextual allomorphy. First, categorizers like *n* are phase heads (Arad 2003, 2005; Embick & Marantz 2008; Embick 2010). Second, *K* is the next phase head above *n*, not *D* (Richards 2010). Third, roots remain visible to higher functional heads through a single phase head (Embick 2010).

- (24) a. 
- b. 

If the name *Ló* were structurally identical to the noun *ló* ‘horse’, the root would be visible to *K* and thus subject to contextual allomorphy. In other words, the predicted accusative form of *Ló* would be **Lovat*, as in (24a), not *Lót*. The Hungarian data suggest that all names involve more structure than nouns, echoing the observation at the end of section 3 that names contain a second extended projection, one that may host features different from those that play a role in the formation of the name as a phonological string.

5. The structure of name predicates

Building on the approach in Jambrović 2021, I argue that name predicates comprise a lower naming layer and a higher predicativizing layer. Further motivation for the proposed system is the fact that language does not impose conditions on the possible names that an individual may bear. I maintain Ghomeshi & Massam’s (2009) use of a [NAME] feature to distinguish names from nouns, but the role of $n_{[NAME]}$ is solely to generate a phonological string (“*Jewel*”), not the property of bearing that phonological string (*Jewel*). To derive a name predicate that can combine with a determiner, a second nominalizer is necessary, one that converts the name as a phonological string into a property-denoting expression.³

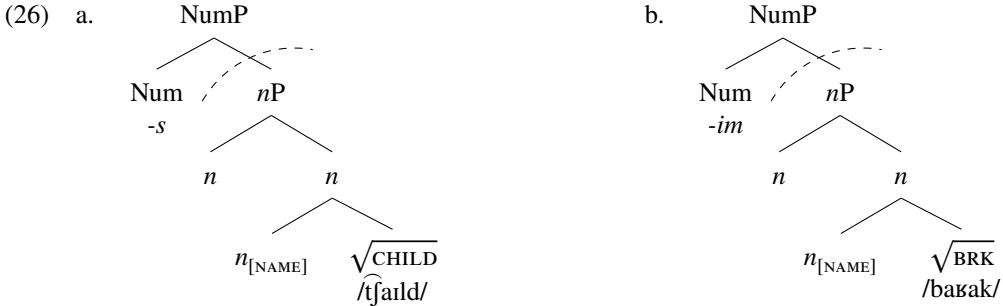
- (25) a. Name predicate 
- b. Noun predicate 

³ Acquaviva (2009) provides a similar account of *ox* as an epithet, which has the regularized plural form *oxes* for some speakers of English.

In essence, the structure in (25a) is interpreted as the property of being a “Jewel”, or bearing the phonological string /dʒuəl/, while the structure in (25b) is interpreted as the property of being a jewel.

The fact that names do not display contextual allomorphy or allosemy is predicted by (25a). As phase heads, categorizers like *n* initiate spell-out of their complement domains (Arad 2003, 2005; Embick & Marantz 2008; Embick 2010). In (25a), the higher nominalizer, which converts the name into a predicate, triggers spell-out of the lower *nP*. At this point, the root is sent to the interfaces and is inaccessible to any functional heads that merge above the higher *nP*.

Regarding the lack of contextual allomorphy, (25a) accounts for both types of regularization in (1–4a): allomorphy of a higher functional head conditioned by the root, as in English and German, and allomorphy of the root conditioned by a higher functional head, as in Hebrew and Hungarian. The structures of English *Childs* (**Children*) and Hebrew *Barakim* (**Brakim*) in (26) illustrate each case.



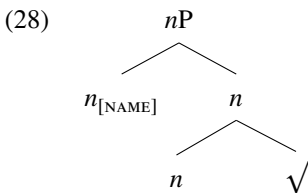
In (26a), the lower *nP*, which contains the root, undergoes spell-out when the higher *n* merges to convert the name into a predicate. At this point, the root is no longer visible to Num, and the elsewhere form of the plural morpheme (-s) is inserted. In (26b), the root cannot be conditioned by Num for the same reason, having been sent to the interfaces as part of the lower *nP* before Num merges. This argument extends to the regularization of bare names in Hungarian. Like Num in (26), *K* merges after the root has a phonological form and therefore cannot affect its allomorphy.

As for the lack of contextual allosemy, the semantic value of any name predicate corresponds to the template in (27), where the only element that varies is the phonological string.

$$(27) \quad \llbracket \text{Name} \rrbracket^w = \lambda x_e . x \text{ is a } /n\text{eim}/ \text{ in } w$$

That is, the extension of a name predicate is the set of entities that bear a given phonological string in the world of evaluation. In this way, the notion of predictable interpretation is built into predicativism.

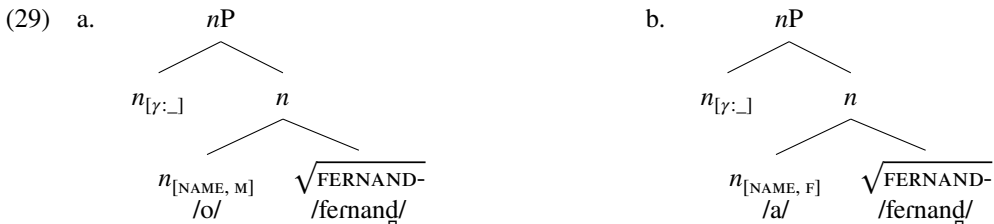
It is now important to rule out an alternative analysis that would also result in regularization. If one were to posit that the family names in (1–4a) are noun-derived names, where *n* categorizes the root and $n_{[NAME]}$ converts the noun into a name, there would still be two nominalizers.



Like (25a), the inverted structure in (28) maintains a second cyclic layer between the root and higher functional projections, and so it predicts regularization. There are, however, intuitive and empirical reasons to reject this approach. First, speakers may not be aware that a name has a noun counterpart, or a name may be so ubiquitous that speakers do not draw a connection between it and the noun; possible examples include the given names *Amber*, *Heather*, and *Victor* and the family names *Ford*, *Lane*, and *Smith*. Second, many names contain roots that are not otherwise found in a language, such as *Cameron*, *Jordan*, and *Quinn*.

The existence of name-only roots challenge the adequacy of the structure in (28) when it comes to languages with grammatical gender. As Lyons (1977: 221) observes, “if a girl happened to be called ‘John’, we would have no hesitation in saying *John has just cut herself*”. In Spanish, names like *Fernando* and *Fernanda* come in morphologically related pairs that have a common root, yet the grammar of Spanish does not limit who can bear these names. If someone who is called “Fernando” or “Fernanda” transitions and wishes to keep the same name, utterances like *Fernando es mi amiga* ‘Fernando is my (female) friend’ and *Fernanda es mi amigo* ‘Fernanda is my (male) friend’ are not only possible but necessary. Moreover, it is telling that when Spanish speakers encounter apparent mismatches between the forms of coreferential names and nouns, they consider the form of the noun to be the more reliable indicator of gender identity.

Assuming that roots are not phonologically or semantically identified, $n_{[NAME]}$ is the first element that can differentiate *Fernando* from *Fernanda*, which is consistent with the view that n is the locus of gender (Lecarme 2002, Lowenstamm 2008, Acquaviva 2009, Kramer 2015).⁴



Once the name is generated, the n that converts it into a predicate is still available to host its own gender feature, one that corresponds to the identity of the bearer. Both structures in (29) indicate this possibility through $\gamma: _$ on the higher n . Given that n can have at most one gender feature, any approach with a single nominalizer, such as that in (21a), would incorrectly predict that the bearer of “Fernando” is necessarily male and that the bearer of “Fernanda” is necessarily female.

Beyond the issue of gender, this account explains why names like *Dolores*, which contain plural morphology, can be borne by atomic individuals and why names like *Papanikoláou* and *De Ruiter*, which are genitive and definite in form, can appear in nongentive and indefinite contexts. In each case, $n_{[NAME]}$ recategorizes an existing phrase as a name: the NumP *dolores* ‘pains’, the KP *papa-Nikoláou* ‘of the priest Nikólaos’, and the DP *de ruiter* ‘the rider’.

6. Conclusion

Across languages, names inflect differently than nouns that are built from the same roots, and any content that is associated with the form of a name need not be true of its bearer. To capture these facts, I argue that names consist of two nominalizers, one that derives a name from existing material and another that converts the name into a predicate. This second cyclic head in the structure of names prevents higher functional projections from accessing the root, hence their inflectional regularization. Independent evidence for the proposal is found in languages like Spanish where names come in morphologically related pairs, such as *Fernando* and *Fernanda*. The first nominalizer serves to distinguish one name from the other, and the second nominalizer hosts the gender feature that reflects the identity of the referent.

References

- Acquaviva, Paolo. 2009. Roots and lexicality in Distributed Morphology. In Alexandra Galani, Daniel Redinger & Norman Yeo (eds.), *York Papers in Linguistics Series 2*, 1–21. York: University of York.
- Arad, Maya. 2003. Locality constraints on the interpretation of roots: The case of Hebrew denominal verbs. *Natural Language & Linguistic Theory* 21(4). 737–778.
- Arad, Maya. 2005. *Roots and patterns: Hebrew morpho-syntax*. Dordrecht: Springer.
- Bach, Kent. 1981. What’s in a name. *Australasian Journal of Philosophy* 59(4). 371–386.

⁴ The syntactic representation of gender is a topic of ongoing debate, one that exceeds the scope of this paper, and the features [M] and [F] are used solely for expository purposes. As for class markers like *-o* and *-a*, many authors consider these to be inserted into theme nodes as part of morphological operations (Harris 1996, Embick 2010, Kramer 2015).

- Berent, Iris, Steven Pinker & Joseph Shimron. 2002. The nature of regularity and irregularity: Evidence from Hebrew nominal inflection. *Journal of Psycholinguistic Research* 31(5). 459–502.
- Borer, Hagit. 2005. *Structuring sense, volume 1: In name only*. Oxford: Oxford University Press.
- Burge, Tyler. 1973. Reference and proper names. *The Journal of Philosophy* 70(14). 425–439.
- Coates, Richard. 2006. Properhood. *Language* 82(2). 356–382.
- Elbourne, Paul D. 2005. *Situations and individuals*. Cambridge, MA: The MIT Press.
- Embick, David. 2010. *Localism versus globalism in morphology and phonology*. Cambridge, MA: The MIT Press.
- Embick, David & Alec Marantz. 2008. Architecture and blocking. *Linguistic Inquiry* 39(1). 1–53.
- Fara, Delia Graff. 2015. Names are predicates. *Philosophical Review* 124(1). 59–117.
- Faust, Noam. 2019. What the Schwarzes told me about allomorph priority. Paper presented at the Center for Research in Syntax, Semantics, and Phonology, KU Leuven.
- Geurts, Bart. 1997. Good news about the description theory of names. *Journal of Semantics* 14(4). 319–348.
- Ghomeshi, Jila & Diane Massam. 2009. The proper D connection. In Jila Ghomeshi, Ileana Paul & Martina Wiltschko (eds.), *Determiners: Universals and variation*, 67–96. Amsterdam: John Benjamins Publishing Company.
- Harley, Heidi. 2014. On the identity of roots. *Theoretical Linguistics* 40(3/4). 225–276.
- Harris, James W. 1996. The syntax and morphology of class marker suppression in Spanish. In Karen Zagana (ed.), *Grammatical theory and Romance languages*, 99–122. Amsterdam: John Benjamins Publishing Company.
- Idrissi, Ali, Jean-François Prunet & Renée Béland. 2008. On the mental representation of Arabic roots. *Linguistic Inquiry* 39(2). 221–259.
- Izumi, Yu. 2012. *The semantics of proper names and other bare nominals*. University of Maryland, College Park dissertation.
- Jambrović, Samuel. 2021. Common names and proper nouns: Morphosyntactic evidence of a complete nominal paradigm. *Proceedings of the Linguistic Society of America* 6(1). 815–828.
- Jeshion, Robin. 2015. Names not predicates. In Andrea Bianchi (ed.), *On reference*, 225–250. Oxford: Oxford University Press.
- Kim, John J., Gary F. Marcus, Steven Pinker, Michelle Hollander & Marie Coppola. 1994. Sensitivity of children's inflection to grammatical structure. *Journal of Child Language* 21(1). 173–209.
- Kramer, Ruth. 2015. *The morphosyntax of gender*. Oxford: Oxford University Press.
- Lecarme, Jacqueline. 2002. Gender “polarity”: Theoretical aspects of Somali nominal morphology. In Paul Boucher (ed.), *Many morphologies*, 109–141. Somerville, MA: Cascadilla Press.
- Leckie, Gail. 2013. The double life of names. *Philosophical Studies* 165(3). 1139–1160.
- Lekakou, Marika & Kriszta Szendrői. 2012. Polydefinites in Greek: Ellipsis, close apposition and expletive determiners. *Journal of Linguistics* 48(1). 107–149.
- Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25(4). 609–665.
- Longobardi, Giuseppe. 2005. Toward a unified grammar of reference. *Zeitschrift für Sprachwissenschaft* 24(1). 5–44.
- Lowenstamm, Jean. 2008. On little *n*, $\sqrt{\quad}$, and types of nouns. In Jutta M. Hartmann, Veronika Hegedűs & Henk van Riemsdijk (eds.), *Sounds of silence: Empty elements in syntax and phonology*, 105–143. Amsterdam: Elsevier.
- Lyons, John. 1977. *Semantics, volume 1*. Cambridge: Cambridge University Press.
- Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania Working Papers in Linguistics* 4(2). 201–225.
- Marcus, Gary F., Ursula Brinkmann, Harald Clahsen, Richard Wiese & Steven Pinker. 1995. German inflection: The exception that proves the rule. *Cognitive Psychology* 29(3). 189–256.
- Matushansky, Ora. 2008. On the linguistic complexity of proper names. *Linguistics and Philosophy* 31(5). 573–627.
- Mill, John Stuart. 1843. *A system of logic, ratiocinative and inductive, volume 1*. London: John W. Parker, West Strand.
- Muñoz, Patrick. 2019. The proprial article and the semantics of names. *Semantics & Pragmatics* 12. 1–36.
- Pinker, Steven. 1999. *Words and rules: The ingredients of language*. New York, NY: Basic Books.
- Rabern, Brian. 2015. Descriptions which have grown capital letters. *Mind & Language* 30(3). 292–319.
- Resende, Maurício. 2020. How nouns get their names: Remarks on the form and the meaning of proper names. *Revista do Grupo de Estudos Linguísticos do Nordeste* 22(2). 231–245.
- Richards, Norvin. 2010. *Uttering trees*. Cambridge, MA: The MIT Press.
- Saab, Andrés & Nicolás Lo Guercio. 2020. No name: The allosemy view. *Studia Linguistica: A Journal of General Linguistics* 74(1). 60–97.
- Sloat, Clarence. 1969. Proper nouns in English. *Language* 45(1). 26–30.
- Thomsen, Hanne Erdman. 1997. On the proper treatment of proper names. *Nordic Journal of Linguistics* 20(1). 91–110.
- Wiltschko, Martina. 2013. Descriptive relative clauses in Austro-Bavarian German. *Canadian Journal of Linguistics* 58(2). 157–189.

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