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**Person Deictics and Imagination:
Their Metaphoric Use in Representational Play**

Abstract. This investigation traces the ontogeny of the use of “I” and how its use in representational play scenarios promotes its metaphoric extension to imaginative contexts. Person deictics, such as “I”, are first indexes. Later when their social function/ meaning is apprehended they serve as indexical symbols; still later they are used psychologically in self to self monologues, and acquire a metaphoric use when extended to representational play objects. The indexical use of “I” is non-deictic—“I” referring to self only absent recognition of conversational roles. “I” is employed symbolically when its referent shifts and when its invariant meaning (speaker) is apprehended. Person deictics enhance the emergence of imagination when their metaphoric application transcends their inter psychological regulation through human to human conversation to their intra psychological function in self to self discourse. Extension of functional roles (speaker/ listener) to dolls/puppets (in representational play scenarios) constitutes metaphoric use of the symbolic function because inanimates cannot assume conversational roles. The symbolic use of “I” as speaker facilitates apprehension of self as object which is a major determinant of when in ontogeny children extend the use of person deictics from social to psychological to metaphoric, imaginative scenarios.

Introduction

This paper seeks to demonstrate the pivotal role of linguistic shifters in the development of social toward psychological regulation and how they facilitate or enhance qualitative advances in cognition and imaginative thinking in the preschool child. Within social exchanges, children's notion of control over entities, others and eventually the self (objectification) is foundational to the imagination projecting animate and inanimate participants into functional roles. The ontogeny of certain linguistic shifters, namely those which classify conversational participant roles, proceeds from a social function (child to other) to a psychological one (child to self in monologues). The initial social function of participant shifters is to regulate a partner in the conversational exchange. Their later psychological function, when self talks to self, is to direct and modify the child's own conduct/thought and to promote the application of typically human conversational roles to inanimates.

Vygotsky's theories undergird this analysis in that socio-cultural interactions precede and enhance self regulatory advances necessary to imaginative thinking. According to Vygotsky (1978, p.27) language is a primary social tool; later it serves as a psychological tool facilitating development of individual selfhood. Person shifters, such as "I" and "you," (and in other grammatical cases "me," "mine," "yours," etc.) are particular linguistic tools which establish and modulate conversational roles and functional roles, proceeding from social to psychological functioning. Apprehension, on the part of the child, of participation in speaker and addressee roles ("I", "you") facilitates recognition of self as agent in a social exchange together with the recognition that others can likewise be agents. Mastery of shifting agency validates that the child thinks of himself and others likewise, as a member of the speaker class and consequently an initiator within a social exchange. Later use of conversational shifters in monologues or in self to

self dialogues indicates not social competencies but psychological ones (self as agent to self). The productive use of “I” and its counterparts within conversational exchanges serves as a scaffold toward imagining the social self or other humans/inanimates in shifting participant roles and in imagining the self as the only participant in multiple roles.

Ontogeny of Linguistic Functioning Toward Self Regulation: A Vygotskian Perspective

According to Vygotsky, three types of tool use exist to bring the child to self regulation: physical, social, and psychological. Physical tools are developed pre-linguistically during the “chimpanzoid age” (Vygotsky, 1962, p.42; 1993, p.71). They consist of the child’s use of an object to attain another and thus demonstrate some control over the physical environment. The child during the first year might attempt to attain a favorite teddy not by direct prehensile grasping alone with the hand, rather by vigorous attempts to cover and pull it with a blanket. This manipulation of physical objects is not yet social; it does not involve any partner to partner exchange, either conversationally or otherwise. Social tools likewise are developed pre-linguistically within “patty- cake” or “peek- a- boo” exchanges. Within these scenarios social tools consist of the quality of the child’s participation to affect the character of an exchange with the partner, e.g., readily turn taking or failing to do so. Children’s pre-linguistic conduct can serve as a social tool to alter the response of their partner. If one partner were to miss his or her turn, the other could accommodate or could withdraw from the exchange altogether. Once language has developed, it likewise becomes a social tool to control/modify responses on the part of conversational participants. A response of “No, I no wanna go!” on the part of a two-year-old is likely to result in a series of imperatives on the part of an adult, together with a decline in speaker role opportunities thereafter for the child. Both adult and child as speech partners can affect each other as conversational participants such that unwillingness on the part of one

conversational participant can estrange him or her from the other and may preclude ongoing speaker role taking during a social exchange.

To this point language, specifically conversational shifters, functions as a social tool to facilitate recognition of roles within event structures. Children's production of soliloquies/ monologues typically illustrates passage from language as a social tool to language as a psychological tool. Vygotsky characterizes the child's monologic performance as "egocentric speech," and claims that the proportion of egocentric speech increases during problem solving events, especially in the face of the need to reconstruct novel remedies when old remedies fail (Vygotsky, 1962, pp. 16-17). These egocentric monologues consist of audible (often whispered) discourse in which the child hears him/herself for the benefit of self. In these self articulated, self listening discourses children are speaker and hearers simultaneously; hence children can begin using language to influence their immediate conduct. Children's monologues often accompany problem solving tasks; and according to Vygotsky their function is to direct children's performance toward a goal and to facilitate success toward that end. In anticipation of gaining access to the mother's cell phone a three-year-old child expresses some contrived schemes aloud: "I wonder where mommy was earlier?" "I 'member she was in the kitchen chair, but I no 'member where mommy had her purse." "Might be on the chair too." (After looking) "Not dere." "Might be in bafroom." "Oh, wow, it is in the bafroom!" "I open mommy's purse for phone." The child's repeated reference during the monologue to his role as speaker and agent directs the sequence of problem solving behaviors, creating novel conduct when success is not immediately forthcoming. The function of language in the process of egocentric speech very obviously guides performance and even alters the quality of the performance to reach a goal. Had the child been silent the sought after forbidden object is likely to have been less attainable

because an alternative direction is unexpressed. Absent linguistic directives, conducting those directives is far less likely to materialize. Furthermore, the child's use of "I", addressed to self, is likewise for self; and his role as agent is more defined toward solving the problem (phone access). Absent the articulation of "I" classifying the child as speaker and agent and absent the child as hearer of this classification, redirection of new means (when old means fail) toward accessing the sought after object is unlikely. Use of "I" within egocentric speech scenarios illustrates that the child assumes two roles simultaneously; thus self affects self as speaker to hearer within the child's role as event agent.

For Vygotsky egocentric speech does not extinguish altogether; rather it becomes inaudible, amplifying its self-regulatory function in "inner speech" (Vygotsky, 1962, p.14). Inner speech is considered by Vygotsky to be thought without syntactic form but carries semantic viability: "Inner speech is to a large extent thinking in pure meanings. It is a dynamic, shifting, unstable thing, fluttering between word and thought" (Vygotsky, 1962, p.149). Because language is stripped of its external attributes, syntactic form and the like, it becomes one with thought, but is not synonymous with it. As in egocentric speech, language is still distinct from thought, but given its advancement to an inaudible character it shares with thought a vital role in the development of problem solving direction. Both egocentric and inner speech given their role of facilitator in problem solving events, have a self regulatory function:

"the function of egocentric speech is similar to that of inner speech: it does not merely accompany the child's activity; it serves mental orientation, conscious understanding; it helps in overcoming difficulties; it is speech for oneself, intimately and usefully connected with the child's thinking." (Vygotsky, 1962, 149)

Inner speech is likewise inaudible speech for oneself, and like egocentric speech, inner speech serves as a device toward the same immediate end—redirection in a failed problem solving scenario. Consequently, inner speech, like egocentric speech, still functions to facilitate the success of problem solving events toward self regulation.

The inaudible nature of inner speech appears to deemphasize the focus on conversational roles. Since “I” and “you” are unexpressed, the nature of the participation in the shifting conversational event/s becomes immaterial. Inner speech concerns itself with roles within non speaker events only. In inner speech children never take any role in a conversation with self because there is no conversation. It is the child’s role in the non-conversational event only which is maintained. Self is still agent and self can still affect self during inner speech but self is no longer speaker or addressee to self. The role of “I” and “you” during egocentric speech scenarios is the impetus for characterizing and representing self in its other roles in non-social, more psychological event use, in which self affects self in a non speech event. But for the use of “I” and “you” in egocentric speech, apprehension of other non speech functional roles necessary to self regulation may well be thwarted. Essentially, the use of “I” and “you” in egocentric speech scenarios is the precursor to the advancement of inner speech in which conversational roles are no longer necessary.

The function of person deictic shifters undergoes several revolutions.¹ Prior to inner speech, their role is purely social since the referent of “I” and “you” shifts with exchanges with other. During egocentric speech “I” and “you” acquire a psychological role. Children recreate the original social scenario between self and other, but extend it to self only. Self becomes other in that it is subjective and objective. Receiving self as subject and object (speaker and addressee) simultaneously allows for self regulation. This lays the groundwork for the development of inner

speech and thought, especially imaginative thinking, whose emergence requires an understanding of self as object.

The role of objectification toward self regulation

Use of psychological tools (self affecting self) requires a rudimentary concept of self as object. To objectify means first to consider an entity to be distinct from the self. Perceiving a distinction between two entities is insufficient; apprehension of participation in social interactions, and classifying the nature of the participation are paramount. Inherent in the process of objectification is the recognition that the self and other can have a reciprocal relationship to one another in terms of their role in events. To assume a role in an event, on a literal plane, one must have the capacity to be an initiator as well as a receiver. The child must learn that self can take the role of other as legitimately as other can take the role of self. In interaction the child can in one instance be the initiator of an exchange and within the same series of exchanges can become the receiver or can become excluded from the exchange as a nonparticipant. Early in development children learn to affect the outcome of an event and its participants by modifying their degree of and quality of participation therein. In other words, a child can withdraw, partially or fully, from being an agent or a receiver, thus, changing the outcome of the event and the roles which others assume. The child as subject becoming objectified can reassume his or her role as initiator, as can others.

These turn taking interactions illustrate the socio-cultural basis for the psychological discovery of self as object. Objectification is initially dependent on social interactions (inter psychological) in that distinction of self versus other as initiator and receiver in exchanges is critical to recognizing other as object (intra psychological). The participants in an activity impose a sociocultural interpretation of relational exchanges. Such exchanges can consist of interactions

with objects or with others or with both.² It is this element of social intent and control in participant exchanges which provides the impetus toward regulation of other and self; this theoretical orientation evidences the socio-cultural foundation of self regulation. “It is the social process itself that is responsible for the appearance of the self” (in Mead, 1974, p. 142). Moreover, self regulation requires the apprehension of self as object (in Mead, 1974, p. 136). While regulation/control of other relies on participation in social exchanges, self regulation/control entails the additional skill of objectification, in particular, the awareness of the equal legitimacy of self and other when assuming shifting conversational/non-conversational roles. Whether the awareness of self as object in social and psychological interactions is conscious is not entirely determined. Although use of “I” in social/conversational exchanges, or in self to self exchanges, appears to be unconscious at first glance, certain psycho-linguistic skills militate in favor of the presence of conscious use. It is obvious that the child at three or four years of age, or perhaps earlier,³ does not provide spontaneous or elicited definitions of “I” (demonstrating meta-linguistic knowledge) during monologic egocentric speech. Nonetheless, children possess some means to employ “I” metaphorically when they apply socially motivated speaker/listener roles to themselves as psychological agents, i.e., self regulation is evident when children become their own agent. This metaphoric extension of linguistic roles implies some conscious knowledge of the meaning of “I” in its original social and literal function⁴-- “I” and “you” between distinct persons as opposed to “I” and “you” as distinct perspectives of the same person. Independent of whether the use of conversational deictics is conscious, or unconscious, it nonetheless facilitates the use of language from a purely social to a more psychological function. Perhaps, as Bruner points out in vague terms, language functions as “a raiser of consciousness” (1986, p. 143). In specific terms person deictic shifters expressing conversational

roles from the inter to the intra psychological, are responsible for an emerging awareness of self as object, self affecting self. Self rises out of our capacity to reflect upon our own acts, by the operation of metacognition. (Bruner, 1986, p. 67).

The influence of self on self constitutes internal mediation in that an utterance/thought controls/modifies one or more other thoughts/behaviors within the same individual. For the child to self affect, an internal sharing of perspectives must take place such that the child considers more than one outcome in an event and can control the quality of his or her own contributing behavior. Such internal control constitutes the very essence of self regulation. It remains challenging to ascertain when and to what degree the child is self regulating, given the covert nature of intrapsychological regulation. There exists little, if any, overt non-linguistic manifestation of control exerted from self to self; this type of regulation transcends social exchanges and experiences in the physical world. Difficulties interpreting covert cues which measure/influence the self regulation process underscore the need for linguistic cues toward that end. In fact, given their overt character, linguistic cues constitute not merely the primary facilitators toward self regulation but an indispensable measure of intra psychological development.

Person Deictics as Social and Psychological Tool toward Self Regulation

Language, particularly person deitic use, initially serves a social function (classifying separate conversational participants) and afterward a psychological function (as in inner speech when conversational participant roles are assumed by the same individual). Vygotsky proposes a theory of ontogenesis of inter to intra psychic functioning, which alters the purpose of these deictic shifters from enhancing social, to facilitating psychological development. Person deictics initially differentiate self among a sea of other selves (social function); afterward (during

egocentric speech) they accompany and direct/modify the child's own conduct (psychological function). Only later, when egocentric and inner speech prevail, do person deictics modify internal thoughts and behaviors.

Although Vygotsky illustrates the social genesis of language toward psychological regulation, he provides little, if any, microanalysis of which grammatical categories are particularly instrumental in attaining self objectification. In other words, he discusses the tool-like function of language as a whole without indicating which terms make apparent the identical, or distinctive, roles (conversational and otherwise) that self and other can take. An awareness of self and other as speaker/listener demonstrates and confirms both that the self and other can assume these conversational roles and that in addition to the invariant meaning of speaker and listener, the role of self and other can shift. At some point the child apprehends the invariant meaning of "I" signifying speaker, as well as its shifting character: self as speaker, other as addressee or other as speaker, self as addressee.

Application of Charles S. Peirce's theory of signs offers insight into the linguistic complexities of person pronoun use and mastery within a socio-cultural milieu. A sign, from a Peircian perspective, essentially is that which refers to an "object" or that "which determines something else" (In Peirce, II, 1960, 169). Peirce has determined that three types of signs exist: icon⁵, index, and symbol (Peirce, II, 1960, 170). The latter two are germane here since they more directly pertain to meaning and use of person pronouns as conversational participants. Charles S. Peirce regards virtually all signs to have more than one semiotic function, e.g. the same sign may exist as an index and a symbol, an icon and a symbol, an icon or an index, etc. (Peirce, 1960, II, 166). Indexical signs stand in existential relationship with the objects to which

they refer, i.e. they must exist in the same spacio-temporal context as their referent (Peirce, 1960, II, 170). Indices possess two primary attributes:

1. they refer to an individual person/object/ group
2. they “direct the attention to their objects” (Peirce, 1960, II, 172)

In other words, indices point out, or direct someone toward, an object in the same environment.

An exit sign, or an index finger pointing at a referent, constitute quintessential indexical signs.

The demonstratives “this,” “that,” “here,” and “there” are likewise classic indexical signs

(Peirce, 1960, II, 170). Indexical signs, like symbolic signs, never bear resemblance to the

objects they represent (Peirce, 1960, II, 172). Symbolic signs differ from indexical signs in that

they have an arbitrary relationship with their referent(s), e.g. a seal of a university as well as the

term “university” are primarily symbolic in that their association with the referent object is a

consequence of convention only, a defining attribute of symbol for Peirce (Peirce, 1960, II, 165).

The nature of symbolic signs is that they denote a general type or set of qualities characteristic of

a set of referents without necessarily having any existential relationship with the signified

(Peirce, 1960, II, 166). In fact, the referents of symbols need not exist at all, but can refer to

objects which no longer exist or have yet to materialize (Peirce, 1960, II, 166), e.g. the words

“dinosaur” and “unicorn”.

Charles S. Peirce regards the speaker and listener pronouns to be indexical symbols such that the symbolic, or invariant, meaning of “I” is speaker (general type) while the indexical meaning of “I” refers to the particular user of “I” at any one point in time (token) (In Jakobson, R, 1957, p.2). The indexical meaning is extracted from associating the pronoun with its user. The indexical meaning, which emerges earlier in development than does the symbolic meaning, is extracted by associating the pronoun (sign) with its particular user at different points in time

(Clark and Clark, 1977, p. 313 and Clark, 2003, 95, Goodwyn & Acredolo, 1993).⁶ The sign “I” is in an existential relationship with that which it signifies (the particular user) such that it points out its referent in the same spacio-temporal environment. “I” is articulated by the referent person, illustrating the contemporaneous relationship between the indexical use of “I” and its particular referent. The indexical use of “I” is not iconic since “I” does not bear resemblance to any particular user. Onset of the indexical use of the conversational deictics “I” and “you” takes place from its earliest productions in the second year of life until the productive use of the symbolic function of “I” at approximately 3;0 (Loveland, 1980, West, 1986, p. 139, 1987, p. 138, 1988, p. 44). In fact, pointing gestures and eye gaze are considered to be precursors to early use of deictic indicators, namely, demonstratives and person pronouns (Clark, 2003, 95). In other words, a purely indexical gestural sign is the precursor for the development for linguistic signs whose referents need to be indexed since they shift from context to context. Contextual dependence of conversational deictics determines their essential function as indexical signs.

Means to objectify the self from social participant to psychological participant is a primary determinant in productive use of the symbolic function of “I”. Although there is some fledgling sense of objectification present in the indexical use of “I,” self as distinct from other, full fledged objectification cannot be realized unless the symbolic meaning of “I” is apprehended. The symbolic meaning informs the child that “I” does not merely refer to individual participation in events, but to the nature of their participation in a particular type of event, the speech event primarily as opposed to a narrated event. Whereas the speech event consists of the speaker and the addressee and their potentially shifting roles, the narrated event expresses participant roles in the event under consideration (the event spoken about) (Waugh, 1976, 24 & 1990, 33). “I” within the speech event means speaker; and “I” in the narrated event

means agent. In “I completed the assignment” “I” takes the role of speaker in the speech event and the role of agent completing the assignment in the narrated event. “I” and “you” when used merely indexically refer to a particular person rather than to the type of role (speaker/ addressee). Stripped of its semantic potency, “I” is often used early on by the child to refer to him- or herself only, or is construed by the child to refer to another particular user, without realizing the speaker categorization (Clark, 2001, p. 380). This indexical use is non-deictic in that it fails to include the shifting character intrinsic to full fledged deictic use. The symbolic meaning solidifies the reason for the use of “I” and “you” altogether-- to classify persons, including the child as speaker. The symbolic meaning classifies participants by applying “I” to different persons who have a particular conversational role. It does not refer to the child or to other alone, as might a proper name (Lyons, 1968, 337-338); nor is its primary function to classify participation in the narrated situation (as agent, receiver and the like). The purpose of the symbolic use of “I” is to objectify, highlighting membership in the speaker class as the person producing the utterance ⁷. The indexical use may facilitate the symbolic toward such objectification. For the child, the indexical use of “I” (repeated exposure to and use of “I” applied to distinct referents within distinctive contexts) can serve as a catalyst toward objectification with mastery of the symbolic use of “I”. In sum, apprehension of the symbolic meaning of the grammatical category, speaker “I,” is necessary for full fledged objectification- the scaffold from social toward self regulation.

Paramount to full fledged objectification is the understanding that individuals are not inherently connected to a particular role/pronoun, i.e. the particular speaker does not define the role nor does the role define the particular speaker. The subject, namely, ego (the self), does not define “I” nor do others do so. It is the nature of the participation within the speech event which defines the role. Children’s use and comprehension of terms which connote shifting social and

linguistic roles permits them to depart from self as subject only and to view self as object. This inter to intra psychological progression illustrates how the grammatical category of person is particularly influential in the shift from self as a social agent to self as a psychological agent or receiver. It is only when the child can view self as subject and object that egocentric/inner speech and self regulation are possible⁸. To engage in inner speech toward self regulation the child must speak to/with the self such that the self is subject and object, speaker and listener, in the exchange. Communication with self entails recognition of two roles for the same individual, namely self. Thus, application of conversational roles to the self and the implementation of those conversational roles as a psychological tool ensure progression from interpsychological to intrapsychological control. Use of person deictics, in their symbolic and indexical sense, to refer to conversational roles, is pivotal to the shift from social to psychological regulation.

Metaphoric extensions of person deictics

Once the shift has been made from the use of conversational deictics in social contexts only to their use intrapsychologically as well, integration of the social with the psychological use can emerge. At two plus years of age and beyond, children begin attributing inanimate play objects with physical, social, and psychological human characteristics (Vygotsky, 1978, pg. 93, 98) which is an imaginative skill. Beforehand, children engage in mental imagery which is not imaginative (Piaget & Inhelder, 1969, p. 54, 71) since it originally develops from imitation and mental reproduction of a sensory experience⁹ (Piaget & Inhelder, 1969, p.69). The imaginative skill of attributing social and psychological human characteristics to play objects provides the forum for observation and measurement of children's use of conversational deictics during representational play scenarios.¹⁰ The nature of play as expressing role taking exchanges together with the fact that linguistic narrative often accompanies these role taking exchanges,

necessitates frequent use of person deictics. Use of these deictic shifters prior to the onset of representational play coupled with the continuation of their use during enactment of representational play scenarios lends credence to the claim that deictic shifters constitute the foundation upon which representational play events are scaffolded. “I,” “you,” “he,” “she” and the like do not merely serve as precursors to the onset of more advanced representational systems, they accompany and direct those imaginative systems. Without the preparation afforded in using speaker, addressee and non speech participant signs functional roles within representational play and other advanced imaginative systems are unlikely to be discerned.

Children utilize the literal, social use of conversational deictics in play scenarios in which “I”/ “you” is extended to imaginative settings, imaginative objects/people, and to representational objects. In the case of the latter, children apply conversational deictics to tangible objects which are inanimate. Application of “I” and “you” in these representational play scenarios extends their meaning—“I” and “you” as human participants to “I” and “you” between inanimates or within a single inanimate. The metaphor is illustrated by the amplification of the original, literal meaning between humans, to its less literal meaning within a single human and finally to its non literal meaning with objects whose capacities preclude taking speaker/listener roles. This metaphoric use of “I” and “you” demonstrates increased imaginative thinking such that inter and intra psychological skills are extended to those who do not possess such skills, e.g., puppets or dolls within representational play can take on speaker or addressee shifting roles even though they are not animate and cannot converse. When linguistic shifters are used to accompany representational play scenarios, they are applied in a metaphoric sense in that the inanimate referent of “I” may never have the means to speak interactively; and inanimate referents of “you” never have the means to take the role of listener. In fact they neither speak nor

listen, it is the child who speaks in their stead and listens in their stead. In this play context, “I” and “you” are used metaphorically in that their use transcends the literal. Such metaphoric use transforms the event from the actual to the imaginative.¹¹ As illustrated by the infamous Sesame Street puppets: “Ernie” can exist in the imaginative world as speaker or addressee, “Bert” can likewise assume these roles despite his inanimate nature. Bert can also be an “I” to himself as can Ernie in the imaginative sense, thus exhibiting control not merely over the other but over each self. It is at this juncture that the child extends both the inter and intra psychological function from humans to inanimates. If Bruner’s claim (Bruner, 1986, p. 67) is accurate 1) that metaphoric/metacognitive skills are teachable to children and 2) that culture is the mechanism for the degree of facilitation of such skills, then linguistic roles as expressed by conversational deictics, which constitute cultural tools, can promote the development of metaphor in representational play scenarios.

Application of deictic shifters to inanimates is a quintessential illustration of imaginative thinking in that metaphoric extension and “a departure from reality” are both present. According to Vygotsky (1987, p. 349), imagination must ‘depart from reality’; it must exhibit a certain distance from the immediate spacio-temporal context. Likewise, Vygotsky (1978, p. 94) asserts that some measure of emotive functioning/ affect is present in imaginative thinking.¹² Children’s impetus for representational play according to Vygotsky (1978, p. 93) is a consequence of desires which are not realizable. In representational play the child is reenacting some semblance of actual events at a later time, and perhaps in a different place. Moreover, the participants of the exchange depart from reality/ the actual since they are inanimates and are not conversational partners in the real world. The child must go beyond the actual in space and time and in participant role recognition to ascertain imaginative thinking through representational play.

Modifying the original social event using different types of participants in the same event roles, and/or displacing the original events to distinct settings, demonstrates a departure from reality, constituting more advanced objectification than is present in self regulation only. Perceiving inanimate participants as subject and object to one another and to themselves amplifies participant roles from the actual (literal) static function to a more dynamic metaphoric function. Extending functional roles uncharacteristically to inanimates is unattainable without full fledged objectification, a skill without which imaginative thinking could not develop.

Conclusion

On numerous occasions language is cited to be the primary tool toward socio-cultural development (repeatedly by Vygotsky, Bruner, Piaget). Nonetheless, it has been demonstrated herein that such claim, although true, is vague and incomplete. While the primary function of language as a whole is communication- a sociocultural function- the particular functions of person deictics hasten: 1) the recognition of self as object- the bridge from social to self regulatory processes, and 2) the use of metaphor/analogy in representational play contexts. Conversational deictics have a very specific and vital role in transforming social tools to psychological ones and in transforming the literal to the imaginative.

Productive use of “I” and “you” in conversational exchanges appears to be the initial linchpin toward applying such role shifts to other more imaginative representational interactions. Use of “I” and “you” as indexical symbols creates conversational slots which distinctive types of participants can fill. It is evident then that social functions as expressed in language create the foundation for imaginative functional roles and in turn influence the characterization of such roles. They amplify and transcend the literal animate use of conversational shifters to a

metaphoric use. Person deictics, given their conversationally shifting character, epitomize the influence of social exchanges on imaginative thinking.

These deictics ensure the recognition of functional roles within events. Since functional roles are a vital component in placing participants and representational objects in possible events, they serve a primary function in the development of imaginative thinking. In fact, metaphoric extension of these person deitic shifters to inanimates, may monitor the emergence of imaginative thinking—violation of the conventional use of “I” for speaker marks the threshold when the child is liberated from the actual and reproduction of the actual. The imagination would be thwarted without the means to project an inanimate whose participation is conventionally unforeseen into roles within possible events. Person deictics are the vehicle by which functional roles are applied in imaginative contexts.

Notes

1. Deitic shifters was coined by Jespersen (In Jespersen, 1922, 123). As a grammatical category deixis “(which is merely the Greek word for ‘pointing’ or ‘indicating’...) is introduced to handle ‘orientational’ features of language which are relative to the time and the place of utterance. The so-called ‘personal pronouns’ (*I, you, he, etc.*) constitute only one class of the elements in language whose meaning is to be stated with reference to the ‘deictic-co-ordinates’ of the typical situation of the utterance (Lyons, 1968, 275).
2. Leont’ev’s notion of activity is germane here. According to Leont’ev activity is “the nonadditive, molar unit of life... mediated by mental reflection. The real function of this unit is to orient the subject in the world of objects” (in Wertsch, 1985 p. 211).

In other words, activity is the interpretive cognitions of conduct. Interpretations necessarily involve perspectives couched in sociocultural principles. Interpretation of the exchange may or may not be conscious on the part of the participant(s) and involves some element of intent toward a goal (In Wertsch 1981, p. 401). When the goal involves exchanges with others, as opposed to exchanges with objects, it necessarily presupposes social intent.

3. Meta cognitive/ meta linguistic skills may in fact be exercised at still earlier ages, at 1;8 (Bruner, 1986, p. 67) “an *Anlage* of metacognition is present as early as the eighteenth month of life. How much and in what form it develops will... depend upon the demands of the culture in which one lives” (Bruner, 1986, p.67). Bruner additionally suggests that the degree of self correction which the culture permits or promotes determines the age of onset of metacognitive activity and, I might add, social and self regulatory activity (1986, p. 67).

4. A constructivist approach to metaphor entails “the application of a word or expression that properly belongs to one context to express meaning in a different context because of some real or implied similarity in the reference involved” (C. Anderson, 1964, p.53). The similarity between the original context and the metaphoric extension is often difficult to discern, especially when the creator of the metaphor is a child. At two, three and perhaps four years of age, rationale for metaphoric extensions based on similarity are unlikely. It is doubtful, at best, that metacognitive skills at this age have developed sufficiently to express any similarity between an original use and a metaphoric use, even if the similarity is perceptual/iconic. Consequently, the motivation/basis for the similarity is never consciously surfaces, nor is it always apparent to adult interlocutors. With respect to the use of personal pronouns from their original context with humans to their metaphoric use with inanimate play objects, the unexpressed similarity for children is perceptual—puppets/dolls and humans both have perceptual organs and inherent

fronts and backs. Humans use their sense organs to engage in conversation as a partner (speaking, listening), and, for children beginning representational play, puppets or dolls do likewise.

5. According to Peirce an iconic sign represents its object “by its similarity,” such that it resembles its referent. In visual terms an iconic sign is “an image of its object.” (1960, II, 157).

A quintessential illustration of a visual iconic sign is a statue, photograph, or other depiction of Abraham Lincoln. Iconic signs do not merely represent visually, but can represent a likeness of other sensory modalities: auditory, tactual, and the like. The sound that a car produces while traveling in the rain like a “swish” represents the rain in the auditory modality.

6. Indexical gestures (primarily pointing) are employed as early as 11 months prior to the emergence of person and space deitics (Accredolo & Goodwyn, 1988).

7. In the case of addressee, the symbolic meaning of “you” the person listening to the utterance.

8. This process of objectification, or decentration (becoming less egocentric), takes place far sooner than Piaget alleges. According to Piaget (Piaget & Inhelder, 1969, p. 94) egocentrism continues until eight years of age when the child is finally able to perspective take.

9. While representational play illustrates competence in role taking scenarios this competence does not appear suddenly. Certain linguistic competencies underlie and facilitate the cognitive skill of attributing a shifting character to participants within a play event. That which a child represents in play if it departs from reality/ the actual must first be experienced in actual social exchanges (Piaget, 1962 p. 215). This shift from the actual to the representational demonstrates the necessity of social foundation for the development of imaginative thinking and the essential role of language toward that end.

10. The premise here is that the imaginative function begins with the development of early cognitions, namely, mental imagery and objectification which are dependent on social interactions accompanied by language. Deferred imitation illustrates the earliest forms of mental imagery, according to Piaget (1962, p. 63). At 1;4 children can later imitate action sequences which they themselves observe. While imitation which is immediate represents mere copying without the intervention of memory, deferred imitation is attenuated from the original event in time; thus pictorial memory of the original event must be stored at least until the reenactment. An additional illustration of the emergence of mental imagery (anticipation of the consequences of an event) materializes at 1;8 (Harris, 1997 p.15). Anticipating the same consequences that were already observed is insufficient to full fledged imagination in that the consequence which the child expects does not diverge from the actual—the expectation merely consists of unaltered memories of the original events. Memory of the actual, either deferred imitation or expectations of event's consequences, devoid of any alteration fails to constitute imaginative thinking. One of the primary attributes of imaginative thinking according to Vygotsky is that representations exhibit 'departure from reality' (Vygotsky 1962, p. 349). Early mental imagery fails to attenuate the participants of the event from the event itself, or from the place of the original event; hence, these mental images do not 'depart from reality.' It is not until contextual attributes of the event can be varied that children can 'depart from reality' --neither participants, nor place, nor time is intrinsic to the event.

11. Metaphoric use here refers to non-literal and often involves some and often involves some extension of meaning of the original use of a concept or term to a somewhat analogous context.

12. Vygotsky notes that although in large part affect exerts imaginative thinking, affect can likewise be present in “realistic” (non-imaginative) thinking, especially when an experience/discovery is intense (Vygotsky, 1987, p. 347).

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