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Perspectives in Pragmatics, Philosophy and Psychology deals with theoretical pragmatics and pragmatics from a philosophical point of view. The connection between philosophy and pragmatics is double. On the one hand, philosophy contributes to creating a framework to be called the 'pragmatics of language' capable of dealing with interpretation phenomena that complement purely semantic processes; on the other hand, pragmatics is capable of coping with major philosophical problems, e.g. skepticism and Gettier's problem. All volumes in the collection reserve a central place for the philosophical ideas in pragmatics, such as contributions to epistemology in which pragmatics plays a key role.

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Roberto Graci

Aphasia's Implications for Linguistics Research

Exploring the Interface Between Semantics
and Pragmatics

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To the memory of my father

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Introduction

The complexity of language is evident in the various forms of impairment it can take. Disorders such as aphasia or dyslexia demonstrate the intricate cognitive architecture underlying communication and the need to distinguish between different components and processes.

The fact that focal lesions in the left hemisphere cause selective linguistic disorders is empirical proof that language develops in the brain according to a precise pattern. Circumscribed lesions reveal dissociations in the cognitive system and sometimes isolate the linguistic component in a highly refined way. This is evident in acquired speech disorders, such as aphasia. It is usually caused by brain injuries such as vascular damage, trauma, or tumors. Aphasia is a disorder in the organization of the internal cognitive system and not a peripheral problem; it is not an alteration in word articulation and vocalization, such as dysarthria or dysphonia.

Furthermore, language impairments in aphasia do not occur with an overall and uniform reduction of linguistic skills. Instead, the analysis of the patient's speech shows regularities that suggest a selective process at the basis of the deficit. These aspects pave the way for fascinating questions: If some elements of language are compromised, and others do not, what could this data tell us about language organization in the brain? Which lexical and grammatical categories create greater difficulty in the aphasic patient? How can the study of aphasia affect theoretical pragmatics matters?

These are some of the questions that this book attempts to answer.

The first part addresses some preliminary questions on theoretical pragmatics, introduces the terms of the debate between minimalism and contextualism, and offers a general overview of current research in clinical pragmatics. The main objective is to prove how language pathologies can become a fruitful meeting place between scientific discoveries and theories. They represent a worktable in which it is possible to approach perspectives and investigation methods from distant disciplines, such as pragmatics, neurosciences, developmental psychology, or psychopathology. I hope to start a productive comparison between these disciplinary sectors. On the one hand, introducing linguistic and philosophical theories in the

clinical field can improve the assessment criteria and treatment plans of communicative disorders: using more refined conceptual distinctions allows clinicians to isolate and better analyze a particular communicative phenomenon. On the other hand, discoveries in the clinical field can provide valuable data that help settle old theoretical debates by moving them into new fertile ground. Indeed, the validity of a theory can be proven through the number of practical problems it manages: the more it withstands scientific counter-evidence, the more robust it can be considered.

In the last 20 years, linguistics tools have been increasingly used to investigate the aphasic deficit. Research has moved towards more complex analysis models: language is not only a set of discrete and isolated activities managed by specific brain centers. It is the principal means by which people connect with others and the environment surrounding them. The second part of the book will be extensively devoted to this topic by virtue of the importance that the situational context assumes in language production and comprehension. In particular, I will review various pieces of research that have emphasized the relationship between language, man, and the socio-cultural dimension. Given its potential role in unifying theories that focus on various aspects of the context, I will focus on the concept of Common Ground. The numerous clues disseminated throughout the perceptual scene, the background assumptions shared by the speakers, the previous knowledge, and individual dispositions interact dynamically with what a speaker says, producing considerable and further communicative effects. In the case of aphasia, these factors can enhance the limited linguistic resources of patients or even solve isolated reference problems. A complex and dynamic Common Ground model is also essential for planning personalized therapeutic interventions to improve communication quality with aphasic individuals.

Part three of the book is more theoretical and takes up the salient lines of the contemporary semantic/pragmatic debate. It is helpful to understand better the scope of pragmatics in determining the propositional form transmitted by an uttered sentence. Indeed, recently, in the philosophical field, it has been recognized that the Gricean distinction between *what is said* and *what is communicated* is not entirely exhaustive, given that the distance between the conventional meaning of words and the explicit proposition that the speaker wants to convey is much broader than previously thought. In principle, it is possible to communicate something that is neither totally determined by semantics nor is conversationally implicated. Framing this intermediate level of meaning has required the articulation of new concepts. According to relevance theorists, the pragmatic processes underlying the global understanding of an utterance give rise to an appropriate hypothesis about the explicit content of a communicative act. This hypothesis takes the name of *explicature* (Sperber & Wilson, 1995; Carston 1988). It involves an inferential logical development of the minimal proposition expressed by an uttered sentence. On the other hand, Bach (1994) also argues that the minimum semantic content of sentences must be expanded through processes of a pragmatic nature in order for it to correspond to what is intentionally communicated. For the author, determining the maximal proposition requires adding conceptual materials to what one literally says. Finally, Recanati introduces the concept of *free enrichment* (Recanati, 2004). It

includes two types of top-down pragmatic processes: modulation of word meaning in the context of an utterance and the recovery of parts of the propositional content that are not linguistically triggered (unarticulated constituents). Beyond the theoretical differences, the theses that fall under the label of “contextualism” share the idea that the conventional meaning of the uttered sentence is insufficient to express a complete proposition. An uttered sentence expresses a complete proposition only when it has been integrated and enriched through pragmatic processes. If this hypothesis is correct, it is plausible to hypothesize that pragmatics can intervene even in the presence of linguistic disorders, compensating for deficiencies of a syntactic/semantic nature.

The study of aphasia has brought attention to the organization of language in the human mind. It was initially believed that language was governed by its own set of rules and inputs, and that damage to this faculty was independent of other cognitive abilities. Part four of the book delves into this theme. Although the modular theory of the mind (in its various formulations) has had enormous diffusion in philosophy and other fields of knowledge, it is not exempt from critical issues. The most robust attacks come from the neuroscientific side. Recently, it has been found that removing Broca’s area does not produce lasting or permanent effects on speech. The same can be said for the cases of removal of Wernicke’s area (Plaza et al., 2009, Sarubbo et al., 2012). Secondly, the advance in modern neuro-imaging techniques has made it possible to obtain a clearer view of what happens in the human brain while performing particular tasks. It has been found that the representations of words are highly bilateral: responses in the right brain hemisphere are about as large and varied as responses in the left hemisphere. In other words, the right hemisphere actively participates in understanding the explicit content of the utterances. These pieces of evidence suggest that processing linguistic stimuli requires the parallel activation of systems involved in processing inputs of various types and senses. However, how the integration of multi-sensory sources into meaning units occurs remains to be clarified.

Language is not just an input/output system, but a complex set of abstract processes and rules governing how sounds and meanings combine into words and sentences. Thanks to generative grammar, the view that Broca’s aphasia is an articulatory problem has changed radically. Specific syntactic abilities have been localized in this area, leading to hypotheses explored in part five of the book. This section covers insights into the nature of agrammatism, the search for a unifying factor to explain symptoms of aphasia, and an alternative characterization of non-sentential speeches. Because of the damage to functional categories and grammatical morphemes, aphasic patients apply a “principle of economics” by virtue of which they eliminate all grammatical words and use a more straightforward and reduced emergency language. The under-specification of the cases and the Tense node distinguishes a full-fledged sentence from a non-sentential structure (in the case of languages that grammaticalize Tense) (Progovac, 2006). Non-sentential speeches are not only a typical production of individuals suffering from aphasia but also of speakers of Pidgin, second language learners, or children who are acquiring language. Generally, using a reduced grammar system is justified by specific

communication needs. This point is linked to the semantic/pragmatic debate. We should not favor a particular position without considering the needs of the actual communicative context. There are situations where the sentences uttered are so accurate and specific that the intervention of pragmatics in determining the propositional content is minimal. On the other hand, there are situations where linguistic sources are scarce and incomplete to the point where pragmatics assumes a predominant role.

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