



A pragmatic view on referential acts in aphasia

Roberto Graci^{*}, Alessandro Capone

University of Messina, COSPECS, Via Concezione 6/8, Messina 98121, Italy

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ABSTRACT

This paper investigates referential acts in discourse, focusing on how individuals with aphasia use language within specific communicative contexts. We argue that reference is not merely a function of lexical or syntactic conventions, but a pragmatic act shaped by context, shared knowledge, and interactional dynamics. Through discourse analyses, we show that people with aphasia often maintain referential coherence when supported by collaborative interlocutors. In contrast to traditional assessments that rely on decontextualized testing, we advocate for assessment approaches grounded in the analysis of real communicative situations, which better capture the situated and collaboratively constructed nature of reference. By integrating contextual, perceptual, and social dimensions into assessment and intervention, we propose a shift toward more dynamic and effective models for understanding and supporting communicative abilities in aphasia.

1. Introduction

In this paper, we will explore referential acts and their connection to discursive context by analysing discourses produced by people with aphasia. These examples aim to show that, despite the conventional nature of certain lexemes or syntactic constructions, their use in discourse is often guided by pragmatic reasoning. Inferences drawn from specific linguistic signs are stereotypical, just like the uses and functions of certain objects. However, language users engage in explicit or implicit reasoning about why a particular lexeme was used at a certain moment in the conversation, why one choice was made over another, and why the speaker employed language in a specific manner.

In Section 2, we introduce the core concepts underlying our work—namely, reference and referential acts—and examine the most prominent perspectives on these topics. In Section 3, we show that when confronted with irregularities or deviations in discourse, speakers consistently resort to contextual cues to draw the most plausible interpretation. This reflects the fact that reference is not an inherent property of words alone, but a speech act embedded in context and shaped by the norms of language and society—i.e., a *pragmatic act* to follow terminology by Mey (2001). In Section 4, we turn to the crucial role of the interlocutor in everyday communication, emphasizing how the speaker's referential intentions are co-constructed within the specific situational context shared by both participants. Interpretation, too, is a pragmatic act that relies on shared knowledge and aims at making the utterance meaningful.

In Section 5, following an overview of language disorders in aphasia, we examine the principal approaches developed to assess referential impairments. Historically, aphasia research has overlooked the inherently communal and contextual nature of referential acts, favouring standardized assessments conducted in controlled, laboratory environments. Yet these testing conditions fail to capture how communication unfolds in real-life contexts, or how the brain processes the rich, meaning-laden stimuli of natural interaction. While recent developments have begun to acknowledge the importance of evaluating language use in settings where discourse is contextualized significant gaps remain. In particular, the communal and situational dimensions of speech acts—referred to by some pragmatic scholars as *pragmemes*—remain insufficiently addressed. Integrating context-sensitive analysis into language assessment offers a deeper understanding of communicative competence in people with aphasia.

In Sections 6.1 and 6.2, we aim to demonstrate that examining the discourse of individuals with aphasia within well-defined communicative contexts significantly reveals a markedly different picture of their referential abilities. On the one hand, individuals with aphasia are often capable of effectively capturing their interlocutor's attention at key moments, initiating sequences of action directed toward objects in the shared environment. In narrative contexts, they frequently exhibit a surprising degree of coherence, successfully maintaining the temporal structure of events, introducing relevant characters, and signalling those characters' roles within the story. On the other hand, these communicative successes are made possible, in large part, by the active

^{*} Corresponding author.

E-mail addresses: rgraci@unime.it (R. Graci), acapone@unime.it (A. Capone).

participation of interlocutors, who function as collaborative agents in negotiating meaning. Whether family members, healthcare professionals, or others, interlocutors typically possess an awareness of the speaker's condition and assume a degree of responsibility for sustaining the interaction. They do so by adapting to the speaker's needs, interpreting intended meaning pragmatically, and avoiding strategies that might undermine the flow of communication. One of the most effective responses lies in engaging in a form of *reasoning to the best explanation*, interpreting the utterance in light of the broader communicative context and the shared situational cues.

The research concludes that referential errors in aphasia can only be fully understood by taking into account both the broader situational context and the active role of the interlocutor in interpreting the speaker's utterances. As a result, assessments and treatment plans for individuals with aphasia should employ comprehensive frameworks that incorporate a wide array of communicative factors. Such models would clarify the dynamic interplay between these factors, allowing for interventions that are tailored to the specific contexts in which communication takes place.

2. Reference and referential acts

While reference has been defined and interpreted in various ways, many philosophers agree that it involves a relation between a linguistic expression and the entity (the thing) a speaker intends to indicate with that expression. The traditional philosophical challenge is to determine the conditions under which an expression successfully singles out a specific referent. How does a sequence of sounds manage to refer to something in the world? And what roles do linguistic norms and contextual factors play in establishing this connection?

Over time, two broad approaches to reference have emerged to address these questions (see Capone, 2024; Evans, 1982; Sullivan, 2006 for a more extensive discussion on this topic). One influential approach adopts a purely semantic perspective, conceiving reference as a simple two-place relation between a linguistic expression and an object in the world. This view excludes any involvement of mental or conceptual intermediaries. It focuses on the notion of *denotation*—the stable, conventional association between an expression and the entity it designates, grounded in linguistic rules and typical usage patterns. Within this framework, reference is understood in a narrowly defined sense, largely overlapping with the study of the semantics of singular terms. Nevertheless, other semantic theories broaden this perspective by incorporating conceptual elements and proposing a triadic relationship that involves the linguistic sign, the mental representation it activates, and the world. According to this view, the concept triggered by a referential device, such as a definite description, allows the hearer to select a referent, as the referent must satisfy the description (these perspectives are also referred to as *descriptivist*). As a result, the semantic relation between sign, concept, and world involves not only reference in the strict sense, but also predicates or general terms that, while not referential themselves, contribute to the truth conditions of the sentence in which a referential use of an expression appears.

In contrast, the second approach is pragmatic in nature and embraces a broader perspective on reference by incorporating a wide range of contextual and interactional factors (Allan, 2010; Mey, 2010). This view does not reject the insights of semantic theories or the relations they describe. Rather, it emphasizes that referring is fundamentally a speech act performed by speakers within specific communicative contexts, rather than a property inherent in words themselves. Central to this account is the notion of *speaker's reference*, conceived as a four-place relation involving the speaker, the linguistic expression (with its range of denotations), the interlocutor, and the specific context in which the exchange takes place. A key insight of this pragmatic perspective is that referential acts are inherently interactive and co-constructed. In communicative interaction, there are no isolated subjects or objects; instead, meaning and reference emerge through the dynamic

engagement of participants. In this view, referring cannot occur in isolation: it is successful only when a shared understanding of the referent has been collaboratively established. Thus, referentiality is not merely a semantic function but a deeply pragmatic, cooperative act. In this paper, we adopt the pragmatic perspective on reference, as it provides a more comprehensive and context-sensitive account of how individuals effectively establish a shared framework for communication and interaction.

3. Referential acts and *pragmemes*

From a pragmatic perspective, no referential act can occur in isolation. Speech acts only exist when they are contextually grounded. Mey (2001) refers to situated speech acts as *pragmatic acts*. They depend heavily—if not entirely—on the context of use. This includes the social setting where speakers engage in a “linguistic pact” that encompasses not only their verbal expressions but also the range of acceptable discursive behaviours:

Speech acts, in order to be effective, have to be situated. That is to say, they both rely on, and actively create, the situation in which they are realized. Thus, a situated speech act comes close to what has been called a speech event in ethnographic and anthropological studies (Bauman & Sherzer, 1974): speech as centered on an institutionalized social activity of a certain kind, such as teaching, visiting a doctor's office, participating in a tea-ceremony, and so on. In all such activities, speech is, in a way, prescribed: only certain utterances can be expected and will thus be acceptable; conversely, the participants in the situation, by their acceptance of their own and others' utterances, establish and reaffirm the social situation in which the utterances are uttered and in which they find themselves as utterers. (Mey, 2001:219).

According to this perspective, the focus should shift away from purely grammatical analysis or the felicity conditions of speech acts, and instead be directed toward the relationship between speech acts and the typical situations in which they occur. When examined from a generalized standpoint, this relationship is expressed through what we call a *pragmeme*—a term coined by analogy with linguistic units such as *phoneme* in phonology, *morpheme* in morphology, and *lexeme* in lexicology. Pragmemes encompass prototypical sequences of actions—both linguistic and non-linguistic—that can be performed within specific situational contexts, such as a university exam, a funeral rite, a classroom lesson, or a dinner at a restaurant (Capone, 2005). In the pragmeme theory, the emphasis is placed on the overall situation in which communication takes place (see also Capone & Graci, 2024 for an extended account on *pragmemes*).

When referential acts are situated within a context, they cannot be said to have a fixed or univocal reference exclusively based on their linguistic (or semantic) content. The same referential act can serve different functions depending on the situation and its position in the discourse. Identifying the set of denotations associated with an expression (e.g., an NP) within a purely linguistic framework is not the same as understanding the speaker's reference. Referring is fundamentally a pragmatic act, not merely a semantic operation—such as distinguishing between definite and indefinite nouns or identifying the possible range of values of indexicals like “he” or “this” based on their linguistic properties. While these linguistic processes may be necessary for extracting certain aspects of meaning, they are not sufficient for grasping what the speaker is actually doing in context or *why*. What people intend to communicate is not always what they explicitly say, and conversely, what they say is not always what they intend to communicate. *Intentionality* is the crucial factor in this dynamic, and it cannot be reduced to a simple correlation between observable elements in a sequence of events (Searle, 1983). This is particularly evident in linguistic mistakes, such as slips of the tongue, where there is a clear divergence between denotation and the speaker's reference. In such instances, the speaker thinks of the correct object but uses a word that denotes a different class of objects. Essentially, the speaker has object Y

in mind but mistakenly uses the word X, which does not denote Y. This can create a discursive anomaly: the speaker's utterance may not be consistent with what s/he has been previously stated, it does not conform to our schematic world knowledge, clash with information from the perceptual context or the broader discursive situation. Nevertheless, in many cases, the hearer is able to reconstruct the speaker's intended meaning, thanks to a cooperative attitude and the ability to formulate a plausible interpretation of what the speaker had in mind within the specific communicative exchange. Mey suggests that interpretive processes of this kind depend heavily on *the force of the situation* (Mey, 2010:2883).

Such instances do not typically pose insurmountable barriers to communication. The referential act is inherently tied to visual, socio-cultural, situational cues, and prototypical situations; it is never performed in isolation. As the pragmatic perspective points out, the referential act is a contextual process. The reference we have in mind when we utter an expression depends on how our interlocutors interpret the potential meanings it could convey. Furthermore, every referential act within a context is influenced by the broader societal context that is shared between us and our interlocutors. In such situations, what we say and understand resembles what philosophy refers to as *abduction*: we draw conclusions or make inferences not only from what we hear or observe but from the fact that we are predisposed—or 'set'—to perceive and interpret events in a particular way. We are socially authorized to speak and act in ways that are meaningful within a given context. Context not only shapes the linguistic forms speakers use but also governs *how* those forms are interpreted.

4. The Discursive nature of referential acts

When we engage in an interactive exchange, we tend to assign specific meanings to certain linguistic expressions based on the prototypical situation in which the interaction takes place. The particular acoustic and visual features of the context help to signal the speaker's communicative intent and guide how the message is likely to be interpreted. However, determining the speaker's reference involves more than just the situational context; other crucial elements come into play. One often overlooked factor in traditional analyses is the role of the *interlocutor*. Contrary to what the term might suggest, the interlocutor is not merely a "co-speaker," but first and foremost a collaborative participant—an *interactor*. A core principle of pragmatics is that interaction relies on the shared experience (i.e., the *common ground*) and the cooperative behaviour of all participants. Whenever a sign is used ostensively, it is meant to communicate something to someone. This "something" may be a full proposition or sentence—but it can also convey a feeling, indicate a stance, or serve as a reference. In all such cases, pragmatics becomes relevant only when the communicative partner actively participates in the interpretive process. Moreover, cooperation grants the interlocutors certain rights and responsibilities. They can choose to withdraw from cooperation when communication breaks down. But when cooperation is offered and accepted, the interaction becomes more than the mere exchange of sounds—it becomes a jointly constructed act of meaning-making. In this view, the interlocutor is not a passive recipient of information, but an active agent capable of dynamically co-constructing and negotiating meaning throughout the exchange. Additionally, the interlocutor has the capacity to influence the direction of the conversation, shaping it to fit the specific contours of the situation at hand.

There is considerable evidence that language use in conversation differs significantly from other forms of language use (e.g., conferences, lectures, or narratives). One of the most significant differences involves the concept of *sequentiality* (Wilkinson, 1999). Conversation analysis research has shown that the way an utterance is shaped in relation to preceding turns plays a critical role in how it is understood (Schegloff, 1984; Schegloff, 1988). For example, Heritage (1984) points out that every utterance in spoken interaction is both *context-shaped* and *context-renewing*: its meaning and function are interpreted based on the

turns that come before it, and at the same time, it shapes the expectations for what follows. In this sense, language in conversation is not only situated within a context but also actively contributes to creating the context for subsequent utterances.

Goodwin (1986) has demonstrated that the meaning of an utterance can shift depending on the interlocutors and their ability to contribute to a speaker's search for words. While word searches might appear to stem from internal psychological processes, *how* speakers navigate and respond to them in conversation reveals their deeply social nature. As Goodwin emphasizes:

The fact that B, someone other than the original speaker, produces what might be the sought-for word, demonstrates that searching for a word is not simply a cognitive process which occurs inside a speaker's head but rather is a visible activity that others can not only recognize but can indeed participate in it. (Goodwin, 1986:52).

As we will explore in Sections 6.1 and 6.2, this is particularly relevant for referential acts produced by people with speech disorders. In the case of aphasia, the linguistic system provides limited support to the speakers, often resulting in the incorrect use of referential devices. In these instances, successful communication relies heavily on the situational context and the cooperative efforts of the interlocutors, who play a crucial role in shaping meaning according to the context and flow of the conversation. Before delving into this further, it is useful to provide a brief overview of aphasia and the language production challenges it entails.

5. Language impairments and communication skills in aphasia

Aphasia typically occurs following a focal lesion in the left hemisphere caused by degenerative disease, stroke, or head trauma. Moreover, language impairments in aphasia never emerge in a stable and regular way. We find a multitude of linguistic deficits that vary in qualitative and quantitative terms (Cummings, 2009; Cummings, 2017) and encompass multiple levels of language, including phonology, morphology, syntax, and semantics. In order to establish a clinical picture within which to operate, many diagnostic manuals rely on the distinction between fluent and non-fluent aphasia. The fluent/non-fluent distinction is never clear-cut but corresponds to two extremes of a continuum that sees intermediate situations. Fluent aphasics generally produce long, well-articulated, and incoherent utterances that retain intonational and suprasegmental features of normal speech. The lack of sense and coherence in their speech is due primarily (but not entirely) to lexical-semantic problems: they often select incorrect words, resort to circumlocutions when they cannot recall specific terms, and repeat the same expressions. In contrast, non-fluent aphasics struggle with producing speech. This is marked by disrupted articulation and altered intonation patterns. Their severe expressive challenges are primarily due to syntactic issues, including the omission of function words (such as determiners, prepositions, and pronouns), morphological markers, and verbs. These omissions and hesitations create a "telegraphic" style often described as "agrammatic speech" (Heeschen & Schegloff, 1999). For example, instead of saying "She is going to the store to buy groceries," a non-fluent aphasic might say "Go store... groceries."

In the late 19th century, as interest grew in analysing brain lesions and their observable effects, several tests were developed to specifically assess impairments at the levels of phonology, morphology, syntax, and semantics. These tests (continually updated to reflect advances in linguistics) remain widely used today in clinical and diagnostic settings. Cummings refers to these as "formal language tests" (Cummings, 2023:406). These are quantitative assessments based on standardized tasks, where a precise score is assigned according to the number of correct responses. Examples include the Boston Naming Test (Kaplan et al., 1983), which assesses the ability to name objects shown in pictures, and various subtests within comprehensive aphasia assessment batteries, such as the Boston Diagnostic Aphasia Examination (BDAAE) (Goodglass et al., 2001), the Western Aphasia Battery-Revised (WAB-R)

(Kertesz, 2006), the Frenchay Aphasia Screening Test (Enderby et al., 2013), and the Mississippi Aphasia Screening Test (MAST) (Nakase-Thompson et al. 2005). The subtests within the batteries above include tasks such as repeating words, completing sentences by choosing from a list of alternatives, and writing letters or numbers from dictation. Instructions for administering and scoring are strictly defined, leaving no room for individual interpretation. They also specify precise time limits for each task. Formal language tests offer clear advantages, which is why they remain widely used by clinical professionals, including speech therapists, neurologists, and psychologists. The primary benefit of these tests is their ability to provide an *objective* measure of a person's language abilities over time. For instance, tasks such as word repetition or picture naming can be administered repeatedly to a speaker with aphasia after a stroke, allowing clinicians to monitor stages of language recovery and track any progress. Alternatively, formal tests can be used to compare an aphasic speaker's language abilities to those of a healthy population or to individuals affected by different clinical conditions.

Despite the value of formal tests in researching and treating language disorders, their use comes with notable limitations. A primary concern is that focusing on isolated aspects—such as morphological, syntactic, or lexical deficits—reveals little about how these specific impairments have an impact on an individual's *overall communication abilities*. That is to say, these tests fail to capture aphasic speakers' ability to dynamically combine their remaining linguistic resources with non-linguistic cues in discourse, adapting to fulfil their own needs as well as those of their conversation partners. Furthermore, these tests fail to account for the role that many extra-linguistic elements play in shaping language use. Indeed, different factors, including situational context, emotional influences, the activity at hand, and the individuals' prior experiences (Kecskes, 2019), significantly affect language production and comprehension processes. For instance, an adolescent interacting with peers at school will likely use a different vocabulary compared to when s/he communicates with his/her parents at home or with a doctor in a clinical environment. Similarly, a person conversing with a foreign speaker or a child will adopt a stylistic register that is different from the one s/he uses when engaging with someone who shares his/her language or with an adult (see Allan, 2013; Kecskes, 2013). Again, an angry person engaged in an argument with a partner will display significant changes in prosodic features—such as a faster speech rate, higher pitch, and reduced pauses—compared to when s/he is chatting with a friend. Despite their importance in linguistic assessment, these aspects are often overlooked in formal tests. In conversation, we do not simply construct sentences from a fixed set of words or a predetermined context. Instead, we actively shape the context based on what has already been discussed, what the hearer is likely to know, and the purpose our utterance aims to achieve within the exchange.

Given this awareness, recent research has focused on examining the linguistic abilities of people with aphasia through a discursive lens (Beeke et al. 2013; Oelshlaeger & Damico 2000; Perkins et al. 1997) and in ecologically valid contexts (Cummings, 2021; Dawson & Marcotte, 2017; Olness & Ulatowska, 2017). Interestingly, many studies that have examined the narratives of speakers with aphasia in natural contexts have revealed surprising insights into their communicative abilities. For instance, a study by Riccardi et al. (2004) involving a quadrilingual speaker with aphasia demonstrated that the individual could switch languages appropriately depending on the nationality of the physicians he was interacting with. He successfully transitioned between Slovenian, Italian, Friulian, and English while recounting his life story. Similarly, a study by Olness et al. (2010) found that people with aphasia are capable of effectively evaluating and communicating the key points of their narratives to their conversation partners. Common strategies used to emphasize significance include repeating specific phrases, intentionally slowing the pace of the narrative (creating a form of “linguistic slow-motion”), and consistently using comparatives, such as “the scariest moment of my life.” The chance to speak spontaneously about personal experiences in a non-clinical setting offers speakers with

aphasia a broad range of expressive options that are often limited during repetitive and standardized tasks. A “natural” environment allows them to convey their emotions, attitudes, and unique experiences, which inherently enhances their motivation to communicate with others (Polanyi, 1989). In non-clinical settings, individuals with aphasia can create coherent narratives by employing multimodal forms of communication. Olness & Ulatowska (2017) describe this ability as *Narrative Coherence*—the capacity to construct stories that fulfil both intrapersonal functions (e.g., expressing moods and emotions) and interpersonal functions (e.g., informing the hearer about relevant events). A central aspect of narrative coherence is *referential coherence*: the ability to clearly represent the “who, what, when, and where” of a narrated event with enough detail and clarity for the hearer to understand the information conveyed.

It may seem obvious that word-choice errors or omissions create insurmountable obstacles for the referential abilities of people with aphasia. However, by shifting our focus from the lexical-semantic level to the discursive level, we can observe that isolated reference issues caused by language impairments do not necessarily compromise the *overall* referential coherence of the narrative. First, speakers with aphasia show the ability to identify and select the key characters in their narratives—those who play significant roles in the events being described. Second, they can effectively refer to these characters using a variety of linguistic and non-linguistic devices. Finally, they maintain the chronological order of events, demonstrating their capacity to identify and arrange the most important occurrences in the sequence in which they happened. In general, people with aphasia exhibit the ability to capture their interlocutor's attention, recall the events of a story, connect them coherently, and monitor the hearer's understanding. Each of these skills relies on cognitive processes such as memory, attention, and Theory of Mind, which appear to remain intact even in cases of aphasia (see Cummings 2015 on the role of ToM in utterance interpretation). The integrity of various cognitive functions is evident in aphasic speakers' ability to maximize their communication potential by all sorts of pragmatic manoeuvring (Olness et al. 2012), such as gestures (Goodwin, 2000; Sekine & Rose, 2013), visual clues (Ulmer et al. (2017); Hux et al. (2010)), metonymy, hyperbole, reduplication (Ulatowska et al. 2000) semantic/pragmatic extensions in general, or onomatopoeia. An example can be found in a study by Olness and Ulatowska (2011), in which a speaker with mild aphasia attempts to describe the road accident that led to the brain damage causing his condition. Although the speaker exhibits signs of anomia—a disorder characterized by the inability to name or define recognized objects and people—he successfully distinguishes each character in the story by applying different modifiers to the head of an NP: thus, “*some* guy” refers to the rescuers, while “*other* guy” designates the driver of another vehicle. These terms are consistently applied to the same referents, creating an “improvised” method of identification.

It is essential to recognize that the hearer plays a crucial role in the communicative success of a speaker with aphasia, as emphasized by Goodwin (2003), regardless of whether the hearer is a doctor, a family member, or any other ordinary speaker. Hearers are capable of adjusting themselves to the situation, are aware of the problems they encounter, and are able to interpret the utterances produced by integrating information from their lexical or grammatical competence with world knowledge. *Inference to the best interpretation* seems to be the crucial engine for the comprehension process. Patterns of interpretation like ‘Surely the subject could not mean this because...’ but could plausibly mean that, because...’ seem to be crucial to the dynamics of making sense of what the speaker says. The force of the situation further reinforces and validates this reasoning. Such a mechanism lends support to Cummings' (2005) idea that the inference process is never only a circumscribed modular mechanism, where automatic inference is promoted by innate inferential systems, but a system in which default inferences or automatic inferences are integrated with the result of applying central intelligence to specific inferential problems (see also

Capone, 2019).

5.1. Referential acts in dialogue: insights from Goodwin's (1995) study

Any term, gesture, point, or head movement can constitute a referential act if the circumstances permit such an interpretation. This holds particularly true in contexts involving language disorders, where the use of syntactic and lexical resources may be severely limited. In these cases, even a simple sound, emitted at the right moment and in the appropriate context, can effectively guide hearers toward the referent intended by the speaker. A notable example comes from Goodwin's (1995) study of an individual with aphasia named Rob, who suffers from a severe form of aphasia following a stroke affecting the left hemisphere. This injury drastically reduces Rob's vocabulary to just three words: "yes," "no," and "and." Despite his near-total loss of language abilities, Rob can still effectively draw his hearers' attention to a specific object he has in mind and perform communicative actions centred around it. Consider an example from Goodwin's (1995):237) study:

(1)

Rob, who suffers from severe articulation difficulties (medically termed apraxia), is being assisted by a nurse who is helping him get dressed. She is in the process of pulling a sock up his leg and has just moved her hands to adjust the upper part of the sock. At this point, Rob initiates the conversation.

Rob: Nyuh nuh «Rob points toward sock»

Nurse: «Nurse looks to Rob and then back to sock »

Nurse: Up more?

Rob: Yes

Nurse: «Nurse pulls lower part of sock»

Rob: Yes

At first glance, it may be surprising that a simple sound paired with a pointing gesture can successfully convey a request. However, on closer inspection, Rob's first move does not stand alone as if it were an isolated, self-contained act. Its meaning emerges in connection with the broader context in which the social agents operate—i.e., the pragmeme of dressing assistance—and everything that happens/can happen within it. This pragmeme sets boundaries on both the number of dressing-related requests a person can make and *how* these requests can be expressed. Additional factors shaping Rob's request include the agents' personal knowledge, the perceptual context, and their shared focus on the activity at hand. Equally significant is Rob's timing: he chooses to make a sound at a specific moment in the dressing procedure, signalling his need to engage with the nurse for something related to *that precise action sequence* (putting on the socks). Rob's vocal signal serves as an attention-getting device or "summon" (Schegloff, 1968), i.e., an expression intended to capture the hearer's attention and initiate a dialogic sequence. Simultaneously, his gesture of pointing to the sock prompts the nurse to continue the dialogic sequence with a response directed toward the item he has highlighted. The nurse, in turn, understands the need to ask yes/no questions, creating a space for Rob to respond within the limits of his abilities. She also recognizes that these questions must be directly related to the sock and the ongoing task. Shared meaning can be achieved only through active collaboration and coordinated effort by both participants. Most importantly, each element of this communicative situation converges to create a unique unrepeatable event, making Rob's request—and the embedded referential act—clear and meaningful. If the same move were transposed into another discursive situation, it would certainly not have the same value.

Case (1) demonstrates how understanding a referential act relies on the convergence of numerous factors, including socio-cultural knowledge, familiarity, perceptual cues, defaults, and world assumptions. Jaszczolt's (2005) concept of *Default Semantics* aligns closely—at least in

intent—with the type of analysis that ideally underpins referential acts. Instead of beginning with the semantics of a term and then exploring how it might be enriched or enhanced, we should start with a single mental representation of a communicative act within a defined context and examine how various sources of information come together to shape it. There are utterances which cannot rely on compositional semantics, because they are fragments, and much of the syntactic structure is missing. For instance, if someone says 'The bill, please', it would be useless to start with compositional semantics, because 'The bill' is placed in a position in an interaction where it can only mean (client speaking to the waiter) 'I would like to see the bill (and possibly pay for it)'. One starts with schematic information (a script, such as the sequences of action typical of a restaurant), then one creates an empty sentence in which the fragment 'The bill, please' is inserted. From there, one tries to figure out what the missing parts are and constructs the semantics of the utterance. The process is clearly top-down (to follow Mey, 2001). 'Please' relates to an illocutionary force activator and indicates the illocutionary act 'making a request'. It is easy to see that this is a pragmatic process, in which we glue together several fragments until an utterance is completed and makes sense.

5.2. Referential acts in narratives

One of the symptoms that most significantly impairs the referential abilities of people with aphasia is semantic paraphasia. Although it bears some resemblance to slips of the tongue, the two phenomena have entirely different underlying causes. Semantic paraphasia complicates establishing the speaker's intended reference more than other linguistic manifestations of aphasia, as it involves using words with meanings slightly different from the widely known pattern of their use. In semantic paraphasia, individuals substitute a word with another that is closely related in meaning. For example, they might inadvertently say "fork" instead of "spoon," "dog" in place of "cat," or "apple" when intending to say "pear." These errors occur unpredictably and can hinder access to shared information.

As discussed in Section 3, however, such issues do not present insurmountable obstacles to communication. This is because referential acts are not produced in isolation; rather, they derive their meanings from the overall situation (i.e., the pragmeme) in which they occur. When a speaker refers to something—whether through linguistic or non-linguistic means such as a gesture, word, nod, or eye movement—we can typically rely on extralinguistic clues and our general knowledge to interpret and confirm what s/he has in mind. In many cases, these discursive and contextual elements are essential for identifying and correcting any inaccurate referential device that does not align with what we observe or prior knowledge. In this section, we aim to illustrate this point by analysing some conversations involving speakers with aphasia. The first conversation is sourced from AphasiaTalkBank (MacWhinney et al., 2011), a database created to advance aphasia research. The second conversation is an excerpt from a research project on aphasia conducted in Italy (Graci, 2023a). Each example will be accompanied by an English translation that aims to be as faithful as possible to the original.

(2)

Ero sulla porta per entrare in casa, e ho pensato no non ce la faccio. E non sono caduto... ho pensato di sedermi in modo di non battere la testa. E così è stato. Mi sono seduto. E da lì, non ho più ben capito. Ho sentito di aiutare. Di fronte c'era... di fronte della mia strada c'era un tabacchino... il tabacchino, che per fortuna era davanti la porta, avrà sentito la mia... l'aiuto. Dopo di che, non l'ho più sentito. E dopo ho pensato finalmente mi aiuterà.

I was at the door to enter the house, and I thought no I can't do it. And I didn't fall... I thought I'd sit down so I wouldn't hit my head. And so it was. I sat. And since then, I no longer entirely understand. I've felt to help. Across there was... across my street there was a

tobacco shop... *the tobacco shop that fortunately was before the doormust have heard my...help... After that, I never heard from him anymore... And then I thought finally [he] will help me.*

(3)

Ricordo quando mio zio si è ammalato. Avevamo una piccola panetteria e mia zia le diceva... mio zio... Continuava a insistere per andare da un medico. Un giorno, finalmente, mio zio ha detto: "portami in clinica". Eravamo tutti sollevati... sono andato in clinica *e ho parlato con il camice*

I remember when my uncle got sick. We had a little bakery and my aunt told her... my uncle... she kept insisting on going to a doctor. One day, finally, my uncle said, "Take me to the clinic." We were all relieved... I went to the clinic *and spoke to the white coat*

The first case involves a man with moderate non-fluent aphasia who was asked to recount a traumatic event. He chose to talk about the stroke that caused his aphasia. Towards the end of his story, he mentions a **tobacco shop**. While it is plausible that there could be a tobacco shop near his house, it is highly unlikely that the shop itself *heard* his call for help. Based on our word knowledge, we know that a tobacco shop is a place where tobacco-related products are sold, and as a commercial entity, it cannot offer voluntary assistance to someone in need. In the context of the situation involving the stroke and rescue, it is probable the speaker is referring to a living person. While the specific identity of this person is unclear, what is evident is that the speaker acknowledges him/her as an epistemic agent and actor—someone capable of decision-making and recognizing the need for assistance. Also, in this context, we can infer that this individual must have a connection to the shop, perhaps as its owner or a customer. Our understanding of the situation suggests a shift from the conventional meaning of "tobacco shop" to "shop staff" or "customer."

It is not unreasonable to suggest that we can arrive at a satisfactory interpretation of a person with aphasia's linguistic output by relying on what we previously referred to in Section 3 as *abduction*: the process of drawing conclusions or making inferences not solely from what we hear or observe, but also from our background knowledge and our predisposition to interpret events in a particular way within the interactional context. Once again, the hearer plays an active role by reinterpreting the incorrect term in the light of the broader situation presented by the speaker. This is achieved by appealing to the underlying context of the error and reasoning toward the most plausible explanation. The hearers, before reaching the right interpretation, have to identify the error through some sort of incompatibility with semantic materials in the vicinity or with contextual clues, and the pragmeme. Clearly, in context (2), the mere denotation of the term "tobacco shop" is not only insufficient to establish the speaker's intended reference but also clashes with stronger encyclopedic assumptions about what a tobacco shop can and cannot typically do. This conflict between encyclopedic assumptions and the typical, stereotypical use of the term "tobacco shop" signals the presence of a production error and suggests that the speaker intended to say something else—presumably "the tobacconist" or "a customer".

The second speaker is a 40-year-old man who was asked to talk about a significant event in his life, whether positive or negative. He chose to recount the events that led his uncle to seek treatment. At one point in his story, he mentions having spoken to the **white coat**. Similar to the previous case, it is improbable that the white coat itself could *hear* the speaker's request regarding his uncle's treatment. Rather, in the pragmeme of the clinical setting and procedures related to healthcare administration, it is likely that the speaker was referring to making requests to the person wearing the "white coat", that is "the doctor".

A work by [Olness and Ulatowska \(2017\)](#) offers another interesting example involving a middle-aged African American preacher with moderate fluent aphasia. When his doctor asks him to describe a frightening experience, he chooses to recount the moment of his stroke—the incident that led to his aphasia:

(4)

Yeah, it was in church while in... I was preaching. And I, I had a young, I had a a ma, a master, not a master, but he was a man who was a member of, of there where I preached when I was preaching. Because and while I was preaching, the condition happened to me. My stroke hit right here in church.

In this example, the speaker struggles to find the precise words to describe the person who was present during his stroke—a person who likely provided assistance. His attempts include phrases like "young man," "a ma, a master," and "a man who was a member," all of which fail to clearly identify the individual. This word-finding difficulty, characterized by stops, corrections, and vague descriptors highlights the effects of anomia and the challenges it poses in producing specific terms. Despite the lack of clarity, we can reasonably deduce that the individual was a *member of the speaker's congregation*. This inference is grounded in contextual clues: the setting is a church, the speaker was preaching at the time, and we know from background knowledge that the speaker is a preacher. These elements enable hearers to bridge gaps in the narrative. Some elements of the narrative are not only unclear but it is unclear what role they play in the assertion. For example, we wonder what the person who was a member of the congregation did in connection with the episode of the stroke. It is possible that when the interlocutor asks him to describe the event of the stroke, he may be interested in knowing who in fact helped him—an expectation consistent with the typical trajectory of such a dialogue.

We cannot dismiss the possibility that, even in narratives elicited within clinical contexts, interlocutors contribute establishing the speaker's reference. In the specific scenario we are examining, the clinician played a role in shaping the speaker's response and referential intentions, insofar as the way the question was framed may have constrained the range of possible *optimal answers*. This is especially evident in questions like "Who likes Mary?" which suggest a response format such as "___ likes Mary," where the blank (which represents a semantic variable X) is naturally expected to be filled by a reference to a person. When the question involves describing a frightening event, the implicit structure guiding the response may be more complex but still functions to shape the response into an optimal form. It is as though the question embeds unspoken prompts, subtly requesting information on key elements of the event. For example, the question might implicitly suggest, "Tell me what happened," "Explain how the problem was resolved," or "Describe who helped." When the speaker with aphasia replies, s/he replies to this implicit structure and he mentions a certain man who belongs to the congregation because he had a role in the stroke event (presumably he provided help).

6. Conclusion

Referential acts operate within the specific context of the communicative act. Definite descriptions may involve a linguistic device and a conceptual component. Devices of direct reference may presuppose conceptual components which are attached through non-restrictive relative clauses at LF (see [García-Carpintero \(2018\)](#) on such presuppositions). However, these elements alone are not sufficient to exhaust the referential act (i.e., to establish what the speaker intends to refer to). As we have emphasized, in a referential act, the conceptual component introduced by a semantic trigger must align with the perceptual context, our world knowledge, and socio-cultural assumptions. Since this alignment varies across different discursive contexts, the fixation of reference is always contingent upon the situation. Furthermore, the interlocutor plays an active and crucial role in this process, not only enabling interaction but also directing the flow of conversation in accordance with the prevailing situational context.

A number of studies in aphasiology have partially recognized this complexity. For instance, research has shown that familiarity with a speaker with aphasia can reduce misunderstandings and significantly

enhance the quality of interactions (Laakso, 2015; Lindsay & Wilkinson, 1999). Speakers with aphasia often rely on their conversational partners as valuable resources for establishing joint meaning. In many instances, these partners actively supplement the speaker's contributions when word-finding difficulties arise (Bloch & Beeke, 2008). Moreover, studies have provided experimental evidence that enhancing a conversational partner's knowledge and employing targeted communication strategies with speakers with aphasia can improve conversational outcomes (see Rayener & Marshall, 2003).

Nonetheless, despite these valuable insights into the interactive nature of communication, such research often overlooks the critical role of situational context. For example, existing studies frequently neglect to consider how the perceptuomotor processes involved in referential acts—such as indicating or drawing attention to objects—are deeply intertwined with cultural practices, social behaviours, and individual predispositions. Likewise, they rarely address how the specific function of a communicative act is shaped by its position within discourse and the speaker's underlying motivations. Omitting these elements can narrow our understanding of the foundational factors in communication. The primary risk is the tendency to adhere to a static view of communication, focusing only on isolated aspects of interaction (Graci 2023b).

We recognize that developing complex models capable of capturing the nuances of human interaction is a challenging endeavor—especially given the diverse and layered nature of meaning-making processes. Yet, by critically examining the limitations of narrowly defined approaches and highlighting the clear advantages of a broader, context-sensitive perspective, we lay essential groundwork for advancing the assessment of communication in individuals with aphasia. Rather than viewing referential difficulties as insurmountable obstacles, complex analytical models—particularly in cases of milder aphasia—we can frame them as manageable within the rich dynamics of real-world interaction. These models not only offer a more accurate reflection of everyday communication but also pave the way for more targeted, socially grounded, and effective intervention strategies.

CRedit authorship contribution statement

Capone Alessandro: Writing – review & editing, Writing – original draft, Visualization, Conceptualization. **Graci Roberto:** Writing – review & editing, Writing – original draft, Visualization, Data curation, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

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