Homesign: Contested Issues

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Abstract

The term homesign has been used to describe the signing of deaf individuals who have not had sustained access to the linguistic resources of a named language. Early studies of child homesigners focused on documenting their manual communication systems through the lens of developmental psycholinguistics and generative linguistics, but a recent wave of linguistic ethnographic investigations is challenging many of the established theoretical presuppositions that underlie the foundational homesign research. Sparked by a larger critical movement within Deaf Studies led by deaf scholars, this new generation of scholarship interrogates how researchers portray deaf individuals and their communication practices and questions the conceptualization of language in the foundational body of homesign research. In this review, we discuss these contested issues and the current moment of transition within research on homesign.

1. INTRODUCTION

The term homesign (or home sign) has been used to describe the signing of deaf individuals who have not had sustained access to the linguistic resources of a named language. This population has captured the interest of language and cognition researchers due to the unique context of language acquisition and socialization (Lillo-Martin & Henner 2021, Singleton & Meier 2021) experienced by these individuals. Most deaf children are born to hearing parents; estimates in the United States suggest as many as 90–95% (Mitchell & Karchmer 2005, Schein 1989), with potentially even higher percentages in other parts of the world. For these children, access to linguistic resources can be uncertain, as there are many factors (e.g., ideological beliefs, limited exposure to other deaf individuals, lack of access to hearing assistive technology) that can constrain this access. While many hearing families find ways to expose their deaf child to spoken and/or signed languages, for some children exposure to linguistic resources can be constrained even into adulthood. Early studies of child homesigners focused on documenting their manual communication systems through the lens of developmental psycholinguistics and generative linguistics, but a recent wave of linguistic ethnographic investigations is challenging many of the established theoretical presuppositions that underlie the foundational homesign research. In particular, this work interrogates how researchers portray deaf individuals and their communication practices and questions the conceptualization of language in this body of work.

In this review, we discuss significant contested issues in homesign research: the portrayal of deaf individuals without sustained access to a named language and the conceptualization of language employed by researchers when analyzing their communication. Engagement with these issues has resulted in a polarized body of literature that is evident in the recent diversification of terms to describe homesign situations around the world. We review the foundational studies of homesign and compare them with the new generation of scholarship, discussing the ways in which homesign researchers are diversifying their methodological and theoretical orientations. In addition, we comment on how these distinct research approaches have been taken up in other veins of sign language scholarship, namely, the literature on emerging sign languages, language delay, and language deprivation. We provide an overview of the diversification of terms to describe homesign situations. We conclude with a discussion of the possible future directions for research with deaf individuals without sustained access to a signed or spoken language.

The basic criteria for a homesign system or homesigning individual suggested by Goldin-Meadow (2003) include the absence of sign language input and an inability to access spoken language input. This definition is built on the notion of "full" linguistic input—gestural input or partial access to spoken language that the child receives is not considered full language access (Koulidobrova & Pichler 2021). The term homesign emerged from research in the United States, prior to the widespread use of hearing assistive technologies. At that time many parents were encouraged to send their deaf children to oralist programs where they would learn spoken language (Baynton 1996). These children sometimes made little progress in the acquisition of spoken language, and the signs they used were documented by researchers and described as "homesign" or "home signs" (Feldman et al. 1978). Fewer children in the United States today would be considered homesigners due to newborn hearing screenings, increased access to hearing assistive technology, and the presence of bilingual/bicultural programs for deaf children in which they learn both a spoken and a signed language (Mauldin 2016). However, there are still deaf migrants who arrive to the United States without having acquired a signed or spoken language (Emmorey et al. 1994, Ferjan Ramírez et al. 2013, Morford 2003), as well as many deaf children who are not typically considered homesigners but still experience language deprivation—the lack of a fully accessible language input (Hall et al. 2019, p. 368). While the current homesign research has few new case studies from the United States, in recent years research that falls under the homesign umbrella

has expanded geographically, documenting the many different circumstances around the world in which deaf children may not have sustained access to linguistic resources.

We are writing this review at a moment of transition in research on homesign that has been sparked by a larger critical movement within Deaf Studies,[1] broadly conceived. This movement has been led primarily by deaf scholars, who are a growing but significant minority in sign language research (Kusters et al. 2017b). Research on sign languages and deaf people is dominated by hearing researchers, and homesign research is no exception (this review, for instance, was written by two hearing scholars). Current work in Deaf Studies is questioning the theoretical motivation behind studying sign languages, who benefits from research on sign languages, how hearing researchers portray the lives of deaf individuals, and the ethics of how hearing researchers engage with deaf populations. The ethics of this research have been discussed, with particular attention to the fact that there is an increasing interest from researchers who are primarily hearing, white, and from the Global North to study research participants who are deaf and from the Global South (Braithwaite 2020, Kusters et al. 2017a, Robinson & Henner 2017).

In homesign research, this transition period has seen a shift from a singular narrative about homesign to a pluralism of narratives. Early research on the topic included reports on deaf individuals who had limited contact with other deaf individuals or national sign languages (Kuschel 1973, MacLeod 1973, Tervoort 1961). These small case studies continued through the 1990s (Da Cunha Pereira & De Lemos 1990; Emmorey et al. 1994; Jepson 1991; Kendon 1980a,b,c; Mohay 1982, 1990; Morford 1995; Scroggs 1981; Torigoe et al. 1995; Yau 1992). Much of the foundational homesign research, however, was conducted by researchers from the University of Chicago beginning in the 1970s. This research was concerned with what homesign can tell us about the innateness of human language (Coppola & Newport 2005, Feldman et al. 1978, Goldin-Meadow 2003, Goldin-Meadow & Mylander 1983, Morford 1996).

While innateness and questions of language emergence remain active areas of study (e.g., Abner et al. 2019, 2021; Carrigan & Coppola 2017; Coppola & Brentari 2014; Flaherty et al. 2021; Rissman & Goldin-Meadow 2017), a new generation of scholars is pursuing an increasing number of ethnographic studies of deaf individuals who have not had sustained access to either a signed or a spoken language (e.g., Goico 2019b; Graif 2018; Green 2014, 2022b; Horton 2018; Hou 2016; Neveu 2019). As mentioned above, this new generation of scholars is rethinking the representation of deaf people, their signing, and the framing of language in the context of their work by highlighting the social lives of deaf individuals. Engagement with these topics has led to a recent proliferation of terms to refer to the signing practices of deaf individuals who do not have sustained access to the linguistic resources of a named language, with several researchers rejecting the term homesign altogether. In this review we discuss these evolving conversations and the future possibilities for homesign research.

Before we continue, it is important to introduce ourselves and our relationship to work on homesign. We are both white hearing scholars who conduct research with deaf children and their families, primarily in the Latin American context. In this regard, we are part of the growing number of hearing sign language researchers from the Global North conducting research with deaf individuals in the Global South. Dr. Goico's departmental training is in anthropology, and she has conducted extended ethnographic and microethnographic research with deaf youth in Iquitos, Peru (Goico 2019b, 2020, 2021a,b). Due to the local implementation of the policy of inclusive education, which calls for the education of children with special education needs in general education schools, a growing number of deaf children in Iquitos are moving through

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[1]We have chosen to capitalize Deaf Studies, following the capitalization practices used in Kusters et al. (2017a).

the schooling system without gaining sustained access to *Lengua de Señas Peruana* (Peruvian Sign Language) (Goico 2019a). Along with documenting these trends, Dr. Goico has been actively involved in supporting language access for deaf children and facilitated the formation of the first public deaf education program in Iquitos (Goico et al. 2021). Dr. Horton's training is interdisciplinary, drawing primarily on developmental psychology and linguistic anthropology as well as documentary linguistics. She has conducted longitudinal fieldwork in Santa Maria Nebaj, Guatemala, beginning in 2013 (Horton 2018, 2020a). Lensegua, the national sign language of Guatemala, is not used in Nebaj, but there are several families in this community with intergenerational deafness and there is a local special education school that is attended by some of the deaf children in Nebaj. We are both early career researchers who received our training during the transition period within homesign research.

2. CONTESTED ISSUES IN HOMESIGN RESEARCH

The situation of individuals who grow up without access to a named language has long sparked interest among researchers of language and cognition for what it can tell us about the human language ability. Early studies of children who did not have access to language input, such as Genie and Victor of Aveyron, demonstrated that the ability to develop language after childhood is affected by early years of social isolation (Curtiss et al. 1974, Lane 1976). However, these case studies were exceptional instances of social and linguistic deprivation; it was difficult to establish whether the atypical language outcomes in these examples should be attributed to the absence of language input or the early traumas the children experienced. For language and cognition scholars, deaf homesigners provided unique "experiments of nature" (Slobin 1985, cited in Goldin-Meadow 2003) to study language development in individuals who did not have sustained access to the linguistic resources of a named language but who were embedded within a family or social community.[2] This framing of the foundational homesign research has given rise to some of the most contested issues in the new generation of scholarship on deaf individuals who have constrained access to either a spoken or a signed language—the interrelated issues of how deaf individuals and their communication are portrayed and how to define or delineate human "language" from other social behaviors.

Historically, public and academic discourse around deaf individuals who have limited access to other deaf individuals and to sign languages has done the work of erasing the social and communicative lives of these individuals. Gal & Irvine (1995, p. 974) define "erasure" as "the process in which ideology, in simplifying the field of linguistic practices, renders some persons or activities or sociolinguistic phenomena invisible." When this semiotic process is at work, language practices that do not match a generally held ideology are ignored or explained away. In the case of deaf homesigners, their social lives were often either implicitly or explicitly assumed to be highly constrained by sensory and communicative asymmetries (i.e., differences in hearing status and access to linguistic resources between deaf individuals and hearing interlocutors; Adami & Swanwick 2019, Kusters 2017). One primary reason for this was that the foundational studies focused on children under the age of 5 whose social lives were limited by their young age. However, the framing

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[2]These natural experiments have been described as shedding light on the "forbidden experiment," used in the title of a book about Victor of Aveyron (Shattuck 1980), noting, "The experiment is forbidden because it is inhuman to deprive people of what is natural to them, language and culture. Emerging sign languages come closer than any other circumstance to the forbidden experiment. By comparing the languages created under such circumstances, we can begin to learn something about the nature of language and of people" (Meir et al. 2010, p. 278).

of deaf homesigners as being "isolated" and "hav[ing] no language" (Moriarty Harrelson 2019, p. 56) contributed to an implicit erasure of their social lives. Public discourse in the form of news reports, books, and social media posts has gone one step further and made this erasure explicit. For example, in the book *A Man Without Words*, Schaller recounts her personal experiences teaching American Sign Language to an adult deaf man who had never learned a sign language. Schaller [2012 (1991)] characterizes the man's prior life as "decades of silence and meaninglessness" (p. 27) and "exclusion from human community" (p. 156) (see also Deaf Link Uganda 2014). These implicit and explicit portrayals of deprivation have typically been presented without sustained research into the everyday lives of these individuals. As discussed below, an important trend in recent scholarship is to conduct ethnographic research on the lives of the deaf individuals under study.

The definition and bounds of "language" are central to claims about deaf people who "have no language" (Moriarty Harrelson 2019) and to many studies of homesign. A significant point of contestation between the foundational and new generation of research on individuals without sustained access to a signed or spoken language is how to conceptualize language. The foundational studies of homesign research grew out of the tradition of generative linguistics and the Saussurean move to treat language as an object of analysis separate from its social context (often referred to as a structural approach to linguistics) (Bourdieu 1991). Methodologically, this approach isolates formal linguistic structures as the relevant locus of analysis. The focus of foundational homesign studies versus the new generation illustrates the divergence between this structural approach and more recent work; whereas many foundational studies centered the question of whether homesign should be considered "language," the new generation frequently calls into question the notion of languages as bounded entities at all (Kusters et al. 2017c, Safar 2019). The new generation of scholars has adopted a repertoire approach to conceptualizing language. Particularly in work framed by the concept of translanguaging, scholars have taken up Gumperz's (1982) notion of the "linguistic repertoire." The concept of the linguistic repertoire reflects the understanding that a person's sociolinguistic knowledge of any language is partial and frequently includes elements of a variety of languages (Otheguy et al. 2015, Pennycook & Otsuji 2015). From this perspective, the concept of language as a self-contained whole is abandoned. Language is reconceived as languaging, the process of meaning-making through the use of multimodal, multilingual, multisensory, and multisemiotic repertoires (Wei 2018, p. 22). The diverse methodological and analytical foci of these two approaches[3] have contributed to a polarized body of literature on deaf individuals without sustained access to linguistic resources.

3. THEORETICAL PERSPECTIVES: FOUNDATIONAL HOMESIGN RESEARCH

3.1. A Structural Approach

As introduced above, foundational studies in homesign research focused primarily on the communication of deaf children in the United States in the 1970s who were being raised under an oralist philosophy. This philosophy focuses on using only spoken language with a deaf child. Hearing parents were actively discouraged from teaching their child sign language (and in some instances even gesturing to them) under the belief that this would interfere with the development of spoken language. However, many deaf children made little progress in learning spoken language and therefore relied on the gestures they produced with their hands to communicate with their family members (Goldin-Meadow 2003). Early projects used primarily observational

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[3]We refer to the two methodological/theoretical approaches as "a structural approach" and "a repertoire approach," even though these terms are not necessarily used by the researchers themselves.

techniques adapted from developmental psycholinguistics; children were filmed while interacting with a researcher who provided a preselected set of books and toys. Later studies employed more controlled elicitation, showing participants sets of pictures or short video clips to describe to a researcher.

As suggested above, developmental psychologists framed these circumstances as an ideal test case to explore the role of language input in language acquisition. Deaf children who were not learning a sign language—which they would have been able to access visually—also did not have auditory access to the spoken language input around them. The visual-manual gestures that these children produced were thus insulated from typical language input, and researchers could conclude that any structures that were documented could be considered innate because they had ruled out the possibility that they were the result of a language model. As Goldin-Meadow (2003) describes it, "If there is a threshold level of linguistic input necessary for certain language properties to develop, these properties should *not* develop in a child who lacks linguistic input. If, however, linguistic input is not necessary for a set of language properties to develop, these properties ought to emerge in the communication of a child without input" (p. 47; emphasis in the original).

To conduct this analysis, researchers focused on the hierarchical structural properties of human languages—the fact that linguistic structure is not just sequential but that structures are embedded within structures. Sentences consist of phrases that have particular grammatical categories (e.g., noun phrase, verb phrase), which are combinations of words, which are built out of morphemes, which are made up of phonemes. Each of these levels follows rule-governed patterns for how combinations can occur. To identify the presence of hierarchical structure, researchers isolated the gestural utterances of deaf children from their video recordings, finding evidence for a stable lexicon of signs—child homesigners used the same sign form to refer to the same concepts across different contexts (Goldin-Meadow et al. 1994)—as well as basic linguistic structures. These structures included a finite set of formal components (handshapes and motions) that were systematically recombined across different signs (Goldin-Meadow et al. 1995), analogous to the morphology of signed and spoken languages. In addition, there was consistent ordering of signs referring to the constituents (patients and actors) of transitive and intransitive events (Goldin-Meadow & Mylander 1998, Goldin-Meadow et al. 2015), analogous to syntactic patterns in signed and spoken languages. The patterns that researchers identified were consistent in homesign systems created by children from the United States, China, and Turkey, leading them to conclude that this pattern reflected a basic cognitive bias and was unlikely to be related to the ambient spoken language because it emerged in the context of diverse spoken languages with different syntactic patterns (Goldin-Meadow et al. 2009).

One of the fundamental questions that arose from these findings concerned the source of these structures: Were children copying the gestures of other people in their life or were they generating this structure themselves? To test whether the linguistic structures in homesign systems were acquired from the language input that the deaf children received, the researchers documented the patterns in the gestures produced by the child homesigners' mothers. This research consistently demonstrated that the patterns in caregivers' gestures did not match the patterns in the child homesigners' gestures (Coppola 2002; Flaherty et al. 2021; Goldin-Meadow & Feldman 1977; Goldin-Meadow & Mylander 1983, 1998; Goldin-Meadow et al. 1994). In summarizing the results of this research, Goldin-Meadow (2003) writes,

> So, do the deaf children learn to structure their gesture systems from their mothers? Almost certainly, the answer is "no." The mothers' responses to their deaf children's gestures cannot account for the structure that we find in those gestures. Moreover, the gestures that the mothers use when talking to their children do not resemble the children's gestures and therefore cannot serve as a model for those gestures. (p. 160)

On the basis of this research, it is argued that the linguistic structures that were documented in children's homesign systems were properties of language that were "resilient" (Goldin-Meadow 2003), that is to say, behaviors "...that each organism in the species is predisposed to develop under widely varying circumstances" (Goldin-Meadow 2003, p. 215). Goldin-Meadow (2003) also describes the homesigns as emerging "de novo" from the child and "without a language model."

Despite possessing some elements of language, foundational studies emphasized that homesign systems are not "full languages," highlighting the absence of both structural features, such as a system for marking tense (Goldin-Meadow 2005, p. 217), and socio-communicative features, such as a community of users and intergenerational transmission (Goldin-Meadow 2011). It became a central concern of researchers to position homesign on a developmental cline, located somewhere between the improvisational cospeech gestures produced by hearing speakers and the standardized, conventional system of an established sign language (Senghas et al. 2013, Singleton et al. 1993). Homesign has also been described as part of the "raw materials" of standard or national sign languages (Fusellier-Souza 2006, Supalla & Clark 2015, cited in Brentari & Goldin-Meadow 2017, p. 370). The developmental cline described above has been further elaborated with studies of young and emerging sign languages. In the next section, we discuss comparative studies of homesign and emerging sign languages.

3.2. Homesign Within the Context of Emerging Sign Languages

While homesigns have been characterized as emerging "de novo" from an individual child, recent work has centered the "de novo" emergence of entire languages (Brentari & Goldin-Meadow 2017, p. 363). The two situations in which young or emerging sign languages have been studied include institutions that provide centralized deaf education and support for a deaf community and communities with a high incidence of genetic deafness. In both of these situations, the elevated concentration and density of deaf individuals contribute to the emergence of new sign languages over a few generations of signers. Some of the most documented cases include Nicaraguan Sign Language (LSN), Al-Sayyid Bedouin Sign Language (ABSL), and Kata Kolok (KK). LSN was developed at a school in Managua, beginning in the early 1980s (Kegl et al. 1999, Polich 2005, Senghas & Coppola 2001), and is cited as an example of a sign language that grew out of the community fostered at a school for the deaf. ABSL, used by a Bedouin community in Israel (Kisch 2008, Sandler et al. 2005), and KK, used in a village in Bali (de Vos 2012), are examples of "village sign languages," used in communities in which there is a higher-than-average rate of deafness and many hearing people who have deaf relatives sign in addition to the deaf signers. Emerging sign languages are viewed as an ideal test case for studying the universal properties of language, a framing that has been similarly used in the research on creoles. In fact, a recent comparison by McWhorter (2022) explores six structural features in emerging sign languages and creole languages. McWhorter suggests that some features, for example, a preference for overt marking of new information, are shared by the two types of languages and thus reflect fundamental aspects of human language.

The projects documenting emerging sign languages often take up homesign with a lens slightly different from that used by the foundational studies. In addition to focusing on the relationship between language input and language structure, studies of young sign languages focus on questions of time depth and the number of generations through which the sign language has been transmitted (Kisch 2012, Nonaka 2014, Senghas et al. 2004). While emerging sign languages in schools and villages are not referred to as homesigns, homesign systems are incorporated into this work as a datapoint with a zero generation, or the time depth of a single individual, offering a starting point with which the additive generations of signers in the school or village community

can be compared. As Goldin-Meadow (2005) phrases it in her discussion of ABSL, "Homesign tells us where ABSL may have started; fully formed sign languages tell us where it is going" (cited in Nyst 2012, p. 565). In her discussion of Ban Khor Sign Language (BKSL), used in a rural village in Thailand, Nonaka (2014) also describes homesign as the predecessor to the "full-blown sign language," BKSL, that she documents (pp. 58–60). Although she characterizes these homesign systems as "proto-BKSL," suggesting they were less developed than BKSL, she also reports that the community was supportive of the sign language and that hearing relatives of the first two deaf children in the village were instrumental in its development, suggesting that the deaf child signers were not socially isolated (p. 59).

Nyst (2012) articulates three "consequences" of such a framing of the typology of sign languages and sign systems. These consequences include an implicit "ultimate" stage of being a legitimate language (Goldin-Meadow's "fully formed" sign languages), the notion that all sign languages in the world are ultimately moving or evolving "towards" this ultimate stage, and the sense that there is a hierarchy in which some sign languages are "more developed" and or advanced along the cline (p. 566). Each of these theoretical moves positions homesign within a constellation of other manual communication systems, but all focus on its utility as an explanatory variable in narratives about language innateness and language emergence. As mentioned above, questions of innateness and language emergence remain active areas of study today (Abner et al. 2019, 2021; Carrigan & Coppola 2017; Coppola & Brentari 2014; Flaherty et al. 2021; Rissman & Goldin-Meadow 2017). However, alongside this work, a new generation of work on homesign has emerged, which we discuss in the next section. This work explores homesign from an entirely different angle, one that focuses on the broader context of homesign use and the social experience of its users.

4. THEORETICAL PERSPECTIVES: A NEW GENERATION OF SCHOLARSHIP

4.1. A Repertoire Approach

The new generation of research on deaf individuals without sustained access to the linguistic resources of a named language has conceptualized language from a repertoire perspective and has portrayed deaf individuals and their communication from the standpoint of everyday meaning-making. There is a significant amount of variety in the lived circumstances of deaf individuals who make up this research. Scholars have worked with deaf individuals in countries around the world in urban and rural settings. The research spans a considerable age range, including individuals from childhood all the way to adulthood, and a wide array of social circumstances that have led to limited sustained access to linguistic resources (e.g., distance from deaf schools, lack of access to hearing assistive technology or audiological services, a national sign language is not widely used).

Research within the new generation of scholarship is heavily influenced by the writings of deaf scholars (e.g., Kusters et al. 2017b) and includes a focus on documenting the diversity of "deaf ways of being" (Kusters et al. 2017a, p. 1; see also Friedner & Kusters 2015, 2020; Paul & Moores 2012). As mentioned above, little research has documented the lives of deaf individuals who do not have sustained access to the linguistic resources of a named language. Yet their experiences have much to offer in elucidating the relationship between language and social life (e.g., Green 2022b). Although there is no unifying research question that characterizes the new generation of scholarship, there is a shared intellectual interest in studying language use in its socially situated context. Interest in situated language use has drawn attention to the variety of communicative resources that deaf individuals employ when shared linguistic resources are scarce. Expanding beyond the

linguistic repertoire, sign language scholars have adopted the term "semiotic repertoire" (Kusters et al. 2017c) to capture the multimodal communicative resources that are used in the process of meaning-making. These resources include not only linguistic but also bodily, written, and material strategies (Safar 2019). To capture the diversity of semiotic resources that deaf individuals employ in their everyday communication, scholars have adopted a methodological orientation toward ethnographic and interactional approaches. Much of this research has been subsumed under the heading of linguistic ethnography (Hodge & Goico 2022, Hou & Kusters 2020, Kusters & Hou 2020). Sharing much in common with linguistic anthropology in the United States and theoretically influenced by interactional sociolinguistics (Rampton 2020), linguistic ethnography emerged in Europe among an interdisciplinary community of scholars who have a shared commitment to bring together the fine-grained analysis of language in use with descriptions of the social and cultural context (Kusters & Hou 2020, Snell et al. 2015). Sustained fieldwork in a particular location and the use of video recording to document signed interactions in a variety of contexts are critical to these analyses (e.g., Goico 2019b, Green 2014, Horton 2018, Hou 2016).

A major contribution of the new generation of research on deaf individuals who do not have sustained access to the linguistic resources of a named language has been to illuminate the diversity within the population. In doing so, this research challenges essentialist categorizations of deaf homesigners and their signing practices (Hodge & Goico 2022, Kusters & Hou 2020). Ethnographically grounded scholarship highlights the dangers of erasing the social lives of deaf signers—at best it misses important contextual information that helps us understand the social and communicative experiences that shape these systems, and at worst it misrepresents these circumstances through the omission of details about lived interactions. The literature has explicit and implicit examples of the ways in which deaf individuals are active participants in their communities. Researchers report deaf individuals engaging in the everyday activities of their communities, such as building houses (Neveu 2019), playing games (Goico 2020), or engaging in interactional genres (Horton 2020c). In addition, evidence of deaf individuals' engagement in their communities can be seen embedded in their signing practices. For example, culturally structured practices for engaging with the world, such as killing a chicken by wringing its neck, are incorporated into signing practices, providing evidence of the deaf individuals' engagement in these everyday activities (Haviland 2013a). Green (2014, 2022a) refers to this as signs being immanent in bodily routines. Moreover, there is evidence of the mobility of deaf individuals, moving between home and school (Goico 2019b, Horton 2018) or traveling to another part of the country (Moriarty Harrelson 2019), that connects them to multiple communities. While these studies shed light on the social lives of deaf individuals who do not acquire a named language, they also document the difficulties that arise within interactions characterized by sensory and communicative asymmetries (Adami & Swanwick 2019, Kusters 2017). For example, Green (2014, 2022a) demonstrates how a hearing person's ethical orientation to a deaf interlocutor plays a critical role in how much a deaf individual and their utterances are framed as understandable. This research provides an example of the way in which the responsibility for mutual understanding in deaf–hearing interactions typically falls more on the deaf individual (Friedner 2016, Graif 2018, Horton 2020c).

Studying the diversity within the population of deaf individuals who do not have access to a named language has also challenged essentialist categorizations of homesign signing practices. The new generation of scholars draws on sociolinguistic themes, highlighting the importance of understanding the social context for studying signing practices [for a recent dialogue on sign language sociolinguistics, see the special issue edited by Kusters & Lucas (2022)]. This has included discussions of the relationship between language ideologies and signing practices (Haviland 2013a, Hou 2020, Neveu 2019). For example, Hou (2020) examines how ideologies affect the extent to which deaf and hearing children are perceived as competent users of the family's local signs. In

addition, Haviland (2013a) examines how the younger users of Zinacantec Family Homesign view the eldest sister as a less-competent signer and extend this ideology to her as a person. Other themes that have been taken up include relationships among deaf signers (Haviland 2016, Horton 2020c, Hou 2016), relationships between deaf and hearing signers (Fusellier-Souza 2006, Reed 2020), and how these relations affect signing practices. Deaf individuals in primarily hearing contexts tend to be the focal point for signed interactions, with little evidence that hearing individuals sign to one another when the deaf individual is not present. However, as Reed (2021) discusses, there is significant variation in the sign networks that deaf individuals have, showing evidence of hearing interlocutors with both weak and strong signing ties to the deaf individual.

In addition to challenging the notion of homesign as a uniform signing practice, the new generation of scholars has also challenged the notion of placing homesign on a cline of emerging sign languages (Green 2014, Hou 2016, Hou & Kusters 2020). The notion of a linear pathway from gesture to homesign systems to sign language is built on academic ideologies about the nature of language (Hou 2020), which is often at odds with the ways that deaf signers categorize language practices (Kusters & Sahasrabudhe 2018). In a recent discussion of the system of sign typology, Braithwaite (2020) highlights the risks, both practical and theoretical, for this framing of the study of emerging sign languages (including homesign systems). Citing DeGraff (2005) and others (Mufwene 1989) who have pointed out that notions of creole "exceptionalism" can be traced to racist ideologies, Braithwaite notes that most research on small sign languages[4] now occurs outside the Global North and risks transmitting negative ideologies about the value of small sign languages when compared with national, named sign languages such as American Sign Language (ASL). Research studies comparing national sign languages and emerging sign languages or homesign systems often set up structural features from national sign languages used in the Global North, such as agreement verbs and classifier handshapes, as more "mature" or "developed" endpoints of evolution, goalposts for the less mature, less developed emerging sign languages and homesign systems used in the Global South (Braithwaite 2020, p. 186).

New generation scholars challenge notions of bounded languages altogether, instead highlighting how signing practices rely on an array of semiotic resources that emerge from social and interactional contexts (Adami & Swanwick 2019, Goico 2021a, Safar 2019). For example, in a case study of a performed narrative, Green (2017) describes two distinct strategies that Samundra Keshar Nepal, a deaf man, uses to engage his audience, including both pantomimic and lexical repertoires. Green argues that rather than view the gestural components of Nepal's performance as deficient because they are less than fully "linguistic," his integration of these two repertoires reflects his skill at engaging a diverse audience with a range of proficiency in signing. As Green (2017) notes, one benefit of expanding the study of homesigners, or signers in what could be considered homesigning circumstances, to new social contexts and across linguistic genres is the opportunity to highlight their social and metacommunicative skills and abilities (p. 332).

4.2. Homesign Within the Context of Language Delay and Language Deprivation

Research on language delay and language deprivation also focuses on the population of deaf children who do not have sustained access to spoken or signed languages. Yet despite similarities in the population under study within research on language delay and deprivation and homesign, historically, there has been little engagement between these bodies of work. Lately, connections

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[4]Braithwaite uses the term "small sign languages" to describe languages used by small communities of signers (see discussion in Braithwaite 2020, pp. 182–83).

are being drawn between these areas of scholarship, in particular through engagement with the repertoire approach.

Research on language delay investigates the impact of delayed first language acquisition on deaf individuals (e.g., Mayberry & Kluender 2018, Mayberry & Lock 2003). Scholars studying language delays have demonstrated the significant negative effects of constrained access to linguistic resources and its long-term impact on deaf individuals' lives. This research finds that acquiring a first language later in life can cause production errors at all levels of linguistic development (Mayberry & Eichen 1991); slow the development of theory of mind (Schick et al. 2007); disrupt the neural organization of the language network in the brain (Ferjan Ramírez et al. 2013); affect cognitive abilities such as memory (Ronnberg 2003); and affect the development of academic skills, such as reading (Chamberlain & Mayberry 2008). The term "language deprivation" has recently gained increasing use within the language delay literature (Glickman & Hall 2018; Hall 2017; Hall et al. 2017; Humphries et al. 2016a,b), as research draws attention to language deprivation as the root cause underlying language delays. Language deprivation refers to the "overall experience of lacking fully accessible language input" (Hall et al. 2019, p. 368), and draws attention to the set of circumstances that leads to language delays in deaf children. This literature is heavily engaged with the polarized debates around the use of sign language and/or spoken language for educating deaf children (Lane 1995, Leigh & Marschark 2016). In particular, this research highlights the importance of full and early access to a sign language to counteract language deprivation, even as families pursue hearing assistive technology and spoken language development for their deaf child (Humphries et al. 2012, 2016a,b; Napoli et al. 2015).

Much of the language delay literature is conducted from a psycholinguistic perspective, similar to the foundational homesign research. Yet it is often unclear in language delay research whether homesigns were ever used by the deaf individuals under study. In their article on the impact of language delay on syntactic development, Mayberry & Lock (2003, p. 382) note that further investigation is needed on the relationship between gestural communication, such as homesign, and delayed first language acquisition. Recently, Koulidobrova & Pichler (2021) have taken up this call. Adopting a Crip Linguistics (Henner & Robinson 2021), Koulidobrova and Pichler argue for the need to study "the full range of communicative mechanisms innovated by [deaf and hard of hearing] people in contexts of degraded, restricted and/or delayed language input" (p. 1) and its relationship to language acquisition. They refer to this "full range of communicative mechanisms" as the "initial system," which they argue includes but is not limited to the homesign system that a child may use. Their article paves the way for increased engagement between the research on language delay and deprivation and homesign, with an explicit theoretical framing toward languaging and multimodality.

However, some scholars have raised concerns with the theoretical perspective on language within the repertoire approach and whether it distracts from the importance of deaf children gaining full language access (De Meulder et al. 2019a). De Meulder et al. (2019a) directly address the tension between translanguaging (the repertoire approach) and the framing of sign languages as named, bounded languages within domains such as deaf education and language policy. Their article questions "whether the concept of translanguaging and attention to deaf signers' fluid language practices and semiotic resources is compatible with efforts to maintain and promote sign languages as named languages" (De Meulder et al. 2019a, p. 894). They stress the importance of close attention to sensory asymmetries between deaf and hearing individuals and thus differential access to semiotic resources. Moreover, they point out the importance in educational settings of determining what is proficient language use for deaf children. In working through this tension, Goico (2020, 2021a,b) has sought to draw attention to the rich communication practices of deaf youth in Iquitos, Peru, who do not have sustained access to a named language, while working with

the community to establish a public deaf education program that provides these deaf children with access to Peruvian Sign Language and Spanish literacy (Goico et al. 2021).

5. LABELING HOMESIGN: WHAT'S IN A NAME?

One of the clearest indicators of the points of tension between the foundational scholarship and the new generation of scholarship is the proliferation of terms used to describe the signing practices of deaf individuals who do not have sustained access to the linguistic resources of a named spoken or signed language. Some scholars have chosen to modify the term homesign, whereas others have chosen to abandon it altogether. The terms we have chosen to include below were selected because the authors explicitly engaged with the foundational homesign literature, even if they ultimately chose not to adopt the term. In **Table 1**, we diagram some of the terms that have been proposed and the dimensions of homesign use with which they are concerned.

The first major challenge to the term homesign came from Nyst et al. (2012), who argued that the category "home sign" was lumping together disparate phenomena. They write,

> . . .it becomes clear that the term "home sign" needs rethinking. The main body of literature on home sign is based on deaf children growing up in hearing environments with no exposure to a conventional sign language, following oralist educational advice. The term "home sign" is also used to refer to the signing of a deaf person who lives in a hearing environment in a typically rural area where deaf education and/or a signing community is not available. (p. 268)

Nyst et al. (2012) went on to make a distinction between "oral home sign," which develops in contexts where families have adopted an oral language philosophy to raise their deaf child, and "rural home sign," which develops among deaf individuals in rural areas such as those the authors investigated in Mali. They note that the rural environment creates opportunities for deaf individuals to develop relationships with hearing signers and to engage with local gesturing practices distinct from what is available in the context of a child being raised under an oral language philosophy. As a result, they argue that the homesigns developed in these two contexts are altogether distinct from one another.

In a similar vein to terms such as oral home sign and rural home sign, some researchers have developed naming practices that incorporate the term homesign but with added qualifiers that better describe their context. For example, Zeshan (2010, p. 228) contrasted the terms "homesign" and "communal homesign" to distinguish between deaf individuals who do not have contact with other deaf people and those who have sporadic contact. Horton (2020a) also noted a similar distinction in her use of "individual homesign systems," used by a single deaf individual, versus "shared homesign systems," which might develop in the context of a home or classroom where there are multiple deaf individuals. In addition, the term "family homesign" has been used to refer to families with multiple deaf individuals but otherwise no exposure to named sign languages (Haviland 2013a,b, 2016, 2022; Horton 2020b). Neveu (2019) introduces the term "multi-generational homesign" to describe the signs used by deaf individuals in the Maijuna villages of the Peruvian Amazon. These communities have had deaf individuals across generations but with minimal contact between them.

At the same time, several authors have chosen to move away from the term homesign. Fusellier-Souza (2006) used the term "emerging sign languages" (although this term is used for other purposes in the psycholinguistics literature; see Section 3.2) to refer to the communication used by Brazilian deaf adults, whom she described as integrated in general society but not part of any deaf community. In a study of signers from Nepal, Green (2014) capitalized on emic terms, "local sign" and "natural sign." Local sign was the term used by hearing Nepalis in the village where she worked to refer to the signed communication of both deaf and hearing people. Natural sign

Table 1 Diagram of homesign terminology used in studies of deaf individuals without sustained access to linguistic resources of named languages and the dimensions of the system that the authors explicitly highlight when using the term

Terminology	Dimensions of system										
	Number of signers, hearing status			Gestural context		Social context		Transmission		Term origin	
	One fluent deaf signer	Multiple fluent deaf signers	Multiple fluent signers	Oralist (restricted/reduced signing and gesturing)	Rich gestural resources	Home	Home and public	Single generation	Multiple generations	Etic	Emic
Oral home sign (Nyst et al. 2012)	●			●		●		●		●	
Rural home sign (Nyst et al. 2012)			●		●		●			●	
Individual homesign (Horton 2018, 2020a)	●							●		●	
Shared homesign (Horton 2018, 2020a)		●			●				●	●	
Family homesign (Haviland 2013a,b, 2016, 2022; Horton 2020a)			●		●				●	●	
Communal homesign (Zeshan 2010)		●					●			●	
Multi-generational homesign (Neveu 2019)			●		●		●		●	●	
Local sign languages (Goico 2020, Horton 2022)			●		●		●			●	
Family sign languages (Hou 2016)			●		●					●	
Making hands (Hou 2016, 2020)			●		●		●		●		●
Natural/local sign (Green 2014, 2017, 2022a)			●		●		●				●
Nucleated sign network (Reed 2021)			●		●		●			●	
Emerging sign languages (Fusellier-Souza 2006)			●				●			●	

was used by signing deaf Nepalis to refer to signing that was not a national sign language, such as the practices used by deaf individuals who do not know Nepali Sign Language. Borrowing on this terminology, Goico (2020) developed the term "Iquitos local signs" to capture the practices of both deaf and hearing interlocutors while also capturing differences in the local signing practices across deaf youth in the city who have minimal to no interaction with one another.

The variation in the use of the terms homesign and sign points to the lack of universal or objective criteria to distinguish homesign systems from sign languages; in some ways this resembles debates about the differences between a dialect and a language (Makoni & Pennycook 2005). These distinctions become particularly "blurry" in places where there are higher-than-average rates of deafness. In such places, the sign systems, sometimes referred to as "village sign languages," are often claimed to be distinct from homesign (e.g., Nonaka 2014). Yet, in practice, they may be difficult to distinguish from what other authors have defined as "communal homesign" or "rural home sign." The description by Branson et al. (1999) of the diversity of signing practices throughout North Bali, where KK is used, provides a clear example of the fuzzy boundaries between what is typically referred to as village sign and homesign. In some places with higher-than-average rates of deafness, researchers have opted to use location or identity-based named sign languages. Examples include San Juan Quiahije Sign Language, used by a Chatino-speaking community in Oaxaca, Mexico (Mesh & Hou 2018), and Yucatec Maya Sign Languages (YMSLs), used by several communities in the Yucatán Peninsula in Mexico (for more discussion about the use of YMSLs, see Safar 2019, pp. 31–32). An alternative strategy has been to use modifiers on the term sign language, as Hou (2016) does in her use of "family sign language" and Horton (2022) in her use of "local sign languages." These terms reflect a concern with the theoretical and political implications of labeling and categorizing the strategies that people use to communicate. Naming a sign language extends legitimacy and status, while the use of homesign or any qualification of the term sign language sets the system in opposition to that status (Braithwaite 2020, De Meulder et al. 2019b, Hill & Tamene 2022).

In a recent overview of classifications of sign languages and signing communities, Hou & de Vos (2022) discuss the advantages and risks of such a range of terminology. They note that many classification schemas or terms are based on a demographic element of the signing community, which we see reflected in terms such as family homesign, communal or community homesign, and multi-generational homesign (see **Table 1**). Alternatively, some sign language typologies emphasize the age or time depth of sign languages, typically placing homesign systems at the young end of a continuum (for further discussion of homesign in the context of other sign systems, see Section 3.2). De Vos suggests that one advantage of classificatory terminology is that it can highlight a specific hypothesis (Hou & de Vos 2022, p. 121). Hou, however, articulates some concerns about these schemas, noting that demographic criteria are

> ...reductionistic and at times can be harmful, especially when a signing practice is invalidated as a natural way of communication for the interactants involved, or when labeling one sign practice as not-language reaffirms misconceptions regarding sign languages on a broader scale. These dichotomies neglect to capture the elusive but more nuanced and complex elements of spontaneous language use.... (Hou & de Vos 2022, p. 121)

Moreover, almost all of the terminology discussed here has been generated by researchers who are not part of the local community; thus, these terms and classifications may be obscuring concepts or configurations that exist in the local community for categorizing and naming these systems. Exceptions to this practice include Hou (2020), who uses the emic term "making hands" to describe the sign language practices in San Juan Quiahije, Mexico, and Green (2014), who uses the terms "natural and local sign" to characterize signing practice in Nepal. In their discussion

of the distinction between signing and gesturing, Kusters & Sahasrabudhe (2018) highlight how categories of gesturing and signing are often blurred in local conceptions of communication, even as they are commonly maintained in academic discourse about sign languages (see, for example, Goldin-Meadow & Brentari 2017).

6. THE FUTURE OF HOMESIGN RESEARCH

This review has highlighted the changing theoretical and social context of research on homesign. We conclude by considering the significance of these contested issues within the field of sign language research and by highlighting the significance of deaf researchers in current and future projects. Writing a review as homesign research undergoes a moment of transition is beneficial because it allows us to reflect on where the research has been and where it is going. We believe that the recent challenges to the term homesign can be generative and advance the field of sign language research. Moreover, we see the diversification of methods for studying homesign, with a particular emphasis on ethnography, as a crucial step toward a better understanding of the social realities of deaf individuals around the world. Ethnographic research provides insight into the particular set of circumstances that shape deaf children's abilities to acquire linguistic resources and the communicative and social implications of those circumstances. The "thick description" (Geertz 1973) that ethnography entails provides the necessary context in which to establish a deeper understanding of human language and cognition and a richer perspective on the diversity of lived experiences of deaf individuals around the world.

In addition to the diversification in the theoretical and methodological orientations that has been brought about by the new generation of scholarship, deaf scholars have played an important role in shaping the direction of this new wave of scholarship. Deaf scholars have spearheaded multiple special issues and edited volumes that bring to the fore the perspectives of deaf researchers (Kusters 2021; Kusters & Hou 2020; Kusters et al. 2017b,c, 2020), and have taken a leading role in recent literature reviews (Friedner & Kusters 2020, Hou & Kusters 2020, Kusters & Lucas 2022). These publications have not examined exclusively the situation of deaf individuals with constrained access to linguistic resources, but instead investigated sign language practices in various contexts. Nevertheless, these publications have been crucial in shaping current research on situations typically described under the umbrella of homesign research. Some of the significant themes that deaf researchers have brought to the fore include reflexivity on research methods, ethics, and positionality (Hou 2017, Kusters 2012, Kusters et al. 2017a). Deaf scholars have critically examined centering visual ontologies and visual methods (Moriarty 2020, O'Brien & Kusters 2017). They have raised concerns with the ethics of how research is carried out, including consent forms, anonymity, confidentiality, and distribution of research findings (Kusters et al. 2017a). Finally, they have examined their role as deaf researchers among deaf participants (Hou 2017, Kusters 2012) and their intersectionality as deaf individuals in the Global North working with deaf populations in the Global South (Friedner 2017, Hou 2020). Engagement with these topics is crucial for the field of sign language research, as the lack of deaf representation in research has profoundly affected how deaf people and their signing practices are studied.

Although the term homesign may not hold up as an accurate descriptive term for the diversity of signing practices used by deaf individuals who experience constrained access to linguistic resources, the recent scholarship advanced by deaf scholars presents an exciting direction forward. The opening up of linguistics to include "disabled ways of languaging" (Henner & Robinson 2021) and of sign language research to include a broader range of ways to be deaf (Friedner & Kusters 2015, 2020; Kusters et al. 2017b; Paul & Moores 2012) will invariably include the lives and signing practices of individuals who have not acquired a spoken language and/or a sign language.

Moreover, the move to study language practices in use and to capture emic perspectives will continue to push forward our understanding of the human language ability.

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