Pragmatic Impairment

Michael Perkins

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Pragmatic Impairment

Pragmatics – the way we interact using more than just language – is particularly problematic for people with communication disorders. Through an extensive analysis of how pragmatics can go wrong, this book not only provides a novel and clinically useful account of pragmatic impairment, but it also throws new light on how pragmatics functions in healthy individuals. The aim of this book is to bring mainstream and clinical pragmatics together by showing that, not only can our understanding of pragmatics be aided by the study of pragmatic impairment, but that clinical and theoretical pragmatics are better served by treating pragmatic ability and disability within a single framework. It is the first book on this topic to be aimed primarily at linguists and psycholinguists rather than clinicians, and includes illustrative material on conditions such as autism and aphasia and a wide range of other communication disorders in both children and adults.

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Transcription conventions

[p^{h}]	Phonetic transcription
/p/	Phonemic transcription
(.)	Very short pause
.	Short pause
-	Longer pause
(3.0)	Pause length in seconds
ˈ	Stressed syllable
ˋ	Falling tone
ˊ	Rising tone
ˆ	Rising-falling tone
ˇ	Falling-rising tone
↑↓	Marked rise or fall in pitch
[text]	Text enclosed in square brackets on consecutive lines of a transcript denotes overlapping talk
° °	Text between degree signs is quieter than surrounding talk
__	Underlining indicates emphasis
(– –)	Dashes in parentheses denote unintelligible syllables
↑↑	Text between up arrows is higher in pitch than surrounding talk
::	Colons indicate that a sound is prolonged

Phonetic symbols are from the International Phonetic Alphabet (IPA, 2005).

1 Introduction

1.1 Aims

This book aims to identify areas of common ground between pragmatics, pragmatic impairment, language, cognition and communication. It is unusual in that it accords equal weight to each, and focuses on the synergy between them.

Apart from recent interest in 'mind-reading' problems in autism by some practitioners of mainstream pragmatics (e.g. Wilson, 2005), the nature of pragmatic impairment and therefore its potential significance for pragmatics generally is largely unknown outside clinical circles. The few books published on pragmatic impairment (e.g. Gallagher, 1991; Leinonen, Letts and Smith, 2000; McTear and Conti-Ramsden, 1992; Müller, 2000; Smith and Leinonen, 1992) are written primarily for clinicians and for the most part aim to show how various pragmatic theories and analytical frameworks may be applied in the description, assessment and treatment of communication disorders. Furthermore, although generally excellent in meeting their stated clinical aims, their focus tends to be rather narrow – for example, concentrating exclusively on developmental disorders. In addition, because their primary interest is in application rather than theory, they also tend to be both eclectic and uncritical with regard to the pragmatic theories they make use of. The lack of two-way traffic between pragmatic theory and clinical practice is perhaps surprising given the growing number of researchers in areas such as syntax and semantics who regularly take into account language pathologies in their attempts to understand normal language processing and to evaluate linguistic theories. But it remains the case that hardly any journal articles – let alone books – have so far considered how pragmatic impairment may inform our understanding of pragmatic theory and normal language use. This is one motivation for the current book. Another is the large number of years spent by the author attempting to analyse conversations involving people with a wide range of so-called pragmatic impairments, but generally – it must be admitted – with varying levels of success. Labelling a stretch of discourse using categories derived

from various pragmatic theories is not particularly difficult, but what it provides is a description rather than an explanation. These motivations are addressed by the first three aims of the book, which are:

Aim 1: to show how our understanding of pragmatics and pragmatic theory can be informed and extended by the study of pragmatic impairment
Aim 2: to evaluate a range of pragmatic theories and analytical methods in terms of how well they account for pragmatic impairments
Aim 3: to provide a model of pragmatics which is applicable to pragmatic ability and disability alike, and which affords a sense of explanation rather than mere description.

The sense of explanation referred to in Aim 3 stems partly from identifying the capacities and processes which underlie pragmatic behaviour. This is no easy task, and also depends on how pragmatics is defined. In the opening paragraph of a recent encyclopedia article on pragmatics, Sperber and Wilson (2005: 468) define the term in its 'broad' sense as covering 'a range of loosely related research programmes from formal studies of deictic expressions to sociological studies of ethnic verbal stereotypes', before proceeding to focus exclusively on one sense of the term. The rationale for their specific focus – namely, 'the study of how contextual factors interact with linguistic meaning in the interpretation of utterances' – is that it has 'been of interest to linguists and philosophers of language in the past thirty years or so'. This is absolutely justified in an encyclopedia article aimed at philosophers, but at the same time reflects the ease with which issues deemed extraneous (for whatever reason) to one's particular concerns can be ignored. The particular focus used in this book derives from an extensive analysis of how pragmatics may be impaired, following the maxim that we only become truly aware of the nature of a mechanism or process by examining what happens when it goes wrong. The underlying capacities which appear to be involved in pragmatic breakdown are reflected in Aim 4:

Aim 4: to examine in detail the role of cognition, language and sensorimotor systems in pragmatic processing.

This engenders rather a broad interpretation of pragmatics, as we shall see in Chapter 2. Nonetheless, unlike the 'range of loosely related research programmes' referred to above by Sperber and Wilson, the broad view of pragmatics covered in this book aims to be holistic while at the same time being principled and coherent. Meeting Aim 4 entails a further aim:

Aim 5: to compare modular and interactional approaches to pragmatics.

While respecting and incorporating the achievements of research on communication and communication impairment carried out within a modular

paradigm, the emphasis of this book is on the interaction and co-dependency of the constituents of cognition, language, sensory input and motor output, rather than on their dissociation and discreteness. This is partly motivated by the specific focus of pragmatics on communication between individuals and, as we shall see, by the way in which language and cognition can be seen as interpersonal phenomena, extending beyond the individual. Aim 6 is a significant by-product of Aims 1–5:

Aim 6: to illustrate the nature of pragmatic impairments using a wide range of material from both developmental and acquired communication disorders (e.g. autistic spectrum disorder, specific language impairment, Williams syndrome, Down's syndrome, aphasia, traumatic brain injury, right hemisphere brain damage).

Handbooks and encyclopedias apart, it is rare to find a comprehensive range of impairments targeted in works on communication disorder and speech and language pathology. Because of this, interesting parallels and similarities and evidence of wider principles at work are sometimes missed.

1.2 Influences

To provide a flavour of where the book is coming from, and to allow readers to form an impression of what they're letting themselves in for, I would like to briefly – but gratefully – acknowledge what I see as its main intellectual antecedents and influences. One of the greatest of these has been the interactive – or what one might call the 'melting-pot' – approach of Elizabeth Bates, whose work spans not only pragmatics but also language development, psycholinguistics, cross-linguistic perspectives, developmental and adult acquired language disorders and much else besides. Bates was not too keen on the notion of pragmatics as a narrow concept and tended to avoid the term. She writes that '[w]ithin the interactive camp, pragmatics is not viewed as a single domain at all. Instead, it can be viewed as the *cause* of linguistic structure, the set of communicative pressures under which all the other linguistic levels have evolved' (Bates, 2003: 262). While similar in breadth and spirit, my own approach focuses on causation in the opposite direction, taking the stance that pragmatics may be seen as the emergent outcome of interactions between cognition, language and sensorimotor systems within and between individuals as motivated by the requirements of interpersonal communication. A related influence is the work of Annette Karmiloff-Smith (e.g. Karmiloff-Smith, 1998), whose 'neuroconstructivist' account of developmental communication disorders puts compensatory adaptation at the heart of the developmental process. Her specific focus is on cognitive neuropsychology – i.e.

the internal ecosystem of the individual. In my own approach – let us call it 'emergentist pragmatics' – the ecosystem within which compensation operates is expanded to encompass the interpersonal domain. This extension of compensation from the intrapersonal into the interpersonal is inspired by the work of cognitive scientists such as Andy Clark (e.g. Clark, 1997), whose conception of emergence and of distributed cognition I have found particularly convincing. A further powerful influence at the interpersonal level has been Conversation Analysis (CA), particularly the work of Emanuel Schegloff, Charles Goodwin and others (e.g. Goodwin, 1995; Schegloff, 2003) who have used CA to analyse interactions involving people with communication impairments, and who tend to see manifestations of the impairment as evidence of interactive solutions to underlying problems, rather than as primary deficits per se. A related influence is the work of Herb Clark (e.g. Clark, 1996), whose 'joint action theory' – a blend of CA, social psychology and reworked elements of Austin's original version of Speech Act Theory – sees communicative interaction between individuals as indivisibly conjoint, rather than being reducible to the sum of their separate contributions. A further interwoven strand is the view of Charles Goodwin and others (e.g. Goodwin, 2000a) – also taken on board by Clark – that interpersonal communication is inextricably multimodal – i.e. that separate symbolic systems such as language, gesture and facial expression fuse together into a semiotic whole during communication. Finally, although it a) is much narrower in scope, b) sees theory of mind as the sole cognitive determinant of pragmatics and c) emphasizes the perspective of the hearer over that of the speaker, I have found Sperber and Wilson's Relevance Theory (Sperber and Wilson, 1995) an impressive account of the way in which shifting focus from pragmatics as behaviour to its cognitive foundations affords a strong sense of explanation.

1.3 Outline

The main points covered in the book are summarized below.

Perhaps inevitably, though necessarily, Chapter 2 begins with terminology. For example, it appears that linguists and language pathologists tend to make rather different assumptions about the link between pragmatics and language. To accommodate both views, a semiotic definition of pragmatics is adopted. A survey of how a range of theories and analytical frameworks has been applied in the analysis of pragmatic impairment shows that they are generally more effective at description than explanation. It is concluded that, in order to provide an acccount of pragmatic ability and disability adequate for the needs of clinicians (which turn out to

be far more extensive and exacting than those of linguists), a holistic account is required which is able to explain the underlying causes of pragmatic impairment in addition to its behavioural symptoms. Because of its greater comprehensiveness, such an account should also be of help in explaining normal pragmatic behaviour too.

Chapter 3 considers to what extent pragmatics may be seen either as a discrete level of language or as a mental module. Evidence is provided from a wide range of communication impairments which suggests that the modular status of various linguistic and cognitive systems which contribute to pragmatic behaviour is far from unequivocal. This is partly a function of the difference between analytical methods which aim to identify dissociations between putative modular entities, and others which focus on associations and interactions. Because pragmatics, broadly defined, appears to be implicated in the entire range of communication impairments whatever their etiology, it is concluded that it may be more helpful – at least heuristically – to see it as the emergent product of the way cognitive and linguistic processes interact, rather than as a primary modular entity.

Chapter 4 presents an emergentist model of typical and atypical pragmatic functioning, and shows that pragmatic disruption is an inescapable corollary even of communication disorders not normally seen as paradigm cases of pragmatic impairment. The notion of choice is at the heart of the model, which includes not just linguistic choice but choice across the entire range of semiotic systems together with their input and output modalities. Pragmatics is defined as the emergent consequence of interactions between cognitive, semiotic and sensorimotor systems within, and between, communicating individuals. In accounting for pragmatic ability and disability, the burden of explanation thus shifts from the communicative behaviour itself to the constitutive elements and interactions from which it emerges. These are examined in Chapters 5–8.

Chapter 5 considers the role played by inference, theory of mind, executive function, memory, emotion and attitude in pragmatics and pragmatic impairment. Each of these areas of cognition is scrutinized in terms of how its impairment affects pragmatic performance by restricting communicative choice, and how it interacts with semiotic, sensorimotor and other cognitive elements both intrapersonally (i.e. within a single individual) and interpersonally (i.e. between communicating individuals). It is concluded that pragmatics is not exclusively linked to any single cognitive process, but typically draws on multiple areas of cognition. Furthermore, there is considerable interaction and co-dependency between the various separate cognitive systems, and there are good grounds for seeing each system as the emergent product of subsidiary interactions.

Pragmatic impairment has been most strongly associated with cognitive dysfunction, but in Chapter 6 the pragmatic consequences of linguistic impairment at all levels are seen to be equally complex and extensive. The pragmatic effects of impairments of phonology, prosody, syntax, morphology, semantics and discourse are considered both separately and together. Co-dependency between all of these, both intrapersonally and interpersonally, and also between them and cognitive and sensorimotor processes, turns out to be considerable.

In Chapter 7 the use of hearing and vision to process meaning and the use of motor output systems (such as the vocal tract, hands, arms, face, eyes and body) to express meaning are examined. Reduced capacity in any of these systems restricts communicative choice, which shows them to be as implicated in pragmatic functioning as cognition and language.

Whereas Chapters 5–7 focus on the elements whose interactions determine the nature of pragmatic ability and disability, in Chapter 8 attention shifts to the interactions themselves and the way in which dysfunction at any point in the system – whether it be cognitive, semiotic or sensorimotor – triggers compensation within the system as a whole. It is argued that the importance and pervasiveness of compensatory adaptation warrants its being given centre stage in any account of pragmatic impairment. Where most accounts of compensation focus exclusively on either the intrapersonal or the interpersonal domain, it is argued that the two should be seen as acting in synergy. A detailed case study is presented of a child whose communication problems can only be satisfactorily explained once compensatory adaptation in both domains is taken into account.

Chapter 9 recapitulates the main arguments, and compares the approach of emergentist pragmatics (EP) with that of other pragmatic theories and frameworks and also considers its clinical implications. The main distinguishing features claimed for EP are that:

- it is broader in scope than most theories, but also more comprehensive
- it focuses on underlying causes of pragmatic behaviour, as well as the behaviour itself
- it sees the underlying determinants of pragmatics as complex interactions between cognitive, semiotic and sensorimotor systems rather than the outcome of a single process
- it integrates both intrapersonal and interpersonal perspectives
- it explicitly accounts for both pragmatic ability and disability.

The major clinical implications are the need to:

- reconsider the use of terms such as 'pragmatic impairment', which are too vague, and used too inconsistently, to be clinically helpful
- address the underlying causes of pragmatic impairment, rather than simply focusing on symptoms and descriptions of pragmatic behaviour

- treat the communicating dyad, as well as the individual, as a complex interactive cognitive, semiotic and sensorimotor system
- acknowledge the centrality of compensatory adaptation in pragmatic impairment
- treat compensatory adaptation as a composite of both intrapersonal and interpersonal interactions.

2 Pragmatic theory and pragmatic impairment

2.1 Introduction

To date, the study of pragmatic impairments has had virtually no impact on pragmatic theory or on mainstream pragmatics generally. This is a pity. Linguistic communication typically appears to be a single, seamless process, but it is only when it goes wrong that we tend to have any inkling that it is really a complex of interacting processes. Unlike clinicians, who need to understand a condition in its entirety in order to plan appropriate intervention, pragmatic theorists have had the luxury of being able to focus only on the specific features which are of interest to them. It is a contention of this book that a holistic and detailed understanding of pragmatic impairment can make a significant contribution to the study of normal pragmatic behaviour, and that the potential benefits for pragmatic theory are considerable.

In contrast, the impact of pragmatic theory on the study of pragmatic impairment has been extensive. However, despite the increasing clinical application of pragmatic theories over the last couple of decades, our understanding of communication disorders has, as I aim to show, not always been particularly well served by it. This is partly because of the heterogeneity and breadth of pragmatics as a discipline. Thus 'pragmatic impairment' and other cognate terms are used to describe an excessively wide range of disparate conditions, and are often used inconsistently. Problems with the clinical use of pragmatic labels have arisen because the terminology and conceptual apparatus of pragmatics is derived from disciplines such as linguistics, philosophy of language and sociology, which are more concerned with abstract models on the one hand and with the description of social behaviour on the other. This apparatus has been imported wholesale and without adaptation into clinical linguistics, but it is not always well suited to the needs of language pathologists and has led to a great deal of confusion in the clinical diagnosis of pragmatic impairment, and in regard to the nature of pragmatic impairment itself.

In this chapter, I will first of all consider some differences in the way linguists and language pathologists appear to define and conceptualize pragmatics, and then examine the application of pragmatic theories and analytical frameworks in studies of pragmatic impairment. I will conclude that a holistic approach is best suited to the needs of clinicians, and that such an approach may in turn have benefits for linguists, too.

2.2 Defining pragmatic ability and disability

2.2.1 Linguistic vs non-linguistic pragmatics

Language is central in mainstream pragmatics. Sperber and Wilson (2005: 468) define pragmatics in general terms as 'the study of the use of language' and more specifically as 'the study of how contextual factors interact with linguistic meaning in the interpretation of utterances'. Virtually all pragmatics textbooks similarly assume the centrality of language (e.g. Green, 1989; Grundy, 2000; Leech, 1983; Levinson, 1983; Mey, 2001; Thomas, 1995; Verschueren, 1999; Yule, 1996). It is rather surprising, therefore, to find that a great deal of published work on pragmatic impairment appears to make no such assumption. Rather than an exclusive focus on language, it is common instead to find non-linguistic features of communication such as gaze, gesture, posture and social rapport described as examples of pragmatics even when they occur *independently* of language use. Dronkers, Ludy and Redfern (1998), for example, assume that pragmatic behaviour is isolable and distinct from linguistic behaviour, as is evident from the title of their article, 'Pragmatics in the absence of verbal language'. Others feel a need to distinguish at least implicitly between linguistic and non-linguistic pragmatics by using terms such as 'pragmatic *language* impairment (PLI)' (Bishop, 2000) and 'pragmatic *language* disorders' (Martin and McDonald, 2003; my emphasis). It would seem that many language pathologists, despite acknowledging mainstream pragmatics as their information source, at least covertly take a much broader and less exclusively language-oriented view than linguists – far closer, in fact, to Morris's original semiotic conception of pragmatics as 'the study of the relation of signs to interpreters' (Morris, 1938: 6). Why should this be so? Firstly, clinicians frequently encounter individuals with minimal linguistic capacity – for example, following a stroke – who are nonetheless able to communicate quite effectively using nonlinguistic and nonverbal means such as body posture, gaze and gesture (e.g. Goodwin, 2000b). (Indeed, therapy often concentrates on these spared abilities as a means of compensating for linguistic disability (Carlomagno, 1994; Davis and Wilcox, 1985.)) At the same time, they are equally familiar with the

converse situation – for example, individuals with autistic spectrum disorder who are unable to communicate effectively despite having reasonably good linguistic abilities (e.g. Blank, Gessner and Esposito, 1979). The key factor which differentiates such cases is the level of competence in a range of nonlinguistic cognitive capacities such as memory, attention and inferential reasoning, and clinicians have thus tended to be far more aware than linguists of the role of cognition in pragmatic functioning (Perkins, 1998c). A further motivation for a semiotic view of pragmatics comes from neurolinguistics, which suggests that much of what is commonly understood as pragmatic competence is controlled by the right cerebral hemisphere, as opposed to linguistic competence, which is subserved to a much greater extent by the left hemisphere (Paradis, 1998a). This apparent double dissociation between language and pragmatics evident in clinical research suggests that, rather than focusing so exclusively on linguistic pragmatics, as linguists and pragmaticists have tended to do so far, it might be more fruitful to consider in a more integrated fashion the role of nonlinguistic as well as linguistic, and of nonverbal as well as verbal, competencies in pragmatic functioning. Thus we might define pragmatics generally as (the study of) the use of linguistic and nonlinguistic capacities for the purpose of communication. Some progress in this direction has been made by theories of pragmatics such as Relevance Theory (Sperber and Wilson, 1995), which emphasizes that language is one communication 'aid' among many, albeit a uniquely complex and central one. Also, the pragmatic significance of the way in which communication may be distributed across both verbal and nonverbal modalities has started to be addressed in the psychological, sociological and anthropological study of language (Clark, 1996; Kendon, 2004; McNeill, 2000a) and in the study of language development (Kelly, 2001). What has not yet been fully appreciated, though, is the unique insight into the nature of such an extended view of pragmatics afforded by the study of communication disorders.

2.2.2 Normal vs abnormal pragmatic behaviour

Researchers who wish to study the nature of pragmatic impairment naturally look to mainstream pragmatics for their definitions, theoretical constructs, terminology and analytical methods. Rather than definitions of pragmatics itself, which are invariably the focus of pragmatics textbooks, their starting point has to be some account of what constitutes 'normal' pragmatic *ability* or 'typical' pragmatic *behaviour* in order thereby to be able to identify and characterize the pathologically abnormal and atypical. One difficulty with this is that, although it is generally assumed in mainstream pragmatics that we are attempting to describe what typically occurs in the normal population,

definitions of what counts as normal are rarely made explicit, if they are considered at all. For example, Grice's Maxim of Quantity states: '1. Make your contribution as informative as is required (for the current purposes of the exchange). 2. Do not make your contribution more informative than is required' (Grice, 1975: 45), but there is no account of how informative or uninformative a contribution would need to be to count as an instance of abnormal or pathological behaviour. Quantifiable definitions of pragmatic ability – as opposed to disability – are rare (see, for example, Slugoski and Wilson's (1998) operational account of pragmatic competence). Quantifiable definitions of pragmatic *disability*, on the other hand, are far more common but typically vague. In most accounts, a range of supposedly normal (or abnormal) pragmatic behaviours are simply given, and individuals are described as being pragmatically impaired if either a sufficient number of behaviours are (or are not) observed or their performance of the behaviours meets (or fails to meet) specified criteria of acceptability or of frequency within a given time frame or situation.

A number of checklists, or 'profiles' (Crystal, 1992), of pragmatic behaviour have been devised for clinical use, and although they are largely unknown outside clinical circles, they are nevertheless a potentially useful resource in mainstream pragmatics in that they aim to provide an itemized and comprehensive account of pragmatic competence (albeit in terms of behaviours which are susceptible to impairment), and are often based on careful observation. Some incorporate an inventory of items derived from a particular theory of pragmatics (e.g. Damico (1985) and Bloom *et al.* (1999), based on Grice's maxims of conversation) or a particular analytical approach (e.g. Perkins, Whitworth and Lesser (1997), based on Conversation Analysis), though most are constructed around an eclectic set of items drawn from a range of sources where theoretical consistency is sacrificed for comprehensiveness. Table 2.1 lists the main section headings in three commonly used profiles.

In each of these profiles, the main categories are further subdivided into 30, 50 and 23 subcategories respectively. For example, *sociolinguistic sensitivity* in Penn (1985) includes 'polite forms; reference to interlocutor; placeholders; fillers, stereotypes, acknowledgments; self correction; comment clauses; sarcasm/humour; control of direct speech; indirect speech acts'; *turn taking* in Prutting and Kirchner (1983) includes 'initiation; response; repair/revision; pause time; interruption/overlap; feedback to speakers; adjacency; contingency; quantity/conciseness'; and *inappropriate initiation* in Bishop (1998) includes 'talks to anyone and everyone; talks too much; keeps telling people things that they know already; talks to himself; talks repetitively about things that no-one is interested in; asks questions although he knows the answers'. Some checklists target