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Socializing Deixis: Interaction and Context in the Study of Child Language

A thesis submitted in partial satisfaction of the requirements for the degree Master of

Arts

in

Anthropology

by

Melanie McComsey

Committee in Charge:

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Professor David Pedersen  
Professor Kathryn Woolard

2010



The thesis of Melanie McComsey is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

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Chair

University of California, San Diego

2010

## DEDICATION

I dedicate this thesis to my hosts and friends in Juchitán who shared with me their language, totopos, and hammocks.

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## ABSTRACT OF THE THESIS

Socializing Deixis: Interaction and Context in the Study of Child Language

by

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Master of Arts in Anthropology

University of California, San Diego 2010

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In this thesis, I discuss what an approach to the study of socialization and deixis could look like, and illustrate some of the insights to be drawn from such research. First, in outlining some of the foundational work that has been done on deixis, I identify some of the central problems that any work on deixis must address, especially those relating to the relationship between meaning and context. Next, I conduct a case study of a particular deictic term, the Isthmus Zapotec presentative/directive *ja'a*. Based on the data I have collected, I draw some preliminary conclusions about how *ja'a* is used by children in interaction. *Ja'a* has both presentative and directive functions, distinguished in part by their relative presupposition/constitution of the deictic field; these two functions may also be accompanied by different kinds of gestures that similarly range from presupposing to creative of the indexing site. Furthermore, *ja'a* is one specific medium through which children are socialized to attend to intersubjectivity as a feature

of context. I argue that deictic terms in general are an important resource for children to learn about indexical relations and the cohabited world. In the final part of the thesis I discuss how research on language socialization can lend to deixis more sophisticated theories of participation frameworks, interaction, and gesture; while research on deixis can lend to socialization studies a more sophisticated theory of context.

## **Introduction**

The following thesis will argue for an integrated approach to the study of deixis and language socialization. Deictic words and gestures are among the earliest that children produce, and may be one of the primary media through which children acquire both grammar and linguistic competence. This approach would complement recent research on deixis that argues for a richer notion of “context” and that emphasizes the importance of considering both spoken and gestural forms. Because children rely heavily on gesture in their early communication, and on immediate relationships with people and objects for learning about the world, their experiences can provide important insights into the nature of deixis. Thus, research on children’s socialization to and through deictic systems can contribute both to more general research on deixis, and to more general studies of language socialization.

First, I will review some of the background literature on deixis. This review will be useful in defining some of the central problems for a theory of deixis and for establishing a working definition of the term. I will also review some of the existing literature on deixis and child language in the interest of identifying the contributions and limitations of the current canon. In the next part of the thesis, I will demonstrate how research using this approach to deixis and socialization might look. I will examine natural language data of a child’s use of a single deictic term in Isthmus Zapotec. The term, *ja’a*, is a presentative/directive adverbial deictic, used in directing the addressee’s perceptual focus to the referent (Hanks 1992:63). These examples will model an approach to the study of deixis and socialization that pays close attention to the multiple dimensions of “context” that are at play. Finally, in the last part of the thesis, I will

outline my proposal for studying deixis in conjunction with language socialization. I will demonstrate that research on deixis done with attention to children's socialization to deictic practice is a rich site for furthering our understanding of both how deixis works and how children learn to use language, especially when attention is paid to multiple modalities of interaction.

## **Review of literature on deixis**

The literature on deixis is extensive, in terms of both its depth and breadth: its roots can be traced to early philosophical writings in semiotics and linguistics, while the quest to understand how deixis works in natural languages has produced descriptions of deictic systems in dozens of languages. Despite its rich history and quickly expanding body of cross-linguistic data, however, deixis remains an understudied linguistic concept, still somewhat philosophically mysterious and lacking a large body of natural language data. The following review of literature then, will have three goals: to trace the intellectual history of the study of deixis; to arrive at a working definition of the term; and to describe some of the past and current research on the socialization to and acquisition of deixis, with a discussion of the contributions and limitations of such work.

Deixis is most basically defined as a linguistic encoding of the contextual nature of language. In one definition of the term, Fillmore (1966) writes:

Deixis is the name given to those aspects of language whose interpretation is relative to the occasion of utterance: to the time of utterance, and to times before and after the time of utterance; to the location of the speaker at the time of utterance; and to the identity of the speaker and the intended audience. An extended theory of deixis would take into account other aspects of the speaker's spatial, temporal, and social orientation (220).

This definition, rather than suggesting any formal or functional criteria for deixis, defines it somewhat tautologically as comprising the traditional categories of deixis—temporal, spatial, and social—and proposes that deixis entails a particular relationship to “the occasion of utterance.” Inasmuch as all speech is related to the occasion of

utterance, however, the nature of this relationship will need to be further specified in order to be a useful defining characteristic.

Lyons' (1977) definition of deixis appears similar to Fillmore's, but outlines in more detail the specific kinds of features that may be considered deictic on the basis of the history of the term:

The term "deixis" (which comes from a Greek word meaning "pointing" or "indicating") is now used in linguistics to refer to the function of personal and demonstrative pronouns, of tense and of a variety of other grammatical and lexical features which relate utterances to the spatio-temporal co-ordinates of the act of utterance (636).

On the one hand, Lyons hints at a possible extensional definition by suggesting grammatical classes of words or features deixis should include. Lyons also introduces a functional definition by saying that deixis refers to the *function* of certain grammatical categories, which share the property of relating utterances to context. In other words, it is not the property of relating utterance to context that defines deixis; rather, it is the *function* of terms that link utterance to context that defines deixis. Furthermore, Lyons explains that early Greek and Roman grammarians drew no sharp distinctions among adjective deictics, demonstrative pronouns, definite articles, and relative pronouns. The result is that linguists today tend to employ the term "deictic" in a broad sense, applying it to demonstrative pronouns, tense, person, and other features.

Some of the most commonly cited examples of deictic terms include demonstratives such as the English "this" and "that;" locative adverbs such as "here" and "there;" temporal adverbs such as "now" and "then;" and personal pronouns such as "I" and "you." Each of these words depends on some feature of the context for its meaning, so that if a person utters the phrase "It is raining here now," one cannot know

to what place “here” refers nor to what time “now” refers without access to the context of the utterance. These are terms we might consider “canonical deictics” because they shift according to participant roles and in reported speech (“I like it here” becomes “She liked it there” when you tell someone else what I said); because they appear to carry a minimal amount of semantic information; and because their “meaning” seems especially contingent on fleeting moments of interaction.

But such terms are also considered “canonical” to Western scholars partly because the term “deixis” was invented by speakers of Indo-European languages, in order to account for such terms. Historically, deictic terms posed a problem for truth-conditional semantics. Logicians who wished to understand language by reducing it to a series of propositions whose truth or falsity could be verified found that propositions containing deictic terms would not submit to such manipulations. For example, in order to ascertain the truth-value of the proposition “A whale is a mammal,” one need only confirm that all whales are mammals. The relationship between “whale” and “mammal” may be determined on the basis of properties of class-membership (Lyons 1977:161); the relationship is semantically determined and the proposition is always true. In contrast, the veracity of the proposition “I am female” can only be determined if one knows who uttered it. The relationship between the referent and the descriptor “female” must be determined through contextual information: specifically, the gender of the speaker. While it is true that deictic terms resist truth-conditional semantics, the original types of Indo-European deictics identified in this manner do not account for the range of deictic expressions in exotic languages and thus should not be used for definitional purposes; furthermore, deictics are not the only expressions that resist truth-conditional

semantics, as I shall discuss later. The preceding examples illustrate some of the difficulties in pinning down a definition of deixis. We now turn to some of the more technical literature as we attempt to hone in on a definition.

One of the earliest uses of the term “deixis” by a modern linguist comes from Karl Brugmann’s *Griechische Grammatik* (1913), which introduced terms for the four types of deixis he discerned in Indo-European languages: *Ich-Deixis*, *Du-Deixis*, *Dér-Deixis*, and *Jener-Deixis*<sup>1</sup> (487). Using examples from Classical Greek, Brugmann explains the deictic functions of each “pronoun” in terms of this paradigm. Interestingly, he seems more concerned with describing the Greek system and its transformation in Hellenistic times, adding the “Deixis” labels almost as an afterthought and with little explanation of what they mean. Brugmann cites the term *ὄττος*, meaning “this,” as an example of *Dér-Deixis* in its anaphoric usage and as an example of *Du-Deixis* in an expanded usage-sphere<sup>2</sup> encroaching on the realm of *ὅ*, meaning “that” (and thereby implying that *ὅ* is an example of *Du-Deixis* as well). In contrast, *ὄδε*, also meaning “this,” is an example of *Ich-Deixis* because it refers to the speaker himself, or to the direct proximity and presence of the speaker, or to what the speaker is spiritually or mentally attending to<sup>3</sup>. He claims this term has the most “deictic power,”<sup>4</sup> but does not elaborate on what such a characterization might mean. Finally, *ἐκεῖνος*, meaning “that one,” exemplifies *Jener-Deixis* in that it indicates something beyond the area of

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<sup>1</sup> These terms incorporate the German personal and demonstrative pronouns *Ich*, “I,” *Du*, the informal second person pronoun, often translated into English as “thou” to avoid confusion with the possible plural reading of “you;” *Dér*, “this/that one;” and *Jener*, a somewhat antiquated distal locative deictic often translated as “yonder” (Collinson and Morris 1937:49-50).

<sup>2</sup> “Gebrauchssphäre” (1913:487).

<sup>3</sup> “ὄδε wies auf den Sprechenden selbst oder die unmittelbare Nähe und Gegenwart des Sprechenden, auf das, was der Sprechende sinnlich oder geistig gerade anschaut” (1913:487).

<sup>4</sup> “deiktische Kraft” (1913:487).



the speaker (Brugmann 1913:487). Later interpretations of this description have, to various degrees and in various ways, attempted to iron out the inconsistencies and fill the obvious gaps.

Brugmann's four modes are cited in most of the earliest literature on deixis, including in work by Jakob Wackernagel (1926), Karl Bühler (1990[1934]), William Edward Collinson and Alice V. Morris (1937), and Henri Frei (1944). Of these, Bühler (1990) gives the most thorough interpretation of Brugmann's paradigm, and also the most comprehensive description of other important aspects of deixis. Because Bühler's work is widely available in translation, he is often credited with disseminating the term "deixis" beyond the German-speaking world.

Bühler (1990) explains that *Ich-Deixis* refers to the indication of an object located near the speaker. *Du-Deixis* refers to the indication of an object located near the addressee (49). Wackernagel (1926) later redubbed these terms *hic*-deixis and *iste*-deixis, respectively; the use of the Latin words for "this" and "that" is preferable to the German pronouns because, Bühler explains, "It is not the I and the thou that are indicated...but rather the place of the I and the place of the thou" (98). *Dér-Deixis*, according to Bühler, seems to be used for stressed, contrastive uses of "this" (98), while *Jener-Deixis* is used to indicate "something more distant and something on the other side of a boundary between the person pointing and what he points at" (114). Bühler should also be credited with conceiving the notion of the "deictic field," which is in opposition to the "symbolic field" (94), the former having to do with "speech about perceptual things," and the latter, with the conceptual order (95). Deictic terms, he posits, can only fulfill their meaning through rootedness in the deictic field of context.

Furthermore, he recognizes that deictics straddle the two fields, gaining meaning from both context and conventional symbolic meaning (95).

Although I have here been tracing the lineage of the term “deixis,” specifically, the same linguistic phenomena have been studied under other names as well. Reviewing these related concepts will help us reach a more refined definition of deixis. C.S. Peirce’s triad of sign types, symbol, icon, and index, characterizes differently related signifiers and signifieds. For Peirce, a sign is “Anything which determines something else (its *interpretant*) to refer to an object to which itself refers (its *object*) in the same way, the interpretant becoming in turn a sign, and so on *ad infinitum*” (Peirce 1991[1901]:239). In this characterization, then, “symbols” are signs related only by convention to their meanings. For example, members of one community might call a particular animal by one arbitrary name, such as “dog,” while members of another community might call the same animal by a different arbitrary name, such as “bi’cu’.” Whether a speaker chooses one sign or the other is merely a matter of the conventions of her community. Icons are signs in which the interpretant and the object have some natural relationship with one another, such as an architectural sketch representing a building, or onomatopoeic words resembling other sounds. As Peirce explains, an icon “would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometric line” (Peirce 1991:239). Indexical signs, finally, have some existential relationship to their referents. For example, a pointing finger is a classic example of an index because one can determine the intended referent of the point by following its vector through space. Peirce writes: “An *index* is a sign which would, at once, lose the character which makes

it a sign if its object were removed, but would not lose that character if there were no interpretant” (1991:239). In other words, an index requires an actual connection between sign and object, but does not require recognition, as does a symbol, in order to be a sign. All deictics are indexes because they point to or indicate their referent on the basis of an existential relationship, but not all indexes are deictics. The relationship between indexicality and deixis is important to my current undertaking, so I will return to this after a brief discussion of “shifters.”

Peirce’s writings from around the turn of the twentieth century were the first to use the term “index” in theorizing this particular relationship between signifier and signified; but his contemporary Otto Jespersen had also considered the unique problem posed by certain signs “whose meaning differs according to the situation” (Jespersen 1959[1922]:123). These, he called “shifters,” because of their tendency to shift in reported speech. Several decades later, Roman Jakobson continued Jespersen’s work on shifters. Jakobson classified shifters as “indexical symbols,” using Burks’ (1949) term and bringing together two Peircean terms because, as Jakobson explains, shifters combine both symbolic and indexical functions<sup>5</sup>. He illustrates this with an example from Burks (1949):

*I* means the person uttering *I*. Thus, on the one hand, the sign *I* cannot represent its object without being associated with the latter ‘by a conventional rule’...consequently, *I* is a symbol. On the other hand, the sign *I* cannot represent its object without ‘being in existential relation’ with this object: the word *I* designating the utterer is existentially related

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<sup>5</sup> It should be noted that symbolism and indexicality are not functions, in the technical sense, but types of relationships that hold between a sign and its referent. “Function” is the term Jakobson uses (1957:388), however, and thus I understand him to mean that some signs function as symbols or indexes, and not that symbols or indexes themselves have a unique linguistic function.

to his utterance and hence functions as an index (in Jakobson 1990[1957]:388).

This description recalls Bühler's notions of symbolic field and deictic field as the dual sites from which deictics gain meaning. Burks, however, explains the distinction in much clearer, Peircean terms. He explains that *I* is not empty of semantic meaning, but represents by convention "the person uttering." At the same time, however, *I* indexes the utterer as its object through the existential relation of being uttered. For my present purposes, I will treat deictics and shifters as equivalent on the basis of their being "indexical symbols;" they are both related to the scene of encoding and interpretable based on convention, and this semiotic duality of deictics is one of their most salient defining characteristics.

Michael Silverstein is usually credited with the advancements in theorizing indexicality since Peirce and Burks. In his classic essay on "Shifters, Linguistic Categories, and Cultural Description" (1995[1976]), Silverstein argues that meaning and context are so interdependent as to be at times mutually constitutive. For Silverstein, indexes can be classified along two axes: referential vs. nonreferential, and presuppositional vs. creative. The former is "a measure of the independence of the indexes from the semantico-referential mode of communication" (205)— in other words, whether the token has primarily a referential function or a nonreferential function. The referential function of speech is descriptive, making propositions that tell about states of affairs (189)<sup>6</sup>; referential indexes, then, contribute to the description of

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<sup>6</sup> Silverstein subsumes reference and predication under the single concept of "reference," presumably in order to avoid the sticky philosophical question of whether reference is even

states of affairs that are relative to the context of discourse (206). For example, signs for verb tense are referential indexes and they function in discourse to describe the time of an event relative to (or by indexing) the time when the description is uttered (196).

Nonreferential indexes, or “pure indexes,” are ones that “signal some particular value of one or more contextual variables” without contributing to achieving reference (201). For example, Silverstein cites work done on some Muskogean languages in which verb forms take an additional suffix when spoken by a “socially female individual” (202). This suffix does not contribute to reference, but rather, codes sociological relations among participants (203). Nonreferential indexes are an example of non-deictic language lying beyond the scope of truth-conditional semantics.

It might be noted that the metaphor of “axis” implies a spectrum that presumably extends beyond the realm of referential indexicals into a realm of “referential nonindexicals.” This would include signs having only referential meaning and no indexical meaning, which is most likely impossible in natural languages. Even something that appears to be completely referential, like a proper name, can index information about its language of origin, or the gender of the bearer, for instance. This poses a potential problem for a technical definition of deixis that requires a distinction between referential indexicals and referential nonindexicals. Proper names are not deictics, but the English third-person pronouns “he/she” seem to be interesting borderline cases: they do not shift in the same way that the first- and second-person pronouns do, yet, because they are anaphoric, their correct interpretation does depend

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possible without predication. Agha (2007) corrects this merger, a development that I will discuss later.

on the utterance context. According to the Levinson's (1983) five-part paradigm, anaphora is a type of "discourse deixis." By what formal or functional criteria, then, do we categorize proper names as non-deictic and "he/she" as deictic? I will return to this question soon.

The latter axis in Silverstein's paradigm is "a measure of the independence of indexes from every other signaling medium and mode in speech events" (205)— in other words, whether that which a token indexes is discernable from preexisting context, or whether a token performs the work of actually defining and creating that which it indexes. For example, English deictic terms such as "this" and "that" are maximally presupposing in most contexts because the object must already exist and be locatable before the speaker can talk about it (204). In contrast, English pronouns such as "I" and "you" have a creative function because, in being uttered, they evoke and make real the participant roles of the speech event (205). Indexes of all types along the presupposing-creative continuum insist on shared social context, whether the context be physical, preexisting, socially constructed, or created by the index itself.

The relationship among shifters, indexicals, and deictics is not well agreed-upon in the literature and infrequently discussed. Lyons (1977) glosses over the problem—and complicates it by adding other, similar terms—writing,

Deixis is also involved in the philosophical notion of ostension, or ostensive definition; and it is worth noting that 'ostensive', 'deictic', and 'demonstrative' are all based upon the idea of identification, or drawing attention to, by pointing. So too is Peirce's term 'indexical', which has been employed in the recent philosophical literature in roughly the sense we are assigning to deictic (637).

Lyons is content to say deixis and Peircean indexicality are equivalent, a position I will not adopt here. He also draws a comparison among deictic, ostensive<sup>7</sup>, and demonstrative terms without further clarification.

As mentioned earlier, Jakobson (1990) observed that shifters belong to the category of “indexical symbols” because they require both convention and an existential relationship with the referent to convey their meaning. Jakobson notes that early writers such as Husserl and Bühler claimed that shifters’ alleged multiplicity of contextual meanings rendered them “mere indices” in “contradistinction to symbols” (1990:388). Instead, Jakobson argues, “every shifter... possesses its own general meaning,” and shifters are “a complex category where code and message overlap” (389). In other words, shifters have both a conventional meaning, determined by the code, or language in which they are spoken, and an indexical meaning, determined by the message, or contextualized instance of speech, in which they occur.

Silverstein reiterates much of Jakobson’s discussion, explaining that shifters fall into the more general category of what Jakobson called “duplex signs,” meaning, as mentioned above, that they operate “at the levels of code and message simultaneously” (Silverstein 1995:197). The category of duplex signs also includes tense and locative deixis, which Silverstein defines as indicating “the spatio-temporal relations of some presupposed referent in the speech event to the speaker, hearer, or other referent” (197). Silverstein adds, then, this notion of “presupposition” to shifters and deictics: shifters are equivalent to his referential indexes, and locative deictics are a presupposing subset

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<sup>7</sup> “The definition of the meaning of the word by pointing to, or otherwise drawing...attention to one of the denotata” (Lyons 1977:228), for example, pointing to a red object to show the meaning of the word “red,” which would otherwise be difficult to explain.

of these. In this characterization, first- and second-person pronouns and tense are not considered deictic because they are more creative than presupposing; and no “pure index” counts as deictic because of their nonreferential rather than referential functions.

In calling deictics or shifters “indexical symbols,” Jakobson and Burks define the terms according to their “meaning;” while Silverstein, with “presupposing referential indexes,” emphasizes the functional characteristics of the terms. Because the concepts of meaning and function are central to understanding what deixis is and how it works, I will diverge slightly from the discussion at hand to address these concepts. Lyons (1977) provides a good overview of linguistic meaning in his two-volume *Semantics*. The technical term “semantic meaning,” distinguishable from any of the various common connotations of the English word “meaning,” refers to information that can be used to disambiguate a message, as opposed to a signal (which is similar to Jakobson’s notion of “code”) (49). Lyons identifies three types of semantic meaning: descriptive, social, and expressive (50). For my present purposes, the most important of these types is descriptive meaning, which is “factual” in that it describes states of affairs, can be explicitly asserted or denied, and objectively verified (50).

Descriptive statements, in their simplest manifestations, “are intended to tell us something about some particular entity (or entities) or group (or groups) of entities” (Lyons 1977:177). This entity is called the “referent” of the particular “referring expression” used to refer to it (177). For instance, in Lyons’ example sentence “Napoleon is a Corsican,” the individual person Napoleon should be identified as the referent of the expression “Napoleon” (177). The second part of this sample sentence, “(be) a Corsican,” is the predicate: “a term which is used in combination with a name in



order to give some information about the individual that the name refers to: i.e. in order to ascribe to him some property” (148). The combination of a referent and a predicate results in a proposition. Of course, any utterance can have multiple kinds of semantic meaning, but if we separate the types of meaning for analytical purposes, “propositions,” as such, are distinctive for their descriptive meaning.

*Denotation*, meanwhile, is a related concept, which Lyons defines thus:

By the denotation of a lexeme... will be meant the relationship that holds between that lexeme and persons, things, places, properties, processes and activities external to the language system. We will use the term denotatum for the class of objects, properties, etc., to which the expression correctly applies... For example we will say that the denotatum of ‘cow’ is a particular class of animals, and also that the individual animals are its denotata (1977:207).

Denotation helps determine reference because it limits the class of things a lexeme can correctly refer to. In contrast to reference, however, which applies only to actual tokens in use, denotation characterizes lexemes as types (208).

Later, Lyons suggests that the concept of denotation can be extended beyond lexemes and applied to both predicative and referring expressions (214). Using the same example as above, we could say that the predicative expression “(be) a Corsican” also has a certain denotation; and this is equivalent to saying what “Corsican” denotes.

Lyons is slightly more reluctant to attribute the same property to referring expressions, because, for example, proper names do not describe the properties of a referent. He does concede that “the denotatum of a [proper] name is the class of individuals to which the name is correctly applied,” but that this “obscures important differences between denotation and other kinds of applicability” (214). He does not however, allow that personal and demonstrative pronouns can have a denotation in the same way, musing,

“it would be odd to talk of the denotation of ‘he’ or the pronoun ‘this’...in English as something distinct from their reference” (215). This is an issue Agha (2007) takes up in his discussion of deixis and representation.

Agha (2007) identifies two axes of semiotic relationships at work in indexical speech: the axis of denotation and the axis of interaction. “The first axis,” he explains, “links the description to the thing or event described. The second axis links the speaker of the description to the hearer of the description” (30). Agha goes on to define deixis in terms of these axes, writing:

The distinctive character of deixis, as a type of indexicality, lies in the fact that deictic expressions are denotational indexicals, expressions that make variables of utterance denotation dependent on variables of interaction. Two basic types of denotational variables are traditionally distinguished, namely referents (entities) and predicates (qualities of, and relations among, entities), the two together forming a third, more complex type, namely propositions (states-of-affairs predicated of entities) (2007:40).

Here, Agha introduces a new way to characterize deictics, as “denotational indexicals,” which builds on the previous labels “indexical symbols” and “referential indexicals.” Agha seeks to capture the unique way that deixis straddles the sign-type divide. In calling deictics “denotational,” he suggests that deictics both refer and predicate (which Silverstein (1995) may have intended but did not specify). In fact, he argues that referents, predicates, and propositions themselves are “denotational variables” whose denotata are ascertained according to the interactional context. In contrast to Lyons (1977), Agha contends that personal pronouns do denote—by providing “a set of default ‘directions for where to look in the context,’ as it were, in order to find the referent” (2007:42). Functionally speaking, Agha considers deictic acts

to be a subset of “propositional acts...in which we denote things in the world (including each other) during communicative interaction” (38).

Lyons (1977) suggests three distinct functions of language that would complement the three types of meaning: the descriptive, the expressive, and the social functions (50). The descriptive function of language encodes descriptive meanings. This is the function of language that allows us to make statements. “Descriptive function” is synonymous with “referential function” and “denotational function” (51). All deictics have a descriptive function; this why we are able to use deictics to pick out a referent from a context. Lyons’ tripartite model is one among many that have tried to differentiate linguistic functions. Bühler (1990), for example, distinguishes among representational, expressive, and vocative functions, while Jakobson (1990) lists referential, poetic, phatic, metalingual, emotive, and conative functions (77). Regardless of the categories employed, what is most relevant here is that all non-descriptive functions encode the kind of meaning we have here been calling “indexical” (Lyons 1977:725). Thus, all deictics also have at least one function in addition to the descriptive.

Silverstein (1995) provides an interesting analysis of how the dual sources of deictic meaning lead to a “functional aggregation.” Earlier in the article he had described the extensive system of Thai and Burmese first- and second-person pronouns that combine a referential personal index and a “pure deference index” in one surface category (203). Later, he writes:

The Thai example cited above in which social deference indexes are united with pronominal referential indexes points up the fact that even indexical categories can be pragmatically multifunctional. On the one

hand, the pronominals have discourse-referential values that contribute to description, and on the other hand, they have nonreferential values that structure the factors of the speech situation...At a functional level, then, there are *two* indexes which happen to be represented by the same surface indexical category, one a shifter, one not. This functional and hence analytic distinctness of the two modes must always be the starting point for the isolation of the pragmatic categories in language, and must rest ultimately on a sensitive analysis of the speech-even function of utterances, a task which is essentially social anthropological (1995:207).

For Silverstein, then, functional distinctions help to separate analytically the indexical components of a form. He advocates an approach to functional analysis that, after Austin (1962), acknowledges the performativity of “speech events” and treats the referential function as just “one kind of linguistic performance among many” (1995:192). Austin’s theory of speech-acts will help us articulate the linguistic functions that are necessary and possible for deixis.

J.L. Austin, early in his theoretical project, distinguished between “constative” and “performative” utterances. The former functioned to describe events and were subject to truth conditions, while the latter had no truth-value and were instead used to *do* as opposed to *say* something (Lyons 1977:726-727). Austin soon realized however, that “saying (or asserting) that something is so is itself a kind of doing” (Lyons 1977:729), and he adjusted his theory to account for the performative function of all utterances.

Thus, he drew a distinction among three types of speech acts: locutionary, illocutionary, and perlocutionary. A locutionary act, or the act *of* saying something carries *meaning* and “can be interpreted according to grammatical conventions” (Duranti 1994:220). An illocutionary act, or what is accomplished *in* saying something, has a *force*, and captures the idea that beyond the literal meaning of the words used, a

particular utterance carries a particular force (Duranti 1994:220). For example, an utterance not actually phrased as a question may have the *force* of a question, so this would be its illocutionary force (Austin 1962:61). Finally, a perlocutionary act, or what is produced *by* saying something, has an *effect*, and captures the idea that there may be consequences or effects beyond the conventional meaning or force of an utterance (Duranti 1994:220). Austin explains: “Saying something will often, or even normally, produce certain consequential effects upon the feelings, thoughts, or actions of the audience, or of the speaker, or of other persons” (1962:61). Utterances containing deictic terms might then be characterized better as “deictic acts” to convey the sense that mobilizing deictic reference is performative. Deictic acts might be said to have a full range of forces and effects based on their referential and nonreferential functions.

In light of these various theoretical approaches to meaning and function, we might now posit a definition of deixis based on both semantic and pragmatic characteristics. Deictic sign tokens are a kind of indexical sign because they derive part of their semantic meaning from the context in which they are uttered. Deictic sign tokens are a subtype of indexical signs, consisting of only those signs that have both symbolic and indexical meaning. Symbolic meaning as typical of deixis is taken to be conventional meaning that includes “instructions” for locating the referent in relation to the utterance context. In terms of their functional attributes, deictic sign tokens are those that have a denotational function and at least one other function. Denotational function as typical of deixis is taken to be the function of individuating and commenting on a referent. This definition, because it is rooted in the distinction between kinds of signs, does not account for the kind of category slippage mentioned earlier in this paper. As a

check against such slippage, I propose a second, extensional definition of deixis based on their characteristic, canonical features, to be described below. The tension between these respectively abstract and practical definitions provides a safeguard against either slipping into meaninglessness.

### **Categories of deixis**

Although it is useful to arrive at a working technical definition of deixis, as I have done above, it is also worth noting that there will always be outliers to the model, and that the model might be challenged by new data. Therefore, in addition to metapragmatically defining deixis, it may also be useful to survey the types of deixis that have been identified along with examples of each from multiple languages. This strategy will give us a better understanding of what is cross-linguistically prototypical for deictic terms and reveal the vast range of information deictic terms can actually encode.

One of the reasons deictic terms are of interest to anthropologists is because they often serve as hosts for a diverse array of social and cultural information, hinting at the types of categories that matter for certain languages to do reference. As a simple example, the English demonstrative system, which includes the four terms “this,” “these,” “that,” and “those,” morphosyntactically encodes distance from speaker/hearer and number, but not, say, grammatical gender. This social and cultural information is indexed, not referred to; but it is relevant to deixis because it comprises the indexical information necessary in a given language to correctly identify the referent of a token. If I ask, “Have you read this?” while pointing to a single magazine, my interlocutor may

understand me to be asking whether she has read that particular issue of the magazine, or perhaps a particular article in it. In contrast, if I ask, “Have you read these?” while pointing to the same single magazine, she may understand me to be asking whether she has ever read any issue of the magazine, not necessarily that particular one. The ability to make this distinction through the contrast of two deictic terms is a peculiarity of the English system, and may or may not be possible in other languages without further elaboration. For example, the Isthmus Zapotec demonstratives do not differentiate singular/plural in their morphology, so that *ndi*’ can mean both “this” and “these.” In identifying “types” of deixis, then, the objective is to identify the different ways that deictic terms “encode relations between indexical and referential objects” (Hanks: 1990:402).

Levinson (1983) names five types of deixis: “person, time, place, discourse, and social deixis<sup>8</sup>” (68). Anderson and Keenan (1985) further elaborate on this system, outlining “a relatively small inventory of contrasts...exploited across languages” (307). Within the five-part paradigm, “Place or space deixis concerns the specification of locations relative to anchorage points in the speech event” (Levinson 1983:79). Locations can be specified either relative to objects or fixed reference points, or relative to the participants at the time of speaking (Levinson 1983:79). In addition to these relative terms, there are also what Levinson calls “pure place-deictic words” like the English “here” and “there”. Typically, such “pure place deictic” terms are conceived of as contrasting along a spectrum of proximal to/distal from the speaker; but, as Levinson

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<sup>8</sup> This latter category, “social deixis,” is not actually deictic in Agha’s (2007) sense but rather corresponds more closely to Silverstein’s (1976) non-referential indexicals.

cautions, “care must be exercised in the analysis of unfamiliar languages, as demonstratives are often organized with respect to contrasts between participant-roles rather than simply to distance in concentric circles from a fixed deictic center” (Levinson 1983:81). Hanks (2009a) would add that even in English and other familiar languages, we should be moving away from such reliance on the proximal/distal dichotomy, and the spatial metaphor in general, for understanding deixis. He explains that deictic systems show more variation than scholars of Indo-European languages originally thought, and that more empirical research is needed to determine what counts as “proximal” and “distal” in various systems, and in relation to what (11).

Anderson and Keenan (1985) categorize spatial deictic systems according to whether they have one term, two terms, three terms, or more than three terms. They also distinguish between “distance oriented” and “person oriented” systems. In distance-oriented systems, terms refer to increasingly distal locations from the speaker. In person-oriented systems, one term represents something close to the speaker, one term represents something close to the addressee, and the third term represents something distant from both (Anderson and Keenan 1985:282). Anderson and Keenan also classify some deictic systems that recognize deictic dimensions other than distance from speaker. These include deictic terms that encode new versus previously mentioned information (289); deictic terms that mark whether the object is visible/invisible or audible/inaudible (290); terms that mark the object’s height relative to the speaker (291); and terms that encode geographical or environmental features, such as the Dyribal deictic terms contrasting along the dimensions of “upriver” versus “downriver” and “uphill” versus “downhill” from the speaker (292). This dimensional information is



morphosyntactically integrated into forms that are deictic because they refer to locations relative to the context of utterance or the utterance itself.

Other important spatial deictics include motion verbs with deictic components, such as the English verbs “come” and “go,” which indicate movement toward or movement away from the speaker’s location, or the addressee’s location, or the “home base” of either speaker or addressee (Levinson 1983:84). Anderson and Keenan (1985) also place “presentatives,” or elements used to “indicate an item’s location or to signal its appearance in (or relative to) the observational field of the speaker” (279) in the spatial deixis category. The French *voici* and *voilà* are typically cited as examples of presentatives. The Isthmus Zapotec presentative term *ja’a* will be discussed at length later in this paper, and I will demonstrate why presentatives constitute a particularly interesting class of deictic terms. Spatial deixis has long been considered the most fundamental type of deixis, and the dimension of distance from speaker, the most fundamental metaphor used in descriptions of deictic systems.

Time deixis has often been thought of as deriving metaphorically from spatial deictic terms. According to Levinson, “time deixis concerns the encoding of temporal points and spans relative to the time at which an utterance was spoken” (62). Temporal deixis can be encoded in demonstrative systems, such as the English “now” and “then” or the three- and four-term systems of some Micronesian languages (Anderson and Keenan 1985:299); lexical items, such as “today” and “tomorrow” (Fillmore 1997:48); and verb tense, which may include ways of encoding present, past, future, non-past, non-future, and an “event time” separate from a “reference time” such as in the “so-called ‘perfect’ construction” (Fillmore 1997:57).

The next category of deixis, person deixis, “concerns the encoding of the role of participants in the speech event in which the utterance in question is delivered” (Levinson 1983:62). This definition is useful because it allows for the study of how much more detailed frameworks of participant-roles are grammaticalized across languages. For English speakers, the most obvious way that person deixis is encoded is in pronouns and their respective predicate agreements. But the English system is relatively uninformative, marking only a limited number of features out of the possibilities identified by Anderson and Keenan: “the sex of the referent; the number of individuals represented by the referent; the social status of the referent; the social and personal relations obtaining between the person and the referent” (1985:260). Thus, some examples of person deixis would include the large range of number distinctions in the Fijian pronoun system—four, with each of the non-singulars having both inclusive and exclusive forms (Anderson and Keenan 1985:263); the Iai pronouns, which appear to carry tense (Anderson and Keenan 1985:268); gendered pronouns in languages such as Hebrew and French, and the vocative kinship terms used in many languages (Levinson 1983:71).

“Social deixis,” which is not referential and therefore not deictic according to the present discussion, “concerns the encoding of social distinctions that are relative to participant-roles, particularly aspects of the social relationship holding between speaker and addressee(s) or speaker and some referent” (Levinson 1983:62). Social deixis can be seen in cases where languages have more than one register, with variable vocabulary and syntactic constructions, for conversing with different participants. Examples of this phenomenon include the Javanese *Krama* and *Ngoko* styles, used for speaking with

people of higher and lower status, respectively (Cf. Errington 1985); and the “brother-in-law language” or “mother-in-law language” of some Australian languages (Cf. Haviland 1979).

Lastly, discourse deixis “has to do with the encoding of reference to portions of the unfolding discourse in which the utterance (which includes the text referring expression) is located” (Levinson 1983:62). In other words, discourse deixis encodes the relationship between a particular utterance and some prior discourse. Levinson explains that this may sometimes include phenomena such as anaphora, cataphora, or topic/comment structures (89). This is the category of deixis that would account for third-person pronouns, which are deictic but differ from first- and second-person pronouns in what they index. As another example of discourse deixis, languages such as Japanese and Tagalog use topic markers on nouns, a major function of which is “to relate the marked utterance to some specific topic raised in the prior discourse” (88).

Thus, deictic terms tend to fit into one of these five categories. They most typically encode spatial, temporal, personal, social, and discourse information, but also serve as hosts to a diverse array of indexical information, all of which contributes to their ability to refer to objects. Some words might be said to have deictic “elements” rather than to be deictics themselves. These tend to be words such as verbs of motion that have some significant meaning or function in addition to the encoding of referential and indexical relations. One constraint on the unchecked expansion of the category of deictics is that they tend to occur in paradigmatic sets, distributed across a particular semantic field.

## **Deixis and anthropology**

The study of deixis is of interest to anthropologists for several reasons. Deictic terms, as should now be apparent, act like little magnets for social and cultural information. First, the morphology of the terms themselves, as seen in the examples above, is often laden with additional information, which shapes how reference is accomplished in different languages. Second, because deictic utterances triangulate a relationship among objects and speakers, deixis is an inherently social act, subject to rules that govern social interaction and, to reiterate, is sensitive to the “speech-event function of an utterance, a task which is essentially social anthropological” (Silverstein 1995:207). Finally, because the semantic meaning of deictic terms derives partly from context, the kind of contextual data often gleaned from ethnographic methods is likely key to a full account of any deictic system.

William F. Hanks, one of the few anthropologists to attend intensively to the problem of deixis, contributes to our theoretical constellation by demonstrating the critical role ethnography can play in understanding deixis. Among the most significant issues he addresses is “context.” Despite Levinson’s extensive taxonomy of deictic types and subtypes, nothing comparable exists to break down and examine the many dimensions of “context” that might be relevant for understanding deixis. Hanks (1990, 1992, 2005) begins to do just that, and the analytical tools he provides are useful for thinking about how deixis intersects with other areas of language and culture of interest to anthropologists.

One of the central projects of Hanks’ work on deixis has been dismantling the doxa of what he calls the “egocentric spatialist” approach to context. According to

Hanks (2005), this has been the default background picture in most English-language literature and modern linguistic research on deixis (196). This background picture “depicts deictic utterances as one-man acts that pick out objects distributed according to relative closeness to the [Speaker]” (Hanks 2009a:11). It therefore obscures several key features of deixis, including “the mutual orientation of interactants, all nonperceptual modes of access such as background knowledge, memory, and anticipation, and all that is part of a social setting and the relations between participants but not embodied in physical objects” (Hanks 2005:196). Because deictic terms tend to be glossed according to an egocentric spatialist paradigm, analysts attempting to get away from this approach would need to rethink this system.

A second “background picture” that has informed some research on deixis is the “interactive” picture, which has its roots in Conversation Analysis. Its lineage can be traced from Schütz’ critiques of Weber and Husserl, to Garfinkle, and to Schegloff (Hanks 2009b). This view differs from the egocentric spatialist view in several ways, and leads to a very different approach to deixis. As Hanks (2005) outlines, it first assumes “a reciprocity of perspectives and a dovetailing of motivations among different parties” (196). There is also “a combination of multiple perspectives and relevancy structures” as well as “an emergent space of interaction” (196-197). Although the interactive picture seems more useful for describing talk, as Hanks explains, it is still deficient for fully explaining deixis. This is primarily because “an exclusive focus on interaction would bypass much of the linguistic system of deixis, effectively collapsing the variety of different deictics into the function of ‘invoking the setting’” (2005:197). One possibility, then, for remedying analytical approaches to deixis that rely on

interactive models is to compare deictic systems across languages, considering how variations in systems may “invoke” a variable array of settings.

While some researchers have attempted to remedy the shortcomings of both the spatialist and interaction background pictures by simply combining them, Hanks argues that this is also insufficient, and proposes instead an approach that would also account for features defined non-locally (2005:197), meaning not in the immediate interactional setting, but by something like culture or social norms. Hanks proposes the idea of a “deictic field,” modeled after related concepts from Bühler (1990) and Bourdieu (1985), which is composed of three parts: “the positions of communicative agents relative to the participant frameworks they occupy,...the positions occupied by objects of reference, and...the multiple dimensions whereby the former have access to the latter” (2005:193). By “position,” here, Hanks means not just spatial position, but also all the social and symbolic senses the word might connote (2009b). By “dimensions of access,” he means the multiple physical or symbolic modalities through which a participant could come to know a referent. These might include sight, sound, touch, or mutual memory, for instance. “Participant frameworks” throughout most of Hanks’ writings include only the roles of Speaker and Hearer. Other work, derived from Goffman (1981), by Goodwin and Goodwin (2004), de León (2000), Duranti (1986), and Goodwin (1986) offers a more nuanced model of participation that could enhance Hanks’ model of the deictic field.

The deictic field is layered with and articulates with other fields of “context,” including a semantic field, Goffman’s (1972) notion of “situation;” “setting,” as defined by the Conversations Analysts; Bühler’s interlocking *Symbolfeld* and *Zeigfeld*; and

“fields” as used in social practice theory (Hanks 2005:192-193). I will briefly describe each of these in turn.

In a “semantic field,” as linguists normally employ the label, related terms “jointly subdivide a coherent space of meaning,” as with kinship or color terms (Hanks 2005:192). This field of context is important for deictic terms since their meaning often depends on contrasts with other terms (192).

For Goffman (1972), a “situation” is “an environment of mutual monitoring possibilities, anywhere within which an individual will find himself accessible to the naked senses of all others who are ‘present’, and similarly find them accessible to him” (63). A situation is a level of context that can exist prior to any instance of “writable statements” of communication, but that serves as the “natural home of speech” (65).

Schegloff (1991) seeks to develop a theory of “context or setting” that would satisfactorily describe *how* setting is “procedurally consequential” to talk (52), rather than just “hovering around” the interaction (53). Although he does not arrive at a satisfactory generalization, Schegloff does suggest, as an example, that the “courtroom-ness” of courtrooms “seems in fact to organize the way in which the talk is distributed” (54). “Setting” seems to differ from “situation” in its increased concern with more structural, institutional aspects of context.

Bühler’s *Symbolfeld*, or symbolic field, was briefly mentioned above, and is made up of “words, other signs, and the concepts they represent” (Hanks 2005:192). The *Zeigfeld*, or demonstrative field, consists of “the experiential present of utterance production, which [Bühler] labeled ‘Here Now I’” (Hanks 2005:192). It is based partly on “speakers’ perception, attention focus, bodily orientation, and gestures;” thus, though

similar to a “situation,” a *Zeigfeld* is more attentive to intersubjective relationships among participants and serves to orient utterances (192).

Lastly, a “field” as defined in social practice theory, especially by Bourdieu (1985), “is a space of positions and position takings in which agents (individual or collective) engage and through which various forms of value or ‘capital’ circulate” (Hanks 2005:192). Fields of this kind are “defined by relations of power, domination, conflict, and collusion,” and differ from the other types of context described above in that individuals bring to them “trajectories, careers occupying certain (sequences of) positions” (192). The discursive or communicative field, for example, is the context in which communicative practice is embedded.

Hanks stresses, “The deictic field is more than a mere context, then, understood as an external surround in which an utterance happens to occur. Through embedding, the meaning and force of deictic expressions are actually reshaped by the field to which they articulate” (Hanks 2005:194). Acts of deictic reference, then, position both participants and objects in relation to each other; and they can be shaped by, reflective of, or even constituting of the various layered fields of context.

The idea of “fields” as an analytic tool is useful because it allows the researcher to examine separately multiple views of the same scene, ultimately creating a composite analysis from all of these. In much the same way that linguists have used varying transcription methodologies to represent various “slices” of an interaction—dialogue, gesture, prosody, pronunciation—the fields concept may be used to examine various slices of the context of an interaction. For example, a single act of deictic reference could draw on knowledge that participants have of deictic reference, and thus, the



deictic field; of categories of personhood, and thus, a field of power relations; and of norms about parent/child interactions, and thus, a kind of socialization field. While the symbolic and phenomenological aspects of context are intended to apply cross-culturally, elements such as “settings” and “fields” will necessarily differ cross-culturally. Inasmuch as our understanding of the deictic field benefits from detailed descriptions of the other elements of context with which it articulates, anthropology has much to contribute to research on deixis.

### **Research on deixis: Acquisition and socialization**

Many of the early scholars working on deixis make mention of how children learn and use deictic terms. The terms’ “shifting” nature is made especially salient by the mistakes children make when first learning them. Jespersen (1959), for example, illustrated the tricky, contextual nature of shifters through examples of children’s difficulties learning to correctly use the word “I” when they may hear it used first “meaning ‘Father,’ then again meaning ‘Mother,’ then again ‘Uncle Peter,’ and so on unendingly in the most confusing manner” (123). Similarly, Jakobson explains, “It is quite obvious that the child who has learned to identify himself with his proper name will not easily become accustomed to such alienable terms as the personal pronouns: he may be afraid of speaking of himself in the first person while being called *you* by his interlocutors” (1990:389). It was not just linguists interested in deixis who were drawn to children’s use of the terms, but also linguists specifically studying child language who were drawn to deixis. For example, Michael Halliday (1975) notes his how his

informant (and son) Nigel, around the age of 23 months, used the second person pronoun for himself, as in “You want Mummy red toothbrush” (133).

Indeed, there exists a substantial body of work on children’s acquisition of deictic terms, and a somewhat less substantial body on socialization to deixis. For my present purposes, I distinguish acquisition from socialization on the basis of the author’s term of choice, and on the potentially oversimplified assumption that linguists tend to prefer the former, and anthropologists, the latter. Here, I will review some of the most relevant work that has been done on deixis in child language, discussing its contributions and limitations.

Christine Tanz provides one of the most thorough studies of deixis and child language in her book *Studies in the Acquisition of Deictic Terms* (1980). She examines the acquisition of four types of deictic terms: personal pronouns; the constructions *in back of* and *in front of*; demonstratives and locatives; and deictic verbs of motion. Among her findings is that the complete acquisition of deictic terms lasts the duration of the language acquisition period, about 8 years, with many two-year-olds mastering the person system, but with eight-year-olds still struggling to differentiate *take* from *bring* (144). Tanz (1980) formulates several hypotheses on the basis of her data, positing that a robust theory of “polarity” or “oppositeness” would contribute greatly to our understanding of how language learners understand deictic paradigms (158); she also hypothesizes that the “deictic decentering” children do when they correctly use shifters prepares them for other types of linguistic reciprocity, including conversational turn-taking (163).

Eve Clark and Olga Garnica (1974) focus on the acquisition of “deictic verbs,” such as *come*, *go*, *take*, and *bring*, using experimental data. Starting from the premise that “semantic complexity is one of the major determinants of the order of acquisition” (560), they find, indeed, that children acquire “simpler, positive” terms first, such as *come* and *bring*, and “complex, negative” terms later, such as *go* and *take* (568). On the basis of these results, the authors conclude that in the early stages of acquisition, children rely on “strategies” rather than “actual semantic knowledge” to determine some word meanings (571). Ryan Internicola and Richard Weist (2003) investigate the acquisition of “spatial locatives,” including the deictic *front*, *back/behind*, and *between*, utilizing longitudinal data from the CHILDS archives (239). They argue that “linguistic and conceptual development co-vary in the spatial domain,” meaning that children’s acquisition of spatial locative systems depends both on linguistic information processing and conceptual development (246)

While Clark and Garnica (1974) and Internicola and Weist (2003) focus on comprehension, Alison Garton’s (1985/86) experimental design seeks to explore the “use and possible integration of verbal and gestural spatial reference in young children” (31). She finds that three-year-old children do not distinguish between *this* and *that* on the basis of the proximity of the object, but that they do consistently integrate the use of the deictic words with specific forms of gestural support related to the context (37). Garton (1985/86) concludes that these variations provide evidence for the children’s “awareness of the pragmatic functions of the deictic terms” (39).

Although the majority of research on deixis and child language has been done in English, there are a small number of studies that look at deixis in other languages.

Pascale Girouard, Marcelle Ricard and Thérèse Gouin Décairie (1999), compare personal pronoun acquisition in French-speaking and English-speaking children, finding that both groups acquire pronouns in the same order, but that English-speaking children comprehend the third-person form earlier than French-speaking children. Additionally, the authors observe that “girls were on the whole more precocious than boys” (322).

Mercedes Amparo Muñetón Ayala, Gustavo Ramírez Santana and María José Rodrigo López (2005) consider the acquisition of deixis in Spanish. Their study is one of the few in the “acquisition” genre to rely on data from “natural” interaction between child and caregiver. They find that children produce more deictic tokens that are spatial, rather than personal or temporal, and more tokens that are ego-centric (332). They do not find significant differences among age groups in the correct marking of deictic terms for number, gender, or distance (333). Miguel Pérez-Pereira (1999) also looks at the production of Spanish deictic terms, specifically in blind children. He finds that blind children do not lag behind sighted children in the correct use of personal reference (672); but his data are inconclusive regarding differences among blind, sighted, and autistic children in the use of spatial deictics.

Because deixis and gesture share a close relationship in natural interaction, this nexus has been the focus of several studies on the acquisition of gesture. According to Elena Pizzuto and Micaela Capobianco (2005), children transitioning from the one- to two-word stage of acquisition demonstrate an earlier command of gestural deixis, but an earlier command of spoken “content-loaded” speech (179). One interesting finding they note is that, for the youngest children, “the most frequent type of two-element utterances were bimodal equivalent combinations of deictic gesture with deictic

vocalization” (190), suggesting that speech and gesture are linked primarily through deictic gestures (196). Other studies, such as Özçalışkan and Goldin-Meadow (2005), attest to the continued importance of deictic gesture as a linguistic scaffolding device even in the later stages of acquisition.

As Michael Tomasello (1988) has argued, “joint attentional processes” play a large role in children’s early lexical acquisition and conversational interaction. The ability to establish joint attention with another participant and on an intended object of reference is a precondition for communication and language. Kidwell and Zimmerman (2007) take this observation one step further: using the example of “show action,” in which a child establishes joint attention with another person by showing him an object (595), the authors argue that the action itself and the acting body become additional sites of joint attention (609). Holger Diessel (2006) more explicitly links joint attention to deixis. He claims that demonstratives are the linguistic feature most closely tied to the coordination of joint attentional focus (469). That demonstratives serve one of the “most basic communicative functions in language” is reflected in the following properties: they commonly occur with a deictic gesture (469), they are the earliest non-content words children produce (471), and they are one of the few closed-class expressions that appear to be universal (472).

The literature on the acquisition of deictic terms seems to support the idea that deixis is somehow special, or particularly integral to early communication. This literature also suggests the importance of studying deixis in conjunction with gesture. One of the obvious gaps in the literature is the dearth of data in non-Indo-European languages and, more generally, in non-Western cultural contexts. This bias may be

leading researchers to results that cannot be cross-linguistically and cross-culturally generalized. The work on socialization and deixis done by anthropologists addresses this shortcoming in a very preliminary way. The socialization literature also differs from the acquisition literature in its methodology, relying less on experimental design and more on ethnographic observation.

In one of the few socialization studies to concentrate specifically on deixis, Martha Platt (1986) considers children's use of two Samoan verbs with deictic elements, *sau*, "to come," and *'aumai*, "to bring/give" (127). Her data come from natural language recordings made inside households during diverse kinds of activities. Because Samoan society is highly stratified across a large number of variables (130), children's use of these verbs is influenced by their "rank with respect to other participants in a given context" (127). Specifically, Platt finds that imperatives using *sau* are more socially restricted, directed to lower-ranking persons or peers, while imperatives using *'aumai* may be directed to higher-ranking persons or to peers (128). Platt's conclusions reveal that children are sensitive to their own social role "as [users] of language within a particular culture" (149).

Ochs (1990) argues that the socialization to indexical expressions is an ideal site for "specifying more precisely the relation of language to sociocultural context" (291). Although she is less concerned with the referential functions of indexicals, her insights pertaining to the nonreferential aspects of indexicality, are, of course, applicable to deixis. She explains that "an understanding of indexes of affect and epistemological stance are basic to interpreting the sociocultural organization of a communicative event. And following this line of thought, such indexes are building blocks of children's

linguistic and sociocultural competence” (Ochs 1990:296). Ochs (1990) also proposes a new type of indexical relation, “indirect indexicality,” in which the relationship between language and some feature of the communicative event is mediated by other social meanings, such as stances, acts, or activities (295). For example, certain Japanese particles like *zo*, *ze*, and *wa*, rather than indexing female gender, per se, index a female “affective disposition,” which, in turn, indexes the gender of the speaker (295).

Ochs and Schieffelin (1995) expand on these observations by arguing that the indexical meanings of grammatical forms, including “cultural systems of belief, knowledge, and social order,” actually influence which forms children learn and produce first (74-75). Finally, John Haviland’s article, “Early Pointing Gestures in Zinacantán” (2000), which I will describe and discuss in more detail later, gives an anthropological perspective on indexical gesturing by infants in a Tzotzil-speaking community of Chiapas, Mexico.

Thus, anthropologists have contributed data on child language and indexicals in a more diverse array of languages than have linguists. At the same time, however, this kind of research is in its nascent stages, so to speak. Ideally, researches from both lineages would seek to combine the experimental rigor of the one with the ethnographic sensibilities of the other.

### ***Ja'a*: A case study of a deictic: Meaning, function, and language in use**

Given my discussion above, it remains to be seen how the definitional parameters laid out will respond to natural language data (or vice versa). In what follows, I will take a closer look at a specific deictic term from Isthmus Zapotec, a language spoken in Oaxaca, Mexico. I will first argue for the validity of treating the Isthmus Zapotec term *ja'a* as a deictic rather than as an “interjection,” as it has been classified up until now. Next, I will describe some of the pragmatic constraints particular to this deictic by subjecting it to a series of tests. Finally, I will provide examples from natural language data of a child’s use of *ja'a* in interaction. Through this analysis, I hope to flesh out a description of *ja'a* in use, as well as to begin to explain the role of *ja'a* in socialization. Regarding the former task, some important topics to consider include the different presentative/directive forces of *ja'a*; the kinds of access to the referent speakers have when it is produced; and how it combines with gesture, action, and other non-spoken linguistic features. Regarding the latter task, I will consider the question of why *ja'a* is used so commonly by and with children, positing that it is particularly important in socializing children to attend to intersubjectivity as a feature of context.

The natural language examples that follow are taken from data I collected in Juchitán during three months of fieldwork in 2008. Juchitán is a city of just under 100,000 people, located on the Pacific coast of the Isthmus of Tehuantepec, in the Mexican state of Oaxaca. The majority of its residents are bilingual in Isthmus Zapotec



(ZAI)<sup>9</sup> and Spanish, although a few older people are monolingual Zapotec speakers, and some children are learning only Spanish. The specific neighborhood of Juchitán in which I conducted my research is located at the southern, “lower” end of the central part of the city. It is one of the poorer neighborhoods, but also one known for having strong Zapotec pride and a greater number of Zapotec speakers than the northern parts of the city.

Currently, the most comprehensive resources on the grammar of Isthmus Zapotec are two relatively slim volumes compiled by Velma Pickett and collaborators, and published by the Summer Institute of Linguistics: *Gramática popular del Zapoteco del Istmo* (1998) and *Vocabulario Zapoteco del Istmo* (1977). Chapter Eleven of the *Gramática* consists of a chart of Zapotec words, glossed in Spanish, and labeled “*Las interjecciones*.” Among these “interjections,” for example, are words such as *jojo*, accompanied by the description: “*Indica admiración*”<sup>10</sup>; and *ay nana*, with the explanation: “*Puede indicar preocupación, dolor, o indiferencia, según el contexto en que se emplee (sólo para mujeres)*”<sup>11</sup> (90). Also included in this chart is *ja’a*, the item which I am here arguing is actually best treated as a presentative/directive deictic term.

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<sup>9</sup> Isthmus Zapotec is a member of the Zapotecan language family, in turn a part of the larger Otomanguean family that includes Mixtec, Amuzgo, Chinantec, and Mazatec, among others (Augsburger 2004:45). The Zapotecan languages are often divided into four major subgroups—Sierra de Juárez, Southern Sierra, Oaxaca Valley, and Isthmus—which are as different from each other as, for example, Spanish is from French is from Romanian (Augsburger 2004:45). What I am here calling “Isthmus Zapotec” is actually the variety spoken in Juchitán, and one of four mutually intelligible dialects of Isthmus Zapotec. Juchitán Isthmus Zapotec has roughly 70,000 speakers, the majority of whom live in Juchitán, with a few in neighboring cities. According to census data from 2000, only 9% of these speakers are monolingual; the rest also speak Spanish (Augsburger 2004:47).

<sup>10</sup> Indicates admiration/wonder.

<sup>11</sup> Can indicate worry, pain, or indifference, according to the context in which it is used (only for women).

Although the rest of the items in this “interjections” chart may also need to be examined and possibly re-identified, it seems quite clear that *ja’a* fits within this deictic category as described by Hanks (2007), and perhaps even according to Pickett’s gloss in the chart: “*Se usa para llamar la atención a algo que tiene o indica el hablante*”<sup>12</sup> (90). This gloss captures quite well the sentiment of the following examples, as *ja’a* is used both as a presentative and as a locative.

As Kockelman has noted in his article, “The Meanings of Interjections in Q’eqchi’ Maya” (2003), interjections were traditionally considered “at the periphery of language and primordially related to emotion” (467). Although this misconception has been righted in more recent literature and interjections have been more formally defined as part of natural languages, a project to which Kockelman contributes, the notion remains that they are still somehow reflective of “mental states” as opposed to being useful mediators of social interaction (467). Kockelman seeks to remedy this misconception by offering a more explicit formal definition of interjections and by “providing an account of their meanings in terms of situational, discursive, and social context” (468). He argues that interjections are “tied to all things cultural” and seeks to outline a framework that will begin to characterize interjections in terms of their “meanings” and “pragmatic functions” (470).

Formally, Kockelman characterizes interjections according to four criteria, which he adapts primarily from Wilkins (1992), among others:

First, all interjections are conventional lexical forms, or words, that can constitute utterances on their own...Second, with few exceptions, no interjection is simultaneously a member of another word class...Third,

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<sup>12</sup> Is used to call attention to something the speaker has or indicates.

with few exceptions, an interjection consists of a single morpheme and undergoes neither inflectional nor derivational processes...Lastly, though it is not a critical feature, many of these forms are phonologically or morphologically anomalous, having features which mark them as odd or unique relative to the standard lexical forms of the language (2003:469-470).

The term *ja'a* appears to fit this formal definition. It can constitute an utterance on its own; it combines with other (spoken) linguistic forms only in a relationship of parataxis (“united by the use of only one sentence pitch” (Kockelman 2003:469)); and it does not undergo inflectional or derivational processes. Its form is not anomalous to the language, but this is not necessarily relevant. The second rule does not pose a problem in this case because Kockelman refers to formal word classes, whereas deixis, as herein defined, is either a semiotic or functional category. *Ja'a* may fit this formal description of interjections, but differ from interjections in other characteristics.

In terms of meaning and function, Kockelman argues that interjections are primarily indexical and that they almost always have pragmatic functions (471). For example, Kockelman discusses Q'eqchi' interjections that variously index internal states, mistakes and glitches, preferred and non-preferred solicited responses, and marked quantities (2003:479). These various indexical objects exert particular perlocutionary forces, including eliciting an utterance from an addressee, eliciting an action, or laying claim to a conversational turn (2003:472). The ZAI term *ja'a* also has important indexical functions as well as related forces, a topic I will address in more depth, later; however, one of its key characterizing features is that it is also referential.

Although Wilkins (1992) claims that all interjections are deictics, an example of a nonreferential interjection would disprove this theory, given that we are defining

deictics in terms of their referential and indexical meaning, and therefore minimally presupposing a referential function and an indexical function. Kockelman's Q'eqchi' interjections are mostly nonreferential. For example, he names a variety of phatic interjections, such as *sht*, used to open a channel for communication (472) and *ih*, used to acknowledge registering of the previous speaker's comment (472). Although these two examples have a symbolic meaning to the extent that they are conventional and conventionally used in the ways described, they do not refer in any significant way. Reference, recall, has to do with the disambiguation of a message, rather than the signal (Lyons 1977:49). In the case of such phatic interjections, it is clear they are concerned with more meta-communicative functions and disambiguation of the signal.

In light of this, I will treat the ZAI term *ja'a* as a deictic rather than an interjection in order to facilitate an analysis of how children are socialized to both referential and indexical speech through deixis. Tokens of *ja'a* refer to objects that are immediately salient in the context of the utterance, thus, in order to use *ja'a* correctly, children must be aware of the perceptual relationship among self, interlocutor, and object. While *ja'a* neither undergoes any inflectional or derivational processes, nor occurs as part of a paradigm, this is a mere coincidence of the language and does not make it any less of a deictic than would be, for example, a demonstrative pronoun in a language with only one<sup>13</sup>. In other languages that have presentative/directive deictic

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<sup>13</sup> Considering "Minimal Systems of Spatial Deictics," Anderson and Keenan (1985) write, "In principle, a language might have only a single item which could function as a demonstrative pronoun or adjective and which would simply indicate something like 'present to *Sp*' or 'present in the extralinguistic context of the utterance', without commitment to its distance from the speaker, visibility to the speaker, etc. While we know of no unequivocal one-term demonstrative systems in this sense, Czech seems to come quite close. The commonly used *ten*

terms, these can occur in multiple forms and as parts of paradigmatic sets, some examples of which we will now consider.

Terms with a comparable meaning and function in Yucatec Maya are those that Hanks labels “ostensive evidentials” (OSTEVs). The paradigm includes three terms derived from the grammatical base “*hé’e(l)-*,” which differ according to the “kinds of perceptual access which participants have to referents at the time of utterance. The three principal kinds of evidence are tactual, visual, and peripheral-sensory (which covers auditory and olfactory)” (Hanks 2007:312-313). The Yucatec OSTEVs explicitly encode evidential information, and thus support the idea that “deictic features are organized primarily in terms of their contribution to the identification and verifiability of referential objects” (Hanks 2007:313). ZAI *ja’a* also encodes evidential information as its felicitous use requires some sort of perceptual access. A second characterizing feature of Yucatec OSTEVs is that they have a directive force; as Hanks explains, “OSTEV tokens characteristically redirect an addressee’s focus of attention...[and] they often require specific, observable forms of compliance” (2007:315). I will demonstrate later the extent to which *ja’a* orients and directs the attention and actions of addressees.

A second comparison can be made between *ja’a* and the French presentative/directive deictic terms *voilà* and *voici*, and the Russian *vot* and *von*. Both pairs of terms contrast according to whether they are +proximal or –proximal. Grenoble and Riley (1996) compare the French and Russian systems, arguing that they have both presentative and discourse functions. Their analysis suggests three additional

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may function either as a demonstrative adjective or as a demonstrative pronoun, and may be used for items which are either close to or far from the speaker” (280).

characteristics that contribute to defining and describing these particular deictic terms. First, they note the etymology of the terms: the French terms are derived from the imperative form of the verb *voir*, “to see,” plus an adverb meaning either “here” or “there” (823); the Russian terms are derived from pronominal forms (824). Second, Grenoble and Riley (1996) consider “discourse functions,” as separate from “presentative functions,” including cases where the deictics signal the beginnings or ends of topical units (827). And lastly, the authors consider “the metaphorical spatialization of linguistic content” (820), arguing that the proximity or distance suggested by a deictic may indicate emotional or attitudinal distance, rather than physical (822).

Thus, the examples from French and Russian suggest that presentative/directive deictics across languages may have very similar functional characteristics, while exhibiting significant formal differences. *Ja’a* cannot take inflections like its Yucatec cousins, and it does not appear to have the extended uses for anaphoric or attitudinal distance that the French and Russian examples have. Most notably, perhaps, *ja’a* is an independent term that does not comprise part of a paradigmatic set. This comparison suggests that, while it is useful to describe the formal characteristics of deictic terms, we should not look to any formal characteristic as definitional. Rather, particular deictic terms might be better described by attending to the semantic and pragmatic constraints that govern them, and their range of functions. Here, I will attempt to characterize the ZAI term *ja’a* in more detail by explaining just where, when, and how it may occur in the language.

After Hanks (2009c), I have devised a series of grammatical tests that demonstrate the semantic and pragmatic rules governing *ja'a*. These results appear in Table 1, below. The results are based on interviews with one adult native bilingual speaker of Isthmus Zapotec and Juchiteco Spanish, and all examples are hypothetical, invented by the interviewer. The native speaker was presented with the utterances here labeled “Zapotec Example” and “Spanish Example,” and asked to say whether each was felicitous. Examples were given in both languages because *ja'a* is ubiquitous in Juchiteco Spanish and I hypothesized that there might be differences in the way it integrates into the grammar of one language versus the other. From my informant’s intuitions, the generalized “Rules” in the left-hand column were either confirmed or denied. In the future, these conclusions will need to be substantiated and expanded using natural language data.

**Table 1: Semantic and Pragmatic Conditions for the Use of *Ja'a***

Rule	Zapotec Example	Spanish Example
Can combine with a lexical verb.	Ja'a biiya' <i>Here, look</i> Ja'a bireebe <i>There, he left</i>	Ja'a mira <i>Here, look</i> Ja'a salió <i>There, he left</i>
Can combine with a lexical noun	Ja'a bicu <i>There, (the/a) dog</i>	Ja'a perro <i>There, (a) dog</i>
Can occur with an indefinite noun.	Ja'a ti bicu <i>There, a dog</i>	Ja'a un perro <i>There, a dog</i>
Can co-occur with interrogative particle (yes/no).	Ja'a stiu la <i>There, is that yours?</i> Ja'a bireebe la <i>There, did he go out?</i>	NA
Cannot combine with information questions.	*Ja'a tu bi'ya' ni <i>There, who saw it?</i>	*Ja'a quién lo vió <i>There, who saw it?</i>

**Table 1, Continued**

Cannot co-occur with “if” particle.	*Ja’a pa na diuxi <i>There, if god says</i>	*Ja’a si dios quiere <i>There, if god wants</i>
Cannot occur in expressions of doubt.	*Zándaca ja’a <i>Maybe here it is</i>	*Tal vez ja’a <i>Maybe here it is</i>
Cannot occur in expressions of hope/speculation.	*Ja’a ñapa <i>Here hopefully you have</i>	*Ja’a ojalá <i>Here it is hopefully</i>
Can occur in negative focus expressions	Ja’a gasti beela <i>Here, no meat (left)</i>	Ja’a nada de carne <i>Here, no meat (left)</i>
Cannot occur in a negative sentence.	*Ja’a cadí naro’bani <i>Here, it is not big</i>	*Ja’a no es grande <i>Here, it is not big</i>
Can function as a pronominal.	Guná’ yoo ya? Ja’a <i>Which house? There</i>	¿Cuál casa? Ja’a <i>Which house? There</i>
Cannot function as an adnominal.	*Guná’ yoo ya? Ja’a yoo <i>Which house? There, that house</i>	*¿Cuál casa? Ja’a casa <i>Which house? There, that house</i>
Can be predicative (presentative).	Ja’a <i>Here is this object</i>	Ja’a <i>Here is this object</i>
Can be predicative (directive).	Ja’a <i>There, look at that</i>	Ja’a! <i>There, look at that</i>
Cannot occur in a subordinate clause	*Nannu’ ja’a <i>You know (that) here it is</i>	*Sabes (que) ja’a <i>You know (that) here it is</i>
Can be used for self-presentation.	Ja’a (naa) <i>Here I am</i>	Ja’a (aquí estoy) <i>Here I am</i>
Can be used in self-talk.	Ja’a! <i>Here, I found it!</i>	Ja’a! <i>Here, I found it!</i>
Can be used to indicate an object that is visible.	Ja’a <i>There it is (I see it)</i>	Ja’a <i>There it is (I see it)</i>
Can be used to indicate an object that is touchable.	Ja’a <i>There it is (I feel it)</i>	Ja’a <i>There it is (I feel it)</i>
Can be used to indicate an object that is audible.	Ja’a <i>There it is (I hear it)</i>	Ja’a <i>There it is (I hear it)</i>
Cannot occur without a gesture/action.	*Ja’a (no gesture) <i>Here it is</i>	*Ja’a (no gesture) <i>Here it is</i>

Table 1 demonstrates that adult native speakers have certain intuitions about the appropriate semantic and pragmatic constraints of deictic terms. Although Hanks (2009a) advocates elicitation of native metadata as important evidence about deictic usage, he also warns that “native metalanguage is different from actual usage” (18). I would further argue that actual usage by children may differ from usage by adults, and



may relate in different ways to both adult and child metalanguage. A full account of the possible uses of *ja'a* would include systematic interview data from both adults and children, as well as natural language examples from both adults and children illustrating all possible scenarios.




At this point, the data and relevant grammatical analysis of ZAI do not exist to conduct such an exhaustive analysis. However, in what follows, I will use a small set of natural language data to begin to tease out some particulars from Table 1. More specifically, I will look at natural language productions of *ja'a* by my informant, a little boy I'll call J, at age 1;11, to examine more closely how two of the above rules are actualized in child speech: I will consider examples of how *ja'a* can be predicative in both presentative and directive capacities; and I will look at the kind of gestures *ja'a* tends to co-occur with and why.

According to Table 1, *ja'a* can encode both presentative and directive predicates. Hanks (1992) demonstrates the difference between these functions through paraphrasing. The former may be paraphrased as "Take the one tactually available to me right now," while the latter might be paraphrased as "Look at the one visible to you and me right now" (52). Although it can be argued that instances of *ja'a* always contain both of these elements, it may be the case that they are present to greater or lesser degrees in each instance. Hanks suggests that such paraphrases are useful because they "can be read off as mini-descriptions in which deixis occurs" and because, "by varying the three components [denotatum type, relational type, and indexical type] independently, one can raise questions regarding how features from each component




combine” (1992:53). So, does J produce tokens of *ja’a* with these two predicative functions? And if so, how might we describe their referential and indexical features?

In the first example, “Toys,” I argue that J produces multiple presentative tokens of *ja’a*. J’s great uncle, P, has come over to visit and is sitting on the low wall of the portico, right next to the recently reorganized toy bucket. J approaches P and the toy bucket, and initiates an interaction by fishing a toy out and handing it to P while saying, “*Ja’a*” with a rising intonation and a prolonged final vowel sound (Line 1). P takes the toy and holds it in his lap. J repeats this exercise multiple times, only three of which are represented in the transcript, below. Each time, P takes the toy and either holds it in his lap, or stacks it on the wall where he is sitting.

### Example 1: Toys

Line	Spr	Sound	Action	Video Still
1.	J:	ja’a:? <i>here</i>	J hands a broken cell phone to P.	
2.	P:	m’hm <i>mhm</i>	P takes the phone and begins to examine it. His gaze is down on the phone. J roots around in the toy bucket.	
3.	J:	ja:’a::? <i>here</i>	J emerges with a video game joystick. J turns toward P to hand it to him.	

### Example 1, Continued

4.	P:	(bueno) (ok)	P takes the joystick and sets it on his lap. P arranges some other toys on the ledge. P examines the broken cell phone.	
5.	J:	ja'a:? here	J tries to hand a plastic cow to P, but P is occupied and does not act to take the toy.	
6.	P:	((unintelligible))	J stacks the cow on the ledge with the other toys	

In this example, it is clear that J means to reference the object he is holding because of the indexing gesture that accompanies his speech. It is also clear that this object is tactually and visually available to J at the time of utterance, but not necessarily to P, who is looking down at and fiddling with a broken cell phone that had made its way into the toy bucket. We can characterize J's combined utterance and gesture as a "deictic act." Drawing on Austinian terminology, deictic acts with different functions will have different forces and effects. This particular deictic act in Example 1 can be said to have both a referential and presentative illocutionary force.

The presentative force of this utterance can be confirmed based on the uptake of the addressee: P takes the toy from J and does something with it. In the case of the first toy, a broken cell phone, P takes it and begins to examine it (Line 2). In the case of the

next toy, a video game joystick, P takes it from J and puts it in his lap. He also places some plastic cows he had in his lap on the ledge on which he is sitting, presumably to free up his hands (Line 4). As I will demonstrate later, these actions help to delimit certain spaces on and around P as “indexing sites” (Clark 2003) for the placing of objects.

In the next example, “Where’s Mommy?”, J and the researcher, R, are engaged in a linguistic routine in which she asks him where some person is, and he answers. He has already supplied the location of his father, who is at work at his job in the Coca Cola factory. Next, he is asked about the location of his mother, who is just a few feet away, visible but engaged in another activity, and responds by pointing and exclaiming, “*Ja’a!*” (Line 10).

**Example 2: “Where’s Mommy?”**

1. J: papá  
*daddy*
2. R: papá  
*daddy*
3. dónde está papá  
*where is daddy*
4. J: mm  
*um*
5. coca!  
*Coca Cola (factory)*
6. R: coca ((laughs))  
*Coca Cola (factory)*
7. ya sabes  
*you already know (things)*

**Example 2, Continued**

8. J: mamamá  
*momommy*
9. R: dónde está mamamá  
*where is momommy*
10. J: ja'a! ((points))  
*there!*
11. R: mhm ((looks in direction of point))  
*mhm*

Again, in this example, J indexes the object of reference through gesture, this time a point and a gaze in the direction of his mother. In this case, the referent is not tactually available to either participant, but is visually and/or aurally available to both. The directive force of this token of *ja'a* can be confirmed partly on the basis of the interactional context. Because it was the answer to a question about the location of the object, the utterance must, at the very least, supply the answer to this question. Rather than describing the location, however, *ja'a* directs the addressee's attention to the object, so that she can see for herself. The directive force can also be confirmed partially by the uptake of the addressee: when J points to his mother, R turns and looks in the direction of the point, and replies with an "Mhm" to confirm that she has found the referent.

As we have seen, then, J produces both presentative and directive tokens of *ja'a*. Because these two types of predication perform different functions, speakers need different kinds of knowledge and skills in order to use each function correctly. For example, these two types of predicate may differ in terms of their relative creative

functions. Hanks (2007) explains that “of the several perceptual values realized by OSTEVS, the most immediate is the one which specifies that the speaker has actual or potential tactual contact with the referent at the time of utterance” (6). In an example of such a usage, Hanks finds that the “utterance occurs in an almost maximally pre-established context” (6). In contrast, other utterances may contribute more to creating or constituting the deictic field, rather than presupposing it. Thus, skilled manipulation of these two functions requires knowledge about what one’s interlocutor knows and does not know.

In Example 1, the first utterance of *ja’a* occurs within a relatively presupposed deictic field. The two participants, J and P, share a perceptual and spatial field. They also share a focus of attention since both are interested in items from the toy bucket (Hanks 2007:317). J further draws P’s attention to the toy bucket with the racket he makes pulling his first toy from its depths. J has tactual contact with the object, and his combined gesture and utterance depend only upon an interpretation that reaches as far as the very immediate context. Furthermore, all subsequent utterances of *ja’a* in this interaction will occur in an even more presupposing context, in which the pattern of utterance and uptake has been established as routine.

Compared to 1, Example 2 involves relatively more creation of the deictic field. Again, the participants, J and R, share a perceptual and spatial field, although their orientations to the future object of reference are slightly different. For R, the future referent is directly to her right, so that she would have to turn her head 90 degrees from center to see it dead-on. J, who is on R’s lap, is facing the future referent directly. The participants share a focus of attention on the linguistic routine at hand. But because the

routine, up to Line 7, has dealt only with non-present individuals, focus on the routine has not necessitated focus on the immediate physical context or the use of referential indexicals. In Line 10, J indicates the object of reference both by uttering “*ja’a!*” and by pointing. While the object is visually available to J, he cannot be sure that it is available to R. Correct interpretation of J’s utterance, then, requires information that may be beyond the perception of his addressee at the time of the utterance. J’s indexical gesture has the force of creating a new, expanded field of context.

These examples suggest that tokens of *ja’a* having a presentative force may be relatively presupposing of the deictic field, while tokens having a directive force may be relatively creative. A child learning to produce such tokens would have to be aware of his own perceptual field, his addressee’s perceptual field, and how the two relate. The child would also have to know the position of the object, and how to unite the object with his addressee’s attention via indexical signs. In the case of *ja’a*, this latter task seems best accomplished through gesture. According to Table 1, *ja’a* does not occur without some sort of gesture. Next we will look more closely at the kinds of gestures *ja’a* combines with in child utterances.

The distinction between presentative and directive force may also be relevant at the level of gesture, and may influence the types of gestures available to speakers. Clark (2003) argues that indicating, which “has fundamentally to do with creating indexes for things,” can be accomplished via two basic techniques, “*directing-to* and *placing-for*” (244), or “pointing” and “placing.” The difference between these two techniques has to do with the relationship between the indexing site and the object of the index: “In pointing, speakers try to *direct* their addressee’s attention *to* the object they are

indicating” (248), thus creating “the indexing site with respect to the referent” (249). Meanwhile “in placing, speakers try to *place* the object they are indicating so that it falls within the addressee’s focus of attention” (248), thus presupposing “an existing indexing site and establish[ing] the referent with respect to it” (249).

It is clear that utterances of *ja’a* require some sort of indicating gesture, but it may be more common for presentative tokens to occur with a “placing” gesture and for directive tokens to occur with a “pointing” gesture. Indeed, in the examples above, we see just this pattern. In Example 1, J’s presupposing presentative co-occurs with the “placing” of a toy in his addressee’s hands. P’s subsequent stacking on his lap and on the wall of toys he has been handed establishes these zones as an extended indexing site for the activity. Thus, the placing of toys in P’s hands becomes equivalent to the placing of toys on the wall next to him; and the repetition of the routine allows for this abstraction of the indexing site. This combination further supports the argument that presentation is more presupposing, since its accompanying gesture could not make sense without a presupposed indexing site.

In Example 2, J’s relatively creative directive co-occurs with a “pointing” gesture: he extends his full arm and index finger forming a vector from it to the referent, his mother. In this case, J must shoulder the burden of directing his addressee’s attention to the referent, thus creating the indexing site. This combination demonstrates that the directive function of *ja’a* is relatively more creative, and therefore more likely to occur with the more creative indicating technique.

Thus far, I have attempted to define formally and functionally the ZAI deictic term *ja’a* and to delineate some of the rules governing its proper semantic and pragmatic



use. I have also discussed some of these rules in light of natural language data, demonstrating how examples of actual use can add nuance to functional descriptions. Now, I will return to the topic of my initial inquiry: the intersection of deixis and socialization. The term *ja'a* is used so commonly by and with children in my data, that it must be doing important and productive socializing work. I assume that, like all language, *ja'a* serves to socialize children to and through the linguistic and social information that it indexes. In particular, deixis seems to be important for socializing children to attend to intersubjectivity as a feature of context.

Duranti (2007) argues that the common usage of “intersubjectivity” in the social sciences to mean “mutual or shared understanding” is not “well supported by a close reading of Husserl’s writings” (1). Duranti undertakes to remedy this by providing an interpretation of Husserl’s notion of intersubjectivity that is broader and more foundational. He argues that such an updated interpretation might be useful enough to anthropologists that it would actually come to replace “culture” as “the common ground on which to found a truly interdisciplinary study of human sociality” (2).

An expanded notion of intersubjectivity underscores the fact that all ways of being in the world are indexical. Hanks (2009a) explains that his way of theorizing deixis as having three parts—object, origo, and the relation between the two—is similar to Du Bois’ (2007) concept of “stance” because “both are indexical relations linking participants, utterances, and objects and both draw on “footing” as defined by Goffman” (12 footnote 4). Similarly, intersubjectivity presupposes an indexical relationship among self, other, and the (e)valuated relationship between them. Like any indexical sign, the self acquires meaning by evoking that which lies beyond it. By saying that

children are socialized to intersubjectivity rather than to, for example, “culture,” I hope to emphasize that children are socialized to *relate* to the world and to others, and that this awareness of an indexical existence is a precursor to learning about interaction, language, and, more specifically, deixis.

Although all language “displays and invokes intersubjectivity” (Duranti 2007:40), deictics may be in a unique position to reveal how children discover and put to use their burgeoning intersubjective knowledge. For one thing, deixis makes certain assumptions about copresence. As I discussed earlier, for example, the Yucatec deictics encode the perceptual sense through which the object is available. Hanks (2009a) gives an example in which two people isolated from each other in a wooded area, may call out “Where are you?” and the appropriate response would use the simple locative phrase, *way yanen e'*, “I’m over here” (21). The deictic term involved, *waye'*, refers to the speaker’s own locative sphere, which the addressee can assume exists even though he does not know where it is relative to himself. This example shows how deictic terms encode an intersubjective understanding of the world in which locations are relative to others even in instances of minimal copresence. Thus, a deixis-based analysis can show what kinds of assumptions are already in play when a deictic act takes place. The intersubjective context is invoked in all deictic acts; and all deictic acts, in turn, contribute to socializing children to intersubjectivity.

## **Conclusions: Toward an integrated theory of context in deixis and socialization**

The theoretical approach set in motion by Hanks has much in common with current approaches in the study of language socialization, and his critiques of unidimensionality and the interactionist model would no doubt resonate with socialization scholars. In what follows, I will outline some of the convergences of theories of deixis and socialization and illustrate with examples the potential of these nexuses to yield rich data and novel insights. I will argue that consideration of gesture and other multimodal communication is especially central for illuminating convergences of deictic practice and socializing practice, and show how Hanks' concept of the deictic field can help sort out an analysis of this complex intersection.

Ochs and Schieffelin (1990) have criticized previous studies of “acquisition” and “socialization” first for seeing the two as separate domains, and also for divorcing “context” from language (470). They argue that language acquisition studies have tended to separate cultural factors from language and its acquisition, while anthropological accounts of socialization have tended to gloss over the role of language “used both *by* children and *to* children in social interaction” (1990:470). Ochs (1990) further explains that the “acquisition” perspective implies that the novice is a receptacle for input from the adult member, and the novice's goal is to become competent through “movement toward the adult model” (302). The acquisition approach may be useful in some analyses if, indeed, “there are linguistic and sociocultural structures that are nonnegotiable and must be acquired,” as Ochs suggests (1990:302), and if it were to incorporate a notion of interaction and joint activity. Ochs advocates a perspective that

takes into account the joint activity between novice and member and the potential “bidirectionality” of socialization despite social asymmetry; she calls for an integration of unidirectional and bidirectional models (1990:303). In an earlier review paper, Ochs and Schieffelin (1986) summarize their alternative perspective as follows:

The process of acquiring language is deeply affected by the process of becoming a competent member of society. The process of becoming a competent member of society is realized to a large extent through language, by acquiring knowledge of its functions, social distribution, and interpretations in and across socially defined situations (168).

Ochs and Schieffelin’s approach to language socialization as represented here has much in common with the interactive model as represented by the Conversation Analysts. Both stress the joint participation of all interactants involved, so that in contrast to input/output models, children are given an active role as agents in their own socialization and as socializers themselves. Also, the socialization application of the interactive model similarly sees interactive space as emergent: that is, negotiated in real time and sensitive to real-time circumstances.

In contrast to the interactive model, however, Ochs and Schieffelin also take into account cultural knowledge, relations of power, and other factors influencing an interaction that may not be immediately salient. They do not, however, suggest a way in which this social context may be linked to the local interactive context. Hanks’ deictic field does just this, relating “a *Zeigfeld* to a broader social world” (Hanks 2005:194). And although other social fields can perform this function, such as the institutional fields analyzed by Bourdieu (Hanks 2005:192), the deictic field is unique for its ubiquity: “*deictic reference takes place in every field in which agents communicate with language*” (Hanks 2005:194, emphasis in original). So while other social fields, such as

the educational, artistic, economic, and many more play a role in socialization, the deictic field is operating as a socializing tool in every interaction a child has, teaching him or her about the ways in which interpersonal activity relates to language structure, and the way language structure relates to context (Hanks 2005:194). Through deictic practice, children experience and experiment with communicative resources that may later serve them in more specialized and restricted social fields. Hanks' notion of "context as a social field" then, fulfills Ochs' call for a way of conceptualizing context and language through a more unifying lens.

Research on child language can also help expand upon the theoretical repertoire of research on deixis. More specifically, theory on deixis lacks models of participation frameworks and gesture that are tailored to children's interactions. De León (2000) has proposed an alternative to the classic participation frames model; it takes into account the fact that participants engage in interactions through more than speech alone, and that these bodily forms of engagement might be especially important for a developing child. Furthermore, de León adds the insight that the "speaker/hearer dyad," often assumed to be the normal conditions of socializing interactions, is not actually so ubiquitous. She explains:

In the case of the developing competence of the child, engagement is revealed in the co-production of the specific activities she is immersed in; and her participation may be entirely nonvocal, involving body movement, body orientation, gaze and gesture. A model of language acquisition based on an expanded participation framework of this kind enables a wider range of possibilities, not limited to the speaker/hearer dyad versus the eavesdropper in a corner watching TV (135-136).

The idea of an expanded participation framework, then, is one insight that research on socialization and multimodal communication can bring to the study of deixis. Applying

such a model to the present example would allow for a more complex understanding of participation that includes the actions and gestures of the communicative agents.

Haviland (2000) criticizes traditional acquisition research for its “preoccupation with a child’s first ‘words’” (162), which, he claims, rests on several misguided assumptions: first, that children’s early utterances are “compositionally combinable units of adult utterances;” second, that children and analysts can identify single “words;” and third, that spoken language is more important than other communicative modalities (163). Haviland calls instead for an approach that breaks down the wall between spoken and non-spoken communication and that refers to a more holistic picture of “notions of communication, speech, and interaction” (164).

Although Hanks has repeatedly acknowledged the uniquely close relationship between deixis and gesture—pointing in particular—both Enfield and Haviland, in their *Comments to Hanks* (2005), lament his superficial treatment of the subject and his relegating it to the periphery. As Enfield argues, “When a prelinguistic infant uses a pointing gesture to say the equivalent of ‘It’s there’ or ‘Gimme that,’ all the elements of Hanks’ structure of embedded fields are in place” (in Hanks 2005:212). Haviland offers a potential direction for remedying such inattention to multimodality, suggesting that “...the different morphologies of pointing gestures (Kita 2003) as well as the frequently prestructured spaces or places in which they operate may parallel both the elaborated paradigmatic contrasts and the social complexity in practice of verbalized deictics” (in Hanks 2005:213).

Haviland (2000) himself begins to speculate about how such a “gestural morphology,” might look specifically in a socialization context. He characterizes it as

“the form of movements and actions that go beyond those required for the alleged underlying ‘practical’ motives,” some of which might include highly conventionalized forms, and some of which may incorporate a “*pragmatic inflection* overlaid over the action itself” (Haviland 2000:175, emphasis in original). An example of a “practical” gesture is grasping an object; an example of a “conventionalized” gesture is pointing; and an example of a “pragmatic inflection” is a beckoning finger added to a pointing gesture (Haviland 2000:176). The guidelines for a particular gestural morphology could be developed from native metapragmatic interpretations. As Haviland explains, “At the earliest stages we have seen, taking as given received theories of mind, the only evidence for this transformation [from ‘practical’ action into signal] comes in the metapragmatic interpretations offered by observers” (2000:184). In other words, communicative function exists not because of the “intentions” of the child, but because of the unavoidable embeddedness of action in social context and thus the drive for participants to interpret (Haviland 2000:185).

### **Summary**

In this paper, I have shown what an approach to the study of socialization and deixis might look like, and illustrated some of the insights that might be drawn from such research. First, in outlining some of the foundational work that has been done on deixis, I identified some of the central problems that any work on deixis must address, especially those relating to the relationship between meaning and context. In the next part of this paper, I did a case study of a particular deictic term, the Isthmus Zapotec presentative/directive *ja'a*, both describing it and investigating how it is used. Because

it conveys both referential and nonreferential information, *ja'a* should be characterized as a presentative/directive deictic similar to the Yucatec OSTEVs and the French *voilà* and *voici*. The specific rules of use and grammar governing *ja'a* need to be further teased out using natural language data as well as metapragmatic assessments given by both children and adults. However, based on the data I have collected, I was able to draw some preliminary conclusions about how *ja'a* is used by children in interaction. *Ja'a* has both presentative and directive functions, distinguished in part by their relative presupposition/constitution of the deictic field; these two functions may also be accompanied by different kinds of gestures that similarly range from presupposing to creative of the indexing site. Furthermore, *ja'a* is one specific medium through which children are socialized to attend to intersubjectivity as a feature of context. I argue that deictic terms in general are an important resource for children to learn about indexical relations and the cohabited world. In the final part of the paper I discussed how research on language socialization can lend to deixis more sophisticated theories of participation frameworks, interaction, and gesture; while research on deixis can lend to socialization studies a more sophisticated theory of context.



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