# Pragmatic Disorders



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## Louise Cummings

## **Pragmatic Disorders**



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For my siblings Judith, Stewart, Edward Victoria, Heather, Elizabeth

#### **Preface**

Clinical pragmatics has undergone a remarkable transformation in its relatively short history. From relative obscurity in early studies of language disorders in children, the field has developed into a thriving area of clinical language study which is on a par with clinical phonology and syntax. This development has been encouraged in large part by the expansion of pragmatics as a linguistic discipline, and also by the clinical imperative to develop assessments and interventions that better address the communication needs of clients. Clinicians now expect to assess and remediate pragmatic language skills as standard within the management of clients with a range of clinical conditions. So rapid have been the developments in clinical pragmatics that an examination of the state of the art in this discipline is now in order. Just such an examination is the aim of this book.

In capturing the state of the art in clinical pragmatics, this book addresses a number of predictable and not so predictable issues. With regard to the former, the reader needs to be introduced (or reintroduced) to the pragmatic concepts that are integral to the study of clinical pragmatics. No progress can be made in the absence of a clear understanding of notions such as speech act, implicature, presupposition and deixis. The reader must also have a sound appreciation of how clinical pragmatists have applied these concepts to the study of clients with clinical conditions as wide-ranging as schizophrenia and autism spectrum disorder. To this end, the full range of developmental and acquired pragmatic disorders will be examined in Chap. 2, with the discussion of each preceded by a characterization of the clinical populations in which these disorders are present.

Alongside these predictable issues, the book will also address a number of less predictable topics. It is often acknowledged that pragmatic disorders are uniquely sensitive to a range of cognitive deficits. These deficits, which include theory of mind impairments and executive dysfunction, have not been examined systematically to date. They will receive such a treatment in Chap. 3. Theoretical models, which have influenced clinical pragmatic studies, are only rarely explicitly discussed and evaluated. In Chap. 4, these models are analysed and evaluated at length. Clinicians and researchers have been almost exclusively preoccupied to date with the different ways in which pragmatics either fails to develop normally or becomes disrupted in children and adults. Until very recently, the impact of these disorders on the psychological wellbeing, social integration, and academic and vocational opportunities of clients had been largely overlooked. This book will

examine this relatively new and important line of enquiry in the study of pragmatic disorders in Chap. 5. Several populations in which there are substantial pragmatic disorders have received little attention from clinicians and researchers. Three such populations—children with emotional and behavioural disorders, incarcerated youths and adults, and adults with one of the non-Alzheimer's dementias—will be examined in Chap. 6. Finally, in Chap. 7 the contribution of pragmatic disorders to social communication problems is considered. In short, there is much that is truly novel for the reader in the pages that follow.

So, how will the success of this book be measured? It will be measured in three ways. First, the book introduces readers to what I consider to be a necessary critical component to work in clinical pragmatics. To the extent that this critical component becomes well established (I hope it does), it should serve to reduce the overriding tendency of investigators to date to engage in largely descriptive studies which lack the capacity to explain pragmatic disorders. Second, the book develops in specific ways the cognitive character of clinical pragmatics. This is reflected in the discussion of the role of cognitive deficits in pragmatic disorders and in the analysis of pragmatic theories which have a 'strong' cognitive orientation. Third, the book explores a number of clinical conditions (e.g. non-Alzheimer's dementias) and topics (e.g. the impact of pragmatic disorders) which are likely to be significant in the future development of the field. In conclusion, if the study of pragmatic disorders can become more critical, cognitive and innovative as a result of this book, then it will have achieved some degree of success.

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## **Chapter 1 Pragmatics and Language Pathology**

#### 1.1 Introduction

The study of any language disorder requires a diverse knowledge base spanning several linguistic and medical disciplines (Cummings 2008). The student of language pathology must have an understanding of the neuroanatomical structures that support the production and comprehension of language. He or she must also appreciate how a range of pathologies including, but not limited to, head trauma, cerebrovascular accidents, cerebral infections and neoplasms, can disrupt these structures. Aside from the medical specialisms which inform the study of language pathology, students must also have a wide-ranging knowledge of linguistic disciplines from phonetics and phonology, through morphology, syntax and semantics to pragmatics and discourse (Cummings 2013b). This knowledge permits us to make sense of the child with phonological disorder who says [peɪn] for 'plane', the child with specific language impairment who utters 'He walking home' and the adult with Down's syndrome who cannot identify pictures of an apple, banana and pear as types of fruit.

These anomalies of phonology, morphosyntax and semantics, respectively, do not fully represent the many ways in which language can break down. The child with autism spectrum disorder, for example, may struggle to understand the idiomatic expression in 'Bill hit the sack', while the adult with schizophrenia may fail to use cohesive devices to link utterances with the result that spoken output can appear disjointed. These additional impairments of pragmatics and discourse are the focus of this book. In terms of the long history of the study of language pathology, pragmatic and discourse impairments are relative newcomers. Nevertheless, there is now a well-established academic and clinical literature on these impairments. The aim of this book is not only to capture the state of the art in our knowledge of these impairments, but also to address a number of topics in clinical pragmatics which have been inadequately examined to date.

In capturing the state of the art in the study of pragmatic disorders in Chap. 2, a lifespan perspective will be adopted. In this way, the chapter will

1

examine pragmatic disorders which have their onset in the developmental period and childhood, in the period extending from adolescence into adulthood and in later life, when neurodegenerative disorders can compromise pragmatic language skills. This survey will address a broad range of clinical conditions in which there are significant pragmatic impairments, including autism spectrum disorder (a neurodevelopmental condition), traumatic brain injury in adolescence and adulthood and the dementias, a group of disorders more commonly associated with increasing age. In recent years, investigators have begun to examine the link between cognitive deficits and pragmatic language disorders. Two groups of cognitive deficits in particular—theory of mind impairments and executive function deficits—have received increasing attention from investigators. However, studies have proceeded in a largely ad hoc fashion with the result that it is difficult to discern any general trends or to arrive at definitive conclusions about what these studies are revealing. Chapter 3 undertakes the first systematic examination of disorders on the pragmatics-cognition interface with a wide-ranging discussion that addresses empirical and theoretical issues.

More generally, theory has occupied a somewhat uneasy position in clinical studies of pragmatics. Many of these studies are not theoretically motivated, while others have employed theoretical frameworks which are not readily applied to the study of pragmatic disorders. Chapter 4 examines the role of theory in clinical pragmatics and discusses the reasons why theory has not always been successfully adopted by clinical investigators. Chapter 5 will examine the impact of pragmatic disorders on the lives of the children and adults who have these disorders. This is a neglected area of research, as evidenced by the paucity of clinical studies that have examined aspects of impact. Where studies of this type have been conducted, they have typically examined the psychosocial impact of pragmatic disorders. However, Chap. 5 will go further in its examination of impact by also considering the academic, occupational or vocational, behavioural and forensic impact of pragmatic disorders.

There are several clinical populations in which pragmatic disorders have been extensively investigated. They include clients who have sustained a traumatic brain injury or right-hemisphere damage. However, there are other populations whose pragmatic impairments have been overlooked by clinicians and researchers. They include incarcerated clients for whom societal and political prejudice has resulted in limited access to clinical language services (these clients form an 'underserved' population). These populations also include clients with emotional and behavioural disorders and one of the non-Alzheimer's dementias, in which pragmatic disorders occur in the presence of psychiatric disturbance and cognitive deficits, respectively (these clients form 'complex' populations). Chapter 6 will consider the pragmatic disorders of these largely overlooked populations. Finally, in Chap. 7, the relationship of pragmatic disorders to social communication is examined. Social communication has been variously defined, with different definitions attributing a more or less significant role to pragmatics within this form of communication. This chapter navigates the largely disparate strands

1.1 Introduction 3

of research in this area to arrive at a clearer understanding of this important relationship.

In laying the foundations for the rest of the book, the current chapter will attempt to do several things. Firstly, pragmatic concepts are often poorly understood and characterized by the clinicians and researchers who use them (Cummings 2012a). The result is the misapplication of these concepts, with linguistic behaviours which are not in any sense pragmatic in nature often incorrectly characterized as such (Cummings 2007a, b). To avoid the misapplication of these concepts in a clinical setting, their examination must become an essential part of the clinical education of students of language pathology (Cummings 2014c). To be clear from the outset on the nature and extent of the behaviours we are calling 'pragmatic', this chapter examines a range of pragmatic and discourse concepts which will be addressed throughout the book. A number of examples, including those taken from clinical subjects, will be used to demonstrate these concepts and to consolidate their understanding on the part of the reader.

Secondly, a 'pragmatic turn' in the study of language disorders has had a number of important implications for how these disorders are diagnosed, assessed and treated (Cummings 2010a, 2012b, 2014d). Formal language batteries that employ word- and sentence-testing formats are often wholly unsuited to the assessment of a client's pragmatic language skills. Increasingly, these batteries are being supplemented by assessments that emphasize the interactional nature of linguistic communication (e.g. conversation analysis) and that pursue linguistic analysis beyond the level of individual sentences (e.g. discourse analysis). By the same token, language interventions that train clients to use syntactic or semantic constructions with little consideration of whether these constructions are likely to bring about gains in everyday communication skills can appear somewhat naïve from a pragmatic perspective. The 'pragmatic turn' in language pathology has thus had implications for the study of language disorders beyond the introduction of new concepts such as implicature and speech acts. This turn has served to reshape every aspect of the clinical management of language disordered clients, and not just those with pragmatic disorders.

Thirdly, in an era of budgetary constraints and evidence-based health care, clinicians who treat clients with communication disorders are increasingly being required to demonstrate the effectiveness of speech and language therapy (SLT). This requirement has seen a proliferation of research which has examined and reviewed outcomes in clients in receipt of a range of speech and language treatments (e.g. the Cochrane Reviews). The outcome of treatment in these studies is often measured in terms of gains in functional communication. Moreover, on at least one significant outcomes measure—the National Outcomes Measurement System (NOMS) of the American Speech-Language-Hearing Association—a series of 15 functional communication measures has been developed for the purpose of determining the outcome of SLT intervention. The concept of functional communication has its origins in pragmatics. This chapter will conclude with a discussion of how pragmatics has also shaped the measures that are now used to demonstrate the effectiveness of SLT interventions.

#### 1.2 Pragmatic Concepts

This section will examine a number of pragmatic and discourse concepts that are integral to the study of pragmatic disorders. These concepts will appear at various points in the following pages. A sound appreciation of these concepts on the part of the reader is thus essential for the discussions of later chapters to be fully understood. Four of the concepts to be discussed—speech act, implicature, presupposition and deixis—are core pragmatic concepts which are included as standard in introductions to pragmatics. A fifth class of concepts, which will be captured under the umbrella expression 'non-literal language', includes, amongst other things, idioms, metaphors and proverbs. A sixth concept, context, is more often alluded to than directly examined in introductions to pragmatics. The centrality of this concept to pragmatics in general, and to clinical studies of pragmatics in particular, requires that this concept be treated on a par with core concepts such as implicature. A seventh and eighth concept—discourse cohesion and coherence will conclude the survey of concepts in this section. Although these concepts are premodified by the term 'discourse', it is the reliance of these concepts on pragmatic skills that warrants their examination alongside notions such as speech acts.

#### 1.2.1 Speech Act

Until the latter half of the twentieth century, the dominant conception of meaning among philosophers of language was semantic in nature. According to this semantic conception, sentence meaning consists in a specification of the conditions that must exist in the world for a sentence to be true. That is, a sentence's meaning is given in terms of its truth conditions. This view of meaning applied to one type of sentence, the class of declaratives in language.

In the 1940s and 1950s, a group of philosophers at Oxford—among them John Austin—began to question this dominant conception of meaning. According to these philosophers, to reduce the meaning of any sentence to a set of truth conditions is to misrepresent the very large number of sentences in a language which are not intended to be true or false. Rather, sentences can be used to make promises and requests, issue threats, ask questions and much else besides. Even declarative sentences, it was argued, do not always report states of affairs and are not true or false for this reason. In the example 'I baptise this child John Brown', the speaker is not reporting an act of baptism but actually engaging in it. Utterances of this type led Austin to propose a distinction between constative utterances, which describe states of affairs in the world and are true or false, and performative utterances, which do not describe anything but whose uttering constitutes the performance of the act in question. These so-called speech acts are to be distinguished from the state of affairs that obtain when these acts are performed. So, while 'I baptise this child John Brown' is not something which is true or false, the fact that

there is a child who has been baptised John Brown is something which is true or false.

While a criterion of truth (or falsity) cannot be applied to performative utterances, these utterances, Austin argued, can be performed felicitously or infelicitously. The so-called felicity conditions that attend the performance of a speech act describe the conditions which must hold for the act to be performed successfully. Austin identified three main categories of felicity condition: (1) a conventional procedure which has a conventional effect in the presence of appropriate people and circumstances; (2) the conventional procedure must be performed correctly and completely; and (3) the thoughts, intentions and feelings required by the conventional procedure are present in the people involved in the speech act. Applied to the utterance 'I baptise this child John Brown', the conventional procedure requires the presence of an individual who has the religious authority to perform an act of baptism. The conventional procedure is not performed correctly or completely if the priest or minister has forgotten to fill the font with water or overlooks placing some water from the font on the child's head. Finally, if the priest is really an imposter who is performing a baptism for some financial gain, there is a clear sense in which he is not entertaining the thoughts, feelings and intentions required by the ceremony.

In his book *How to Do Things with Words*, Austin (1962) examines grammatical and other criteria that may be used to identify performative utterances. He then rejects the distinction between constatives and performatives that he set out to defend. Rejection is necessary, Austin argues, because all utterances are performing speech acts, and not just those identified as performatives. Every utterance, Austin concludes, performs the following three acts: (1) a locutionary act, which is closest to the semantic or propositional meaning of an utterance and in the case of the utterance 'The river has burst its banks' is a description of a state of affairs; (2) an illocutionary act, which in the case of this same utterance may be a warning to local residents about an impending danger; and (3) a perlocutionary act, which results if the residents decide to heed the warning and leave their homes.

It was the work of John Searle which developed further the project initiated by Austin. In his book *Expression and Meaning*, Searle (1979) developed a taxonomy of illocutionary acts that included representatives (e.g. asserting), commissives (e.g. promising), expressives (e.g. thanking), directives (e.g. requesting), and declarations (e.g. appointing). Searle also advanced Austin's notion of felicity conditions. Specifically, it was Searle who argued that by questioning a felicity condition on the performance of a speech act, a speaker can perform an indirect speech act. For example, a preparatory condition on the performance of a directive is that the addressee can perform a certain action (in the case of 'Can you pass the salt?' that the addressee can actually pass the salt). By questioning that condition, the speaker is indirectly requesting that the salt be passed.

Speech acts are one of the most extensively examined pragmatic concepts in clinical studies. In Chap. 2, we will examine what these studies have revealed about the use and understanding of speech acts by language disordered children and adults. In the meantime, it is instructive to examine some examples of the use

and comprehension of speech acts by clinical subjects. The exchange below takes place between a teacher (T) and a child (P) with pragmatic disorder. The teacher has issued a directive to the child, an indirect request to describe a TV programme. However, the child treats the teacher's utterance as a literal question about his or her ability to describe the TV programme and responds as such with 'yes'. A second, more direct utterance—a command—is then used by the teacher as a means of making this communicative intent clear to the child.

- T: Can you tell me about it?
- P: Yes (silence)
- T: Well tell me about it. What's it like?

(adapted from McTear 1985, p. 132).

A similar failure to establish the communicative intent of the speaker is evident in the following exchange. The teacher's utterance is a command to the effect to take *and leave* the note with Mr. Smith. However, the child with pragmatic disorder fails to establish the illocutionary force of the teacher's directive and returns with the note.

- T: Take this note to Mr. Smith's room
- P: (obediently goes to Mr. Smith's room and returns still carrying the note)

(adapted from Crystal and Varley 1998, p. 179).

Even in the presence of severely compromised language skills, children and adults can still perform a range of speech acts. These speech acts are often realized through verbal and non-verbal means. In a study of adults with aphasia, Prinz (1980) used a number of elicitors to encourage the production of requests by three speakers with aphasia. The following requests were produced by adults with Broca's aphasia, Wernicke's aphasia and global aphasia (the elicitor used in each case is indicated):

#### 59-year-old male with Broca's aphasia:

- (1) Need... (gestures writing)

  \*\*Elicitor: Patient is asked to sign his name on paper without being given a pen or pencil
- (2) No... pencil... pentil broke *Elicitor:* Patient is given a broken pencil to sign his name
- (3) (pointing to box) You... open box? *Elicitor:* Patient is shown a locked box

47-year-old male with Wernicke's aphasia (recovering to anomic aphasia):

- (4) Up here? Up here? (pointing to first X). Like this? Like that? *Elicitor:* Patient is asked to sign his name next to the X without indicating which of three X's on the page the experimenter intends
- (5) What'd you do—hurt yourself? Elicitor: Experimenter returns from getting a drink with a large bandage on his neck; no explanation is given

(6) Don't they—don't you have something that you... (looking around room) *Elicitor:* Experimenter spills coffee on the paper without offering to clean it up

37-year-old male with global aphasia:

- (7) September... no... cold... (with experimenter assistance indicates lemonade)
  - *Elicitor:* Patient is offered something to drink without indicating the selection of drinks available in the vending machine
- (8) (looks at experimenter, quizzical looks, laughs—waves arms as if to say "forget it"—points to paper and pen and then writes "German"). *Elicitor:* Experimenter starts speaking in a foreign language.

Requests are more or less successfully indicated in each case through a combination of verbal and non-verbal behaviours. The non-verbal behaviours on display include facial expressions (the quizzical look in 8), eye gaze (looking around the room in 6), pointing (such as in 4), hand gestures (such as writing in 1), and bodily movements (the use of arm waving in 8). These behaviours are more often used in support of a verbal response rather than in place of it (see 1 above) and are probably compensating for word-finding difficulties on the part of these patients.

Verbal responses take both spoken and, less commonly, written form (see the use of the written word 'German' in 8). A range of verbal strategies are used to make requests of the experimenter. Sometimes, a speaker with aphasia describes a condition that must obtain (but which does not hold) in order for an action to be performed, e.g. in 2 when the patient with Broca's aphasia says 'pentil broke'. On other occasions, the patient makes a request by using a declarative with questioning intonation (e.g. 'You... open box?' in 3) or by using an interrogative construction (e.g. 'What'd you do—hurt yourself?' in 5). (It should be noted that posing a question is a conventional way of making a request in English, e.g. 'Do you know the time?') On still other occasions, the speaker with aphasia makes extensive use of deictic expressions such as 'here', 'this' and 'that' to indicate his request. In only utterance 7 does the experimenter have to directly assist the patient in making a request. Notwithstanding significant linguistic impairments, these patients are able to use a range of quite sophisticated verbal and non-verbal strategies to fulfil their performance of the speech act of request.

#### 1.2.2 Implicature

Many utterances that speakers produce communicate meaning beyond what is said.<sup>1</sup> In his landmark article 'Meaning', Paul Grice (1957) described this communicated meaning as non-natural meaning (meaning<sub>NN</sub>). The key characteristic of meaning<sub>NN</sub>, and the feature which distinguishes it from natural meaning (meaning<sub>N</sub>), is the emphasis placed on intentions in communication between speakers and hearers (see Wharton (2010a) for discussion of natural and non-natural meaning). Grice

(1989, p. 219) captures the role of intentions in meaning<sub>NN</sub> as follows: "'A meant something by x' is roughly equivalent to 'A uttered x' with the intention of inducing a belief by means of the recognition of this intention". For the first time intentions were to play a central role in human communication, a Gricean insight that has had a profound influence on the development of the modern discipline of pragmatics.

Grice developed this view of communication through the establishment of a principle of cooperation and four maxims. Through its general prescription of the behaviours that can make a cooperative contribution to a conversational exchange, this principle sets in place certain rational expectations on the part of speakers and hearers. Grice (1989, p. 26) captures the cooperative principle as follows: 'Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk-exchange in which you are engaged'. The four maxims which give effect to this principle are quality ('Do not say that which you believe to be false or that for which you lack adequate evidence'), quantity ('Do not contribute more information than is required but also do not contribute less information than is required'), relation ('Be relevant') and manner ('Be brief and orderly; avoid obscurity of expression and ambiguity').

The cooperative principle and maxims, Grice argued, can be employed by speakers in different ways to generate implicated meanings. Certain conversational implicatures can arise from the simple assumption that the speaker is observing the principle and maxims. In this way, the speaker who utters 'Jill collected the children and did the shopping' may be taken to implicate that Jill collected the children first and then did the shopping. In this case, the implicature arises because the speaker observes the manner maxim, a maxim which requires that the speaker report events in the order in which they occur. By the same token, the hearer can be expected to draw inferences about the order in which these events took place on the basis of the manner maxim. As well as implicatures that arise when speakers observe maxims, speakers can also generate implicatures through the overt flouting of maxims. In the exchange below, Fran may be taken to conversationally implicate that she did not wash the yard:

Jack: Did you wash the patio and the yard?

Fran: I washed the patio.

This implicature is generated by Fran's overt flouting of the quantity maxim. Even though Fran appears not to comply with the quantity maxim—she appears to provide Jack with less information than he requires—Jack can assume that Fran is still being cooperative in the exchange. He then uses this assumption of cooperation to derive the implicature that Fran did not wash the yard.

Grice made a further distinction between those implicatures that arise without the need for particular contextual conditions (*generalized* conversational implicatures) and those that do require particular contextual conditions (*particularized* conversational implicatures). The speaker who utters 'I've bought some of the books on the reading list' may be taken to produce a generalized conversational implicature to the effect that the speaker has not bought all the books on the list. Known as a scalar implicature, this generalized conversational implicature

arises without the need for certain contextual conditions. Rather, there is a default interpretation from the use of 'some' to 'not all'. However, the implicature generated in the exchange below does depend on particular contextual conditions. If Frank knows that Patsy does not like her mother-in-law, he may derive the implicature that Patsy will join him for a drink later. If different contextual conditions obtain—for example, Frank believes that Patsy has a good relationship with her mother-in-law who visits only infrequently—then Frank may draw a quite different implicature, viz. that Patsy will not join him for a drink later.

Frank: Will you join me for a drink later?
Patsy: Bill's mother is visiting this evening.

Grice recognized a further class of implicatures. Known as conventional implicatures, these non-truth-conditional meanings arise not from a rational principle of cooperation but from conventional features attached to particular lexical items or linguistic constructions. For example, the word 'even' in the utterance 'Even Sally passed the linguistics exam' generates an implicature to the effect that it was not expected that Sally would pass the exam. Similarly, the word 'but' in the utterance 'Mike is obese but healthy' creates an implicature in which a state of good health is contrasted with obesity (in the sense of not being consistent with it). To the extent that conventional implicatures are attached by convention to certain linguistic expressions, they are not calculable (derivable) in the way that conversational implicatures are. For further discussion of the features of implicatures, the reader is referred to Cummings (2014c).

Like speech acts, implicatures have been investigated quite extensively in studies of clinical subjects. This said, most studies have examined the comprehension rather than the production of implicatures, and some types of implicatures (e.g. scalar implicatures) have only rarely been investigated. In the following example, a 9-year-old boy with Asperger's syndrome is shown a picture of a mother and a girl. The girl has a dress on and she is running on a road that has muddy puddles on it. The boy is then read a verbal scenario, at the end of which he is asked a question:

The girl with her best clothes on is running on the dirty road. The mother shouts to the girl: "Remember that you have your best clothes on!" What does the mother mean? (Loukusa et al. 2007a, pp. 376–377).

Clearly, the mother is implicating by way of her utterance that she wants the girl to keep her dress clean. However, the boy with Asperger's syndrome fails to derive this implicature from the mother's utterance. Instead, he produces a response which is a verbatim repetition of (part of) that utterance: 'You have your best clothes on'. Other clinical subjects have difficulty adhering to Gricean maxims in their spoken output. For example, in this conversational exchange between a 36-year-old man (W) with AIDS dementia complex and a researcher (R), a relevant response to the researcher's question is followed by an extended turn that fails to adhere to maxims of relation and quantity:

R: What year were you born in?

W: 1964

R: 1964

W: The odd thing was, was I was filling out doctors' forms and hospital forms and all sort of things, putting down the date of birth as xxth of xxxx of 1964 and my age was 34 but a diversional therapist in a nursing home was the only person who actually noticed that there was something wrong with this picture. I thought "well, it's fairly obvious I'm in it" so there's your problem (McCabe et al. 2008, p. 209).

The maxim problems evident in this short exchange were present in all three interviews conducted with W over a period of 13 months.

#### 1.2.3 Presupposition

Semantic and pragmatic definitions of presupposition abound. On a semantic conception of this notion, presupposition is defined in terms of a proposition, the truth of which must be taken for granted and without which a sentence's truth value cannot be assigned. On a pragmatic conception, presuppositions may be taken to be propositions that are assumed or taken for granted in an utterance. Alternatively, they have been characterized in terms of the background, mutual or shared knowledge of speakers and hearers. Marmaridou (2000, p. 141) states that '[i]t has become obvious from the discussion of both semantic and pragmatic approaches to presupposition that this phenomenon is related to some kind of information that appears to be given, or is portrayed as given, in particular speech situations in which sentences are used'.

Presupposition is distinct from entailment. In the utterance 'The doctor managed to save the baby's life', there is a presupposition to the effect that the doctor *tried* to save the baby's life, and an entailment that the doctor *saved* the baby's life. A test of constancy under negation can be used to distinguish the different inferences generated by this utterance. For only the presuppositions of an utterance remain once the utterance is negated (the entailments are quickly cancelled by negation). In this way, in the utterance 'The doctor did *not* manage to save the baby's life', it is still the case that the doctor *tried* to save the baby's life (the presupposition still stands). However, it is no longer the case that the doctor *saved* the baby's life (the entailment fails).

A further feature of presuppositions which distinguishes them from entailments is their defeasibility or cancellability. In the utterance 'Jack managed to pass the grammar exam without even trying to do so', the presupposition generated by 'managed'—that is, that Jack *tried* to pass the exam—is very quickly defeated by the information in the rest of the utterance. However, the same information which overturns the presupposition of this utterance has no effect whatsoever on its entailment—it is still the case that Jack *passed* the grammar exam. For further discussion of these features of presupposition, the reader is referred to Marmaridou (2010a).

It can be seen from the above examples that the implicative verb 'manage' generates a presupposition in which a person tries to do something. Implicative verbs are one type of presupposition trigger. Other triggers include factive verbs (e.g. 'Mary realized that the situation was hopeless' presupposes a fact to the effect that the situation was hopeless), change-of-state verbs (e.g. 'Have you stopped smoking?' presupposes that the addressee has been smoking), cleft constructions (e.g. 'It was the teenager who vandalised the bus shelter' presupposes that someone vandalised the bus shelter), definite descriptions (e.g. 'The castle on the hill is of historic value' presupposes that there is a castle on the hill), comparisons of equality (e.g. 'Paul is as sexist as Fred' presupposes that Fred is sexist), counterfactual conditionals (e.g. 'If I were the Prime Minister, I would cut taxes' presupposes that the speaker is not the Prime Minister), iteratives (e.g. 'Fran failed her driving test again' presupposes that Fran failed her driving test before), and temporal clauses (e.g. 'After he escaped from prison, the criminal fled to France' presupposes that the criminal escaped from prison). These lexical items and constructions enable the speakers of these various utterances to leave certain information implicit in communication. Presupposition thus confers an economy on communication in that not everything has to be explicitly stated by speakers.

Few clinical studies have examined the use and understanding of presuppositions by subjects. This lack of empirical investigation may be related to a misunderstanding of the concept of presupposition (intuitively, presupposition is somewhat more difficult to grasp than either speech acts or implicatures). Alternatively, presupposition may be less amenable to investigation in a clinical context than other pragmatic concepts. One can readily imagine how certain speech acts can be elicited from clients in a clinical setting. A favourite toy placed out of reach but within view of a child can prompt request speech acts. However, it is less easy to imagine how a researcher might investigate a client's use and understanding of certain presuppositions. Some studies have attempted to do this by means of so-called barrier activities which require subjects to make assessments of their listeners' state of knowledge and then tailor the informational content of their messages accordingly (see Wright and Newhoff (2005) for discussion of these activities). A client who can foreground new information and background old or shared information in utterances in accordance with the knowledge state of his listener may be said to use presupposition effectively. The child (P) with pragmatic disorder in the following exchange with a teacher (T) has clear difficulties with presupposition. The child's second utterance presupposes that he has some knowledge of or familiarity with the games mentioned by the teacher, when in fact he does not.

- T: Do you want to see if you can play some games with me?
- P: Yes
- T: They're very easy games
- P: They are indeed

(adapted from McTear 1985, p. 133).

The child with pragmatic disorder in the following conversational exchange also exhibits problems with presupposition. His utterance 'I like to be in X at

the sports day' presupposes that X has a sports day. However, when the teacher directly interrogates this presupposition through the use of the question 'Is there a sports day in X?', the child's response 'There is not' indicates that he should not have couched this information as a presupposition of his earlier utterance. The teacher's continued questioning of the child indicates that he or she is aware of the presuppositional failure that has been introduced into the exchange by means of the child's first utterance and wishes to rectify it.

- T: Which race would you like to be in?
- P: I like to be in X at the sports day
- T: In X?
- P: Yes
- T: What do you mean?
- P: I mean something
- T: Is there a sports day in X?
- P: There is not. There is a sports day in Y
- T: Then what's X got to do with it?
- P: Nothing
- T: Then why did you mention it?
- P: Indeed I did mention it
- T: Why did you mention it?
- P: I don't know

(adapted from McTear 1985, pp. 135–136).

#### 1.2.4 Deixis

Few pragmatic concepts so clearly demonstrate the way in which language relates to context as deixis. Marmaridou (2010b, p. 101) defines deixis as 'the use of certain linguistic expressions to locate entities in spatio-temporal, social and discoursal context'. These expressions include personal pronouns (e.g. 'I am departing for Paris'), demonstratives (e.g. 'Mary arrives this week'), adverbs (e.g. 'Susan lives here'), adjectives (e.g. 'Stan is visiting next month') and verbs (e.g. 'Come here'). To establish the referent of each of these expressions, a hearer must look to the context of an utterance. For example, in the case of the utterance 'Mary arrives this week', a hearer must know when the utterance has been produced (temporal context) in order to establish the particular week in which Mary will be arriving. Similarly, a hearer must look to the spatial context of the utterance 'Susan lives here' in order to establish the referent of the adverb 'here'.

Other linguistic expressions do not point to aspects of the spatio-temporal context of an utterance, but to (spoken or written) discourse that either precedes or follows an utterance. For example, in the utterance 'Moreover, the policy is likely to have an adverse impact on those with a low income', the term 'moreover' points to preceding discourse in which some other negative consequence of the policy has been described. Also, in the utterance 'I challenge this argument in the next chapter', the term 'next' points to an upcoming piece of written text.

A number of linguistic expressions can be used to perform two or more types of deixis. For example, the demonstrative determiner 'this' in the following utterances is used to perform temporal deixis in (1), spatial deixis in (2) and discourse deixis in (3):

- (1) Oscar arrives *this* week.
- (2) Bill walked home *this* way.
- (3) You raised strong points in this chapter.

Languages achieve deixis in different ways. French and German encode features of social context within their pronoun systems. For example, in the presence of a familiar addressee, the French speaker will utter 'Tu es beau' (the German speaker 'Du bist schön'). Different pronouns come into play when the addressee is unfamiliar to the speaker: 'Vous êtes beau' (French) and 'Sie sind schön' (German). This pronoun distinction does not occur in English. However, English speakers can still reflect aspects of the social context of an utterance in the linguistic choices that they make. For example, the mother who says to her 5-year-old daughter 'Is Sally going to be a good girl for mummy?' reflects the asymmetric power relationship between a caregiver and a child through the use of the noun phrases 'Sally' and 'mummy' as opposed to the pronouns 'you' and 'me'.

Like presupposition, deixis has received little investigation in clinical studies of pragmatics. When studies of deixis have been undertaken, they have largely involved children with autism. Autistic children are reported to display confusion of personal pronouns. This is how Kanner (1943, p. 244) characterized this difficulty in his first description of infantile autism: 'Personal pronouns are repeated just as heard, with no change to suit the altered situation. The child, once told by his mother, "Now I will give you your milk," expresses the desire for milk in exactly the same words. Consequently, he comes to speak of himself always as "you," and of the person addressed as "I." Not only the words, but even the intonation is retained'. Later clinical characterizations of autism have also emphasized the reversal of pronouns described by Kanner. Fay (1979, p. 247) describes how the autistic child uses 'You want biscuit' to mean 'I want biscuit'. Tager-Flusberg et al. (2005, p. 347) describes how an autistic child may ask for a drink by saying 'Do you want a drink of water?' Explanations of this pronoun confusion in autistic children have included echolalia. What is clear is that in the absence of further clinical studies of this deictic phenomenon, and of deixis in general in clinical subjects, little progress will continue to be made on this aspect of pragmatics.

#### 1.2.5 Non-literal language

For convenience, a range of pragmatic phenomena may be grouped under the heading of 'non-literal language'. These phenomena include irony (e.g. 'What a delightful view!' uttered by a speaker who is looking out of a hotel window onto a building site), proverbs (e.g. 'A stitch in time saves nine'), idioms (e.g. 'He kicked the bucket'), metaphors (e.g. 'The children are angels'), hyperbole (e.g. 'I've got

millions of things to do'), and understatement (e.g. 'It's rather windy' uttered during a hurricane). What each of these expressions has in common is that their intended meaning is not a sum of the meanings of the individual words contained within them. In fact, a compositional semantic approach to the meaning of these expressions is very often little or no guide to the meaning with which speakers use these expressions. In this way, there is not an obvious connection between sewing and the idea that problems should be dealt with early before they escalate, or the physical action of someone kicking a bucket and his or her death (although Gibbs (2010) argues that even in the case of a 'nondecomposable' or 'nonanalyzable' idiom such as *kick the bucket*, people appear to be using some aspects of word meanings to obtain the idiomatic meaning of the expression, e.g. the sudden action indicated by the verb 'kick' is appropriate in a context where someone died suddenly).

Of course, one's view of the analyzability of the meaning of these expressions determines one's view of how these expressions are stored and processed by language users. If the meaning of these expressions is stipulated in the same way that the meanings of words like 'dog' and 'house' are stipulated, then one is committed to a semantic view of these expressions in which they are stored in and retrieved from the mental lexicon. However, if a hearer actively builds the meaning of these expressions out of linguistic and world knowledge, then one will be more inclined to view the interpretation of these expressions as pragmatic in nature. For further discussion of these issues, the reader is referred to Gibbs (2010).

Non-literal forms have been studied extensively in a clinical context. In fact, some non-literal forms have been examined so routinely that they have come to have diagnostic significance in relation to certain disorders. In this way, proverb comprehension tests were for many decades believed to reveal hallmark features of schizophrenia, although they have been recently abandoned on the grounds of poor reliability (Brüne and Bodenstein 2005). When proverb understanding is tested in a clinical context, the typical testing format is to present subjects with a number of possible interpretations from which they select one. Alternatively, interpretations may not be provided by the examiner. Instead, subjects are asked to explain the meanings of proverbs. In the case of schizophrenia at least, these explanations are often irrelevant or bizarre in nature. For example, Halpern and McCartin-Clark (1984, p. 294) describe how an adult with schizophrenia in their study produced the utterance 'Take rags to junk yard' in explanation of the proverb *Don't put all your eggs in one basket*.

The use of metaphorical language can be symptomatic of pragmatic impairment in some clinical conditions (e.g. autism spectrum disorder). In the following conversational exchange between a researcher (R) and a male subject (W) with AIDS dementia complex, there is a metaphorical use of 'black duck'. W's use of this phrase may indicate inaccurate recall of the ugly duckling from the fairy tale written by Hans Christian Andersen. The ugly duckling in this tale was despised and rejected by the other ducklings, a sentiment possibly expressed by W through his use of the adjective 'common':

R: What would be the longest job you had?

W: Oh when I had the business, cleaning the building

- R: mm and that was for how many years?
- W: 8 years, like I said I was spoiled
- R: And that was when you were in your twenties?

W: Twenty two. (Name) was the only person who had total faith in me. There was an intelligent person in there that, um, he said I've got more common sense. I like that idea 'cause there's nothing *common* about this little *black duck* and if I am on my way to prove that I'm not (McCabe et al. 2008, p. 214; *underlining* added).

#### 1.2.6 Context

The notion of context has attracted the attention of theorists from a number of disciplines including psychology, philosophy and pragmatics (Cummings 2012c). Illustrative of this broad theoretical approach is Clark's notion of common ground which 'explicitly covers mutual knowledge, mutual beliefs, mutual assumptions, and other mutual attitudes' (1992, p. 6). One aspect of this common ground, mutual knowledge, is developed by Schiffer (1972). For Schiffer, mutual knowledge involves an infinite recursion of knowledge states: 'all "normal" people know that snow is white, know that all normal people know that snow is white, know that all normal people know that all normal people know that snow is white, and so on ad infinitum (Likewise, I should think, for all or most of our common general knowledge...)' (1972, p. 32). Whatever the philosophical merits of Schiffer's notion of mutual knowledge, an infinite recursion does not sit well with the types of constraints that we recognize in normal cognitive processing. An approach to context which has greater psychological plausibility is represented by the relevance-theoretic notion of mutual manifestness. This is how Sperber and Wilson (1987, p. 699) define this notion:

An individual's total cognitive environment consists not only of all the facts that he is aware of, but of all the facts that he is capable of becoming aware of at that time and place. Manifestness so defined is a property not only of facts but, more generally, of true or false assumptions. It is a relative property: Facts and assumptions can be more or less strongly manifest. Because *manifest* is weaker than *known* or *assumed*, a notion of mutual manifestness can be developed that does not suffer from the same psychological implausibility as mutual knowledge (italics in original).

Several aspects of context may be identified including (1) linguistic context (the linguistic utterances that precede and follow a particular utterance); (2) physical context (the setting in which a conversation takes place, the people present, and the time at which a conversation occurs); (3) social context (the social relationship between speaker and hearer); and (4) epistemic context (the speaker's and hearer's knowledge and beliefs of the world and of how conversation is conducted). In an important sense, linguistic, physical and social aspects of context are all subsumed by epistemic context, in that they are part of the speaker's and hearer's *knowledge* 

of a vast range of factors that play a role in the interpretation of utterances. (This idea lies at the heart of a relevance-theoretic notion of context.) Also, it is necessary to emphasize that although these different dimensions of context have been enumerated separately, no single aspect of context is more important than other aspects in the interpretation of utterances. This can be demonstrated in the following conversational exchange between two friends, Oscar and Felix. In this exchange, Oscar is attempting to get Felix's opinion of an art exhibition to which he (Oscar) is a significant contributor:

Oscar: What did you think of the exhibition in *The Riverside* last night?

Felix: The number of pieces on display was greater this year.

Like any witness to this exchange, Oscar is likely to conclude that Felix was not particularly impressed with the art exhibition. In deriving this particular implicature of Felix's utterance, Oscar will draw on several sources of information, or aspects of context. Felix's utterance is preceded by a question which is intended to elicit an opinion. This question, and the particular speech act which it performs (elicitation of opinion), forms the linguistic context of Felix's utterance. The physical context of that utterance includes the presence of two conversational participants (Felix and Oscar), and the fact that the conversation is taking place the day after the exhibition took place. The social context is one in which Oscar and Felix are friends. As such, there will be a high degree of familiarity (a lack of social distance) between the speaker and the hearer. In fact, it is a desire to maintain this close social relationship that leads Felix to indicate his negative evaluation of the exhibition indirectly to Oscar by way of implicature, rather than through the use of a direct reply (e.g. 'I thought the exhibition was terrible').

Finally, Oscar and Felix must both have shared world and conversational knowledge (epistemic context) in order to participate in this exchange. They must know, for example, that *The Riverside* is the name of an arts centre in town. They must also have knowledge of, and be able to put into practice, conversational rules such as the cooperative principle and maxims in order to participate competently in this exchange. The essential involvement of each of these different aspects of context is demonstrated by the fact that if any one of them is not present—imagine, for example, that Felix does *not* know that *The Riverside* is the name of an arts centre—then the entire conversational exchange, including the implicature, is unlikely to succeed.

Aspects of context can often be problematic for clients with pragmatic disorder. Difficulties with context can take several forms. In some cases, clients are unable to draw on context to arrive at an intended interpretation of a word or an utterance. It will be seen in Chap. 2, for example, that speakers with schizophrenia are poor at using preceding linguistic context to achieve the disambiguation or correct pronunciation of lexical items. (Unlike language intact individuals, adults with schizophrenia disregard context and operate with the dominant meaning or pronunciation of a lexeme.) In other cases, children and adults with pragmatic disorders are insensitive to features of context in their formulation of utterances. For example, the child (P) with pragmatic disorder in the following exchange fails to gauge the