Chapter 4 Research Design and Analytic Method is presented below.

The chapter is taken from Dr Hellene T Demosthenous' book *Turn-taking in deep hypnosis: A practical guide*. The book was published by VDM Verlag, in 2009.

Note that the Chapter follows:

Chapter 1   An Introduction to the Study

Chapter 2   A Review of the Literature

Chapter 3   Empirical, Theoretical and Methodological Framework: Conversation Analysis

Chapter 4

Research Design and Analytic Method

4.0 Introduction

Recall that this study is interested in providing an empirically grounded account of how hypnotists and highly accomplished hypnotic clients take turns at talk in deep hypnosis. Chapter 3 presented an overview of the conversation analytic approach to the study of talk-in-interaction, and also presented details of the generic organisation of practice that is investigated in this study, namely, turn-taking. This chapter provides an overview of the research design and analytic method that is undertaken in this study. The chapter begins by presenting the findings of a pilot study, which was conducted for the purpose of enabling the refinement of processes before designing the main study. The chapter presents this design as one which is suitable for the rigorous, systematic and non-experimental investigation of the organisation of turn-taking for deep hypnosis.

The remainder of the chapter is organised in five sections. Section 4.2 reports results of the pilot study, which provides some wider context for the subsequent analytic chapters. Section 4.3 presents the research design for the main study, with a description of how the sites and the participants were selected, the data collected and processed and ethical clearance obtained. Section 4.4 discusses reliability and validity. Section 4.5 details stages of data analysis. Section 4.6 concludes the chapter with a summary.

4.1 Pilot Study

When approaching any study of human social interaction "[t]he specific aim is, in the first instance, to see whether actual single events are studiable and how they might be studiable, and then what an explanation of them would look like" (Sacks, 1992, p. 26 [1967, lecture])). For this exploratory study on the organisation of turn-taking for deep hypnosis, a pilot study was conducted on an actual single hypnotic event, or more specifically on the part of an entire hypnosis session that is referred to as "the hypnotic induction". The pilot study findings are not presented in their entirety here. (For a full account, see H. T. Demosthenous, 2004b, 2005, 2006, 2008; H. T. Demosthenous & Austin, 2003.)

Overall, the pilot study found:

- that the use of audiovisual data (rather than audio data alone) was necessary;

- that the capturing of both participants on film at the same time was necessary;

- that the development of additional transcript symbols for capturing details of vocal *with* nonvocal activity was useful;

- that there are benefits to using digital- rather than analogue-data; and

- that close attention to both vocal and nonvocal aspects of the data pointed to the possibility of a special sequential turn-taking organisation.

This section presents the pilot study findings in two sections: Section 4.2.1 *Pilot study data*, and Section 4.2.2 *Lessons from the pilot study*.

4.1.1   Pilot study data

The pilot study data was taken from an existing, uninterrupted and unedited audiovisual recording entitled *The Artistry of Milton H. Erickson, M.D.* (Lustig & Pyle, 2000). The recording of approximately 90 minutes in length depicts two entire sessions of hypnosis. These hypnosis sessions were studio-recorded by an audiovisual technician in the USA in 1975 (Lustig & Pyle, 2000).

Note, though hypnotic sessions for therapeutic purposes may naturally occur in clinics or hospitals they need not be restricted to these (or other) types of institutional settings. This is because the institutionality of an action is determined "as participants' institutional or professional identities are somehow made relevant to the work activities in which they are engaged" (Drew & Heritage, 1995a, p. 3-4). For that reason, the recording of institutional interaction is not restricted to any particular setting.

The use of existing studio recorded data was considered adequate for the purpose of the pilot study. Griffith University Human Research Ethics Committee (HREC) approval was not required for an examination of the pilot study data because the recording is commercially available for public presentation.

The data used in the pilot study consisted of a section of the first hypnosis session, namely, *the hypnotic induction*. In the pilot study data presented below, the hypnotist directs his talk to two different people simultaneously, Monde and Nick. Monde is the primary client. She has previously been hypnotised by the hypnotist on at least one other occasion. Nick is the secondary client. He has no previous experience with hypnosis. The focus of the pilot study analysis is on the (inter)action between the hypnotist and the primary client (henceforth, the client).

4.1.1.1 Vocal aspects

The hypnotist whose hypnotic practice is examined here is Erickson. Recall that Erickson developed a *naturalistic approach* for the induction of hypnosis, which does not require the reading of standardised scripts, and that the terms "hypnosis" and "trance" can be used alternatively.

Notational conventions are described at the outset of this book. These facilitate the reading of the transcripts that follow.

Example 4.1   [Pilot]

1		(4.9) ((beginning of recording))
2	H:	W'll Monde this t↑i::me (0.7) I'd like t'
3		have you take yer time abou' go:ing into
4		a tra:nce (0.8) I don't want tu t' go
5		into a tra:nce ↑too ↓so↑o::n: (0.4)
6		.hhhhhhhhh (.) an' y' know how ea:sy it ↑i:s
7		fer yer,
8		(1.1) ((directs talk to Nick))
9		And while >Nick is< her:e (0.7) I'd like to
10		have you wa:tch how Monde's fa:ce (0.5)
11		.hhhhhhh and yer unconscious mind will
12		lear::n a great deal °s'° tu:rn, 'n' look
13		(0.2) s' yo' c'n see 'er.
14		(3.4) ((redirects talk to Monde))
15		Not quite that (.) fa:s' Monde.

16		(0.8)
17	( )	((quiet laughter))
18		(0.9)
19	H:	Lets >↓hav'a liddle< ta:lk (.) fi:rs'
20		(1.3)
21		'cause in the trance I will ↓wa::nt you::
22		(0.3) t' do something of ↑importance fer
23		↑you (1.5) and jus' fer ↑you:
24		(5.4)
25		An' just↑ w<u>a</u>iting (1.1) an' you know why,
26		(0.3) I'm ↑wai:ting ↑for?
27		(2.9)
28		°That's ↑ri:ght°
29		(2.9)
30		°°<That's°° ↑ri:ght>°
31		(2.4)
32		°°↓All:: the way shu:t°°
33		(3.6)
34		↓<u>Now</u> <u>go</u> <u>deep</u>ly into th:' ↓<u>tra</u>::nce:
		((H continues with deepening instructions))

Note. The *empty curved brackets* in the speaker-designation column are used to indicate the researcher's inability to audibly identify who is laughing.

In Example 4.1, above, the hypnotist instructs the client on how he would like her to proceed with the social activity of going into a trance. From an examination of the hypnotist's talk, the pilot study showed that going into a trance is specified as an activity that the client does and that the hypnotist has rights of control over.

Note that vocal actions only were made available in this transcript and, using only these, it appeared that the hypnotist assumed, and was afforded, sole rights to the floor. The hypnotist's talk appeared as a monologue interspersed with silences, that is, the talk and silences. Further, despite the

hypnotist invitation for the client to comment (e.g., lines 2-7), the client does not speak. Instead, after each pause the hypnotist continues the talk.

According to Pomerantz (1992), "[i]f a recipient does not give a coherent response, the speaker routinely sees the recipient's behaviour as manifesting some problem and deals with it" (p.152). However, this was not the case here. The pilot study data indicated that the hypnotist simply retook the turn without orienting to or dealing with the client's failure to speak in any way. Further, the participants appeared to mutually orient to the talk as reasonable (or normative) for this particular social activity. What this suggests is that interspersing silence in the talk is part of the specific institutionality of hypnosis.

Generally speaking, conversation analytic studies of audiovisual data tend to take the vocal production by the participants as a base-line for understanding interaction (ten Have, 2000). However, since the client did not speak while going into the trance, the pilot study found that it was impossible to determine the character of the interaction from the audio data alone. As a result, the pilot study revealed that it was not possible to take the vocal production by the participants as a base-line for understanding this hypnotic induction event. In order to make sense of the hypnotist's utterances and with a view to determining the client's part in the interaction, both audio and visual aspects of the data had to be examined.

4.1.1.2   Adding nonvocal aspects

The pilot study found that adding nonvocal aspects of the talk to the transcription was central to understanding the hypnotic induction event. The pilot study drew on the transcription notation system for gaze and some other nonvocal aspects of the talk, which was developed by C. Goodwin. This system is especially suited to representing the phenomenon of turn-*sharing*, where vocal and nonvocal aspects of a speaker's turn occur at the same time.

The following notations are based on those provided in provided in C. Goodwin (1981).

> -----　　　　　*Dashes* are used to provide a spatial representation of the length of
> 　　　　　　　silence, with each dash equivalent to one-tenth of a second.
> 　　H:　　how ea:sy it ↑i:s fer yer,-————————

+   *A plus sign* is used to mark each full second.

H: how ea:sy it ↑i:s fer yer,-−−−−−−−−+− And

Relevant nonvocal aspects of the interaction are added to the transcript with respect to where they occur in relation to the talk and/or silence. The nonvocal actions of the hypnotist are transcribed above the line of talk and/or silence, and those of the client are transcribed below it. The first line above and below the talk is reserved for transcribing gaze.

_____   A *continuous line* immediately above and/or below the transcribed line of talk and/or silence is used to indicate that the party is gazing at the face of another.

H: ((H out of camera view))

H: y' know how ea:sy it ↑i:s

C: _____

Further, the pilot study found that it was necessary to expand the commonly used methodology by developing a set of transcription symbols: the *filled circle* (●), the *unfilled circle* (○) and the *doubled headed vertical arrow* (↕). The transcription notation for these symbols is provided below.

__●○__   A *filled circle followed by an unfilled circle punctuating the line of gaze* indicates momentary eye closure and eye opening, i.e., a single blink of the eyes.

●○●○●   A row of *filled and unfilled circles* indicates a blinking or fluttering of the eyelids. The length of the row of filled and unfilled circles indicates the length of the blinking or fluttering of the eyelids in relation to simultaneous talk and/or silence.

●●●●●   *A row of filled circles* indicates a prolonged period of eye closure. The length of the row of filled circles indicates the length of the eye closure in relation to simultaneous talk and/or silence.

○○○○○   *A row of unfilled circles* indicates a prolonged period of eye opening. The length of the row of unfilled circles indicates the length of the eye opening in relation to the simultaneous talk and/or silence.

↕↕↕↕↕   A row of *doubled headed vertical arrows* indicates an up and down movement or nod of the head. The length of the row of doubled headed vertical arrows indicates the length of the head nodding in relation to the simultaneous talk and/or silence.

The pilot study looked at both vocal and nonvocal aspects of the hypnotic induction event (H. T. Demosthenous, 2004b, 2005; 2006; H. T. Demosthenous & Austin, 2003). Two sections of the talk are presented with nonvocal aspects. These are lines 6-9, and lines 18-21 from Example 4.1, Transcript 1. The talk is transcribed across the page, in accordance with conventions devised by C. Goodwin (1981). Note that this examination of nonvocal aspects of the talk is restricted to that of the client, because all parties were not captured on film at the same time.

4.1.1.2.1 Talk with gaze behaviour

Recall that the hypnotist has begun instructing the client on how he would "like" her to proceed with the social activity of going into a trance (see Example 4.1, lines 2-5). Example 4.2, below, shows the talk of the hypnotist and the nonvocal gaze behaviour of the client (i.e., alternating intense gaze and blinking).

Example 4.2 [Pilot]

        Lines 6-9

        H: ((H out of camera view))

        H: y' know how ea:sy it ↑i:s fer yer,-−−−−−−−−−+− And

        C: _____●○__●○__●○_____

The pilot study's examination of the nonvocal data (i.e., gaze behaviour) showed the client gazing intensely at the hypnotist ("__") throughout the production of the assessment, "y' know how ea:sy it ↑i:s fer yer,". It also showed that the client begins to blink her eyes ("●○") at a transition relevance place. Both the hypnotist and the client were found to orient to this gaze behaviour as reasonable (or normative) for the hypnotic induction event.

C. Goodwin (1981) found that in ordinary conversation *gaze* is one way in which co-participants can orient to one another within the turn, and that a non-speaker can *act like a hearer* by gazing at a

speaker. (For similar findings in the medical consultation, see Heath, 1986.) In the hypnotic induction the client does not speak, but continues to gaze intensely at the hypnotist and does not divert her gaze from the hypnotist at this (or any other) time, that is, until she later complies with the hypnotist's instruction to "shu:t" her eyes (see Example 4.1, line 32).

The pilot study, therefore, proposed that the hypnotist recognises the client's prolonged gaze throughout the assessment as *an act of hearing* his talk, and the hypnotist designs his talk, not only, on the basis of past experience(s), but also, on the basis of this hearing.

4.1.1.2.2 Talk with gaze behaviour and head nodding

Example 4.3, builds on Example 4.2 (above). It does so by adding the nonvocal head nodding of the client to the previous transcript.

Example 4.3   [Pilot]

> Lines 6-9
>
> H: ((H out of camera view))
> H: y' know how ea:sy it ↑i:s fer yer,-—————————+— And
> C: _____●○__●○__●○_____
> C: ↕↕↕↕↕↕↕↕↕↕

The pilot study showed that as the hypnotist's assessment of the client's ability to go into a trance comes to a close, the client produces head nodding ("↕↕") at blink related points ("●○") in the production of her gaze ("__") at the hypnotist. The client's head nodding and blinking is positioned at a point of possible completion and, thus, where a smooth turn transition can occur. These nonvocal movements were found to be interpreted by the hypnotist (and researcher) as the client's turn. Other research, on ordinary conversation, has shown that "[b]ecause of their placement at particular points in the talk, actions such as head nodding enable a recipient to display, not simply hearership, but some aspect of his [or her] understanding of the talk then being produced" (C. Goodwin, 1981, p. 103). Based on the positioning of this head nodding and blinking, the pilot study suggested that the hypnotist interpreted the client's head nodding and blinking as *an act of*

understanding or *agreeing* with the hypnotist's assessment. In other words, the hypnotist was found to design his talk on the basis of this understanding or agreeing, as well as past experience.

To further demonstrate how the client responds to the hypnotist's assessment (Example 4.1, lines 6-7), ideally, the visual data around the hypnotist's immediately following utterance and utterances to the secondary client (lines 9-13) and the (primary) client (line 15) should be examined. However, this is not possible because the client is out of camera view until line 18.

4.1.1.2.3   *Further talk with gaze behaviour*

Example 4.4, below, shows the talk of the hypnotist and the nonvocal gaze behaviour of the client (here closing and opening eyes, and intense gaze).

Example 4.4   [Pilot

    Lines 18-21

    H: ((H out of camera view))

    H: ─────────Lets >↓hav'a liddle< ta:lk (.) fi:rs'──────────+─── ...

    C: ●●●●●●●●●●●●●●●●●●●ooooooooooooooooooooooooooo●o●o●o●o __

In addition, at line 18, the pilot study showed the client sitting in silence for nine tenths of a second ("──") with her eyes closed ("●●"). Thereafter the hypnotist was found to produce an utterance to guide the client's actions around delaying the further production of the hypnotic induction, with "Lets >↓hav'a liddle< ta:lk (.) fi:rs'" (line 19). As the hypnotist begins to address this utterance to the client, she slowly opens her eyes ("oo"). Once the client has opened her eyes the hypnotist stops speaking, and 1.3 second silence ("──") becomes evident in the turn. During this silence the client appears unable to keep her eyes open. Her eyelids continue blinking ("o●") until the hypnotist retakes the talk (line 21) and the client resumes gazing at him. This indicated that the client's eyes opening counted for the hypnotist as the client *not* going into a trance too soon. Note also that the way in which the client continued to gaze at the hypnotist in a fixed manner was reminiscent of her earlier gaze behaviour at lines 6-9 (see Examples 4.2 and 4.3, above). The pilot study showed that opening her eyes at this particular position in the talk was one way in which the client could delay the further production of going into a trance (and that keeping her eyes closed was not).

Further, the client's way of complying with the hypnotist's guide for her actions, was found to be positioned at places where turn transition is possible and was therefore found to be "heard" by the hypnotist as the client's turn (see Examples 4.2 and 4.3, above). Accordingly, this suggests that the hypnotist *hears* the client's gaze behaviour as *an act of complying* to his instruction. Thus, the pilot study argued that the hypnotist designed his talk not only on the basis of past experience(s), but also on the basis of this *complying*.

The pilot study showed that the hypnotist's utterance, "Not quite that (.) fa:s' Monde." (see Example 4.1, line 15), gained its interactional significance through its position in the developing stretch of talk and in particular the nonvocal actions produced by the client. The fact that the client's eyes open just after the hypnotist directs her to delay the further production of a trance showed that the client's eye closure and her disinclination to speak is interpreted by hypnotist, in this instance, as *going into a trance*. So, from the positioning of the hypnotist's talk in relation to the patient's nonvocal actions the pilot study discovered that the hypnotist recognises that the client hears, and understands or agrees and complies with the hypnotist's instructions. Clearly, the client is seen to have gone into *a hypnotic trance*, where the hypnotist produces the trance *deepening* instruction: "↓Now go deeply into th:' ↓tra::nce:" (line 34). (For a detailed analysis of the way in which hypnotists and clients can take turns at talk in *deep hypnosis*, that is, after the hypnotist and the client have established that the client is in a deep trance, see Chapters 5 and 6.)

In summary, the pilot study has established that an examination of audio *and* visual data is required for an explanation of hypnosis because turn-taking in this special social activity consists of vocal turns and nonvocal turns. Specifically, this preliminary analysis revealed that: (i) the hypnotist uttered instructions to the client, and (ii) the client non-vocally demonstrated to the hypnotist (and researcher) that she could hear, understand, agree, and comply with the hypnotist's guide for her actions, and (iii) the participants mutually oriented to these actions as reasonable. Hence, the hypnotist's vocal actions and the client's nonvocal actions were methodically produced for the other and thereby displayed orderliness. Further, these co-participants recognised and utilised this orderliness for the basis of each subsequent action in this hypnotic induction sequence.

4.1.2   Lessons from the pilot study

Using a CA approach, this pilot study of an actual, single hypnotic induction event, determined that such "actual single events are studiable", it showed "how they might be studiable" and it revealed something of "what an explanation of them would look like" (Sacks, 1992, p. 26). Further, "[t]hat this particular social action occurred is evidence that the machinery of its production is culturally available, involves members' competencies, and is therefore possibly (and probably) reproducible" (Psathas, 1995, p. 50).

A particularly important lesson was that an analysis of non-vocal *and* vocal actions are essential for an adequate account of interaction in which the participants are physically co-present with one another in the hypnosis session (H. T. Demosthenous, 2004b, 2005, 2006). Although the raw data for the pilot study, a commercially produced audiovisual recording, initially appeared adequate, upon closer examination there were moments when the camera only focused on one of the participants and this frustrated the analysis significantly (as revealed in Examples 4.2 – 4.4). This finding highlighted the need to capture all participants on film throughout the interaction, and proved an invaluable lesson to designing the main study (also, see C. Goodwin, 1993). Consequently, it was decided that the pilot study data would not be used in the main study.

A summary of points that affected the research design for the main study are:

- since a single event occurred and was able to be studied, the main study will extend its focus to the examination of several sessions of hypnosis – to permit a comparative analysis;

- since the pilot study revealed that an analysis of both vocal and nonvocal aspects of *the interaction* is essential to an understanding of the hypnotic induction event, the main study will capture both participants on film throughout the interaction to allow for a detailed sequential analysis of the moment-to-moment interaction;

- since the pilot study recording opens with a hypnotic trance induction, the main study will ensure that each recording starts a few minutes before the opening talk and finishes a few minutes after the closing talk;

- since the pilot study suggested that "silence is an environment of free floating opportunity" (Heath, 1986, p. 28) during which nonvocal actions are likely to occur, the main study will further explore this environment in deep hypnosis; and

- since the pilot study found that the hypnotic induction event involves vocal and nonvocal actions that are collaboratively organised and oriented to, the main study will examine whether these or other patterns are evident in deep hypnosis, i.e., after the hypnotist and the client have established that the client is deeply hypnotised.

Accordingly, the particularities of whether there is a preferred order for the sequencing of vocal and nonvocal turns in interaction between hypnotists and clients may prove an interesting angle for understanding the distinguishing nature of deep hypnosis.

4.2   Research Design for the Main Study

The research design for the main study provides for a comparative analysis of the turn-taking organisation for deep hypnosis in six hypnosis sessions (see Chapters 5 and 6). These sessions took place in the clinical setting and were audio-visually recorded to allow for an investigation of both vocal and nonvocal phenomena. Hence, this study is designed to investigate authentic, naturally occurring talk-in-interaction between the hypnotist and the client during deep hypnosis in real world clinical practice. Accordingly, clients were *not* administered standardised hypnotisability tests, as is traditional research practice, because this is *not* routine clinical practice.

This section presents the research design for the main study in four sections: Section 4.3.1 *Sites*, Section 4.3.2 *Participants*, Section 4.3.3 *Data collection and processing procedures*, and Section 4.3.4 *Ethical clearance*.

4.2.1   Sites

The sites for the main study were selected on the basis that interactions were authentic, naturally occurring (i.e., non-experimental) hypnotic events. It was a selection criterion that the interactions were *not* contrived or controlled for the object of study, as is the case with laboratory experiments. These interactions took place in two different physical sites, in Brisbane, Australia.

To provide for a comparative analysis two hypnotists and six clients were included in the main study. Recall that for the type of research that CA aspires to each hypnotist-and-client dyad's

interaction is conceived of as a separate "site", and each site is considered an achievement of the practical action of the co-participants themselves (Garfinkel & Wieder, 1992). This is the reason why Freiberg (2003) states that "[t]he notion of a *site* as a physical location and multiple sites as several physical locations is not relevant" (p. 163). Therefore, a single hypnotic event,

> constitutes a *site* within which participants' sense-making procedures and reasoning practices can be discovered, examined, described, and, documented. Based on this assumption, local orders of institutional interactional practices can be validly documented in a rigorous analysis of a relatively small number of actual service events. (Freiberg, 2003, pp. 163-164)

Thus, even though the hypnotic interactions were recorded in two physical locations, this study examines and documents interactions between six different hypnotist-client dyads, and therefore encompasses six different interactional "sites." (For an example of the interactional site codes that are used in this book, see Appendix B).

4.2.2   Participants

The participants for this study are all adults who are legally able to give informed consent, and who did so, on a voluntary basis. While voluntary participation by hypnotists made up the sample, in accordance with professional and institutional ethical clearance conditions for the main study, hypnotist participation was restricted to those who were: (i) experienced in the clinical practice of hypnosis; and (ii) able to recruit (up to) three clients whom they had previously hypnotised deeply without adverse effects. Given the difficulties that are often inherent in working with clients in hypnosis and deep hypnosis in particular (Erickson, 1952/1967), this restriction was considered crucial in terms of the manageability of the data and the safety of the clients.

4.2.2.1   Hypnotists

Hypnotists were identified and their contact details obtained from a society of specialist hypnotists in Australia. Six hypnotists were initially approached and informed about the main study by mail. A follow-up phone call was made: (i) to gauge hypnotists' willingness to participate in the study, (ii) to ask them to select three possible client-participants, and (iii) to forward them information about the main study by mail. Only one hypnotist voluntarily consented to participate in this study, and to recruit three clients; whom he had previously hypnotised deeply without adverse effects. The

hypnotist agreed to recruit these clients on an informed basis, and to carry out routine hypnotic practice.

The difficulty in obtaining hypnotists that could meet the strict recruitment requirements, together with my professional experience and qualifications in the clinical practice of hypnosis, informed my decision to participate as a hypnotist in this study, and to recruit three clients whom I had previously hypnotised deeply without adverse effects. I recruited these clients on an informed basis, and carried out "routine" hypnotic practice. For details on the steps that I took to "minimize the influence of personal preconceptions or analytical biases" (Heritage, 1984, p. 238), and establish objectivity.

4.2.2.2 Clients

Six clients voluntarily consented to participate in this study. That is, each of the two hypnotists recruited three client-participants in accordance with the strict recruitment requirements for the main study. At the time of recruitment the hypnotist and the client in each interactional site had already established a solid hypnotic relationship with each other. The establishment of this relationship had involved working together on a person-to-person basis over many sessions of hypnosis. Over the course of these sessions the clients were trained to be able to go into deep hypnosis readily, and function directly at an unconscious level of awareness, without adverse effects. (For details relating to ethical clearance considerations for restricting participation to hypnotists and clients with this type of well established hypnotic relationship, see Section 4.3.4) Hypnotically speaking, all of the clients in this study are well-trained *somnambules*, that is, very highly accomplished hypnotic subjects. According to Erickson (1952/1967),

> A well-trained subject is not meant one laboriously taught to behave in a certain way, but rather a subject trained to rely completely upon his [or her] own unconscious patterns of response and behaviour (p.13).

Hence, it is important to mention that the patterns of interaction between inexperienced hypnotists and novice clients may differ from those documented in this book.

4.2.3   Data collection and processing procedures

Data were collected over six scheduled sessions of hypnosis in June and July in 2004 on dates nominated by the participating hypnotists. These sessions (approximately a total of 360 minutes of interaction) were recorded by an audiovisual technician. The choice of hiring a person conversant with audiovisual technology was considered relevant for the purposes of minimising task and time demands on participants and ensuring the quality of audiovisual recordings. While recognising that the audiovisual recording equipment would have some influence on the participants (Lomax & Casey, 1998), the use of audiovisual (instead of audio-only) recordings was considered essential to an investigation of hypnosis, since the pilot study found unequivocal support for the notion that the interactional accomplishment of hypnosis is dependant upon both vocal *and* nonvocal exchanges.

Procedures for audiovisual recording (C. Goodwin, 1993) involved the use of a single audiovisual camera mounted on a tripod. Although the use of a single, fixed camera is not ideal, operation within the confines of the hypnosis clinics and the fact that the camera could be positioned such that actions of both parties were visible minimised loss of interactional detail in the recording. Since the analytical interest of this study centred on talk and the upper body (gaze behaviour, head movement, and posture) the camera was positioned in the hypnosis clinic so as to view as much of both participants' faces and torsos as possible, as illustrated in Figure 4.1, in Section 4.3.4.1, below.

Moreover, informed by the pilot study, and the imperative to capture all relevant features of the activity on audiovisual (C. Goodwin, 1993), care was taken to capture both participants on film throughout the duration of each hypnotic session. As a result, filming began several minutes before the opening of the session and stopped several minutes after the closing of the session. A Sony Digital Handycam was used to record the interaction.

4.2.3.1   Digital reformatting

Data were digitally reformatted in both Wavepad and QuickTime files to facilitate detailed transcriptions of recorded interaction.

WavePad, a sound editor program, was used to produce a visual display of digitalised sound to assist with the transcription of talk and silence. Accurate measurement of silence was achieved by selecting the region between sounds on a horizontal plane. This facility eliminated the inaccuracies

that result from transcriber error associated with conversion of "heard" silence into measurement of duration.

QuickTime, an audio*visual* media player, was used for playing digitalised videos to assist with the transcription of visual data. The durability of digitalised videos made it possible to repeatedly play forward or backward, and frame-by-frame. A further advantage for the display in print of visual data was the ability to select pictures of stills from the audiovisual recording; so-called "frame grabs" or digitalised pictures (see e.g., C. Goodwin, 1994, 1995a; M. H. Goodwin & Goodwin, 2000).

Selected digitalised pictures were saved with Adobe Photoshop 7.0 as JPEG files and opened in ImageReady where they were rendered as sketches (see Fig. 4.1 below), to protect participant anonymity (see Section 4.3.5). Sketch filters were used for creating a hand-drawn look. Photocopy was used to simulate the effect of photocopying the image with the attributes of Detail 4 and Darkness 6. Because large areas of darkness tend to copy only around the edges of the images, and midtones fall away to either solid black or white, some images required refining with Microsoft Paint Version 5.1.

Figure 4.1 A rendered sketch.

4.2.3.2   Transcription

Transcription involves the representation of spoken words or actions in written form. In conversation analytic research, transcription is regarded as an important stage of the analytic process, because close and repeated listening to and viewing of the data helps the researcher discover and document the "socio-interactional organisation" of events (Heath & Luff, 1993, p. 309). Therefore, transcription files are to be regarded as selective constructions, rather than neutral presentations of the interaction under study (Heritage & Atkinson, 1992; Psathas & Anderson, 1990). For this study, the construction of transcription files involved the close and repeated listening to and viewing of the original audiovisual data recordings.

Recall that the transcription notation used in this book and other conversation analytic research was originally developed by Jefferson (see e.g., Jefferson, 1989). The Jeffersonian method of data transcription will be used in the main study. For details see the beginning of the book.

4.2.4   Ethical clearance

Ethical clearance was granted for the main study (GU Protocol Number EPS/04/04). The main study was conducted in accordance with the approved protocol from the Griffith University Human Research Ethics Committee (HREC).

4.2.4.1   Conditions of ethical clearance

Ethical clearance required that steps be taken to ensure that there were no risks to *client*-participants in this study. Matters of client safety were accounted for by the strict recruitment requirements detailed below:

- ensuring that the hypnotists were experienced in the practice of hypnosis and that their clients were highly hypnotisable persons, and that they had, through previous hypnotic work, established a solid hypnotic relationship with one another.

Furthermore, matters of participant confidentiality and privacy were accounted for by using the data collection and processing procedures outlined below:

- client consent was initially indicated by the return of completed consent forms to the hypnotist that recruited them;

- hypnotist and client consent forms were handed to the researcher prior to the recording of the hypnosis sessions;

- all participants were informed that participation in the study was voluntary, and that they had the right to withdraw their consent at any time, and without needing to explain their reasons for withdrawing;

- clients were assured that their withdrawal would not affect or prejudice their relationship to their hypnotist at any time or in any way;

- identification numbers, letter codes and pseudonyms for the participants' first names, that is, the hypnotist's first name, the client's first name and the deeply hypnotised client's first name were used to distinguish participants for the purpose of analysis (see Appendix B); and

- sketches of participants were included in the study, instead of easily identifiable video frame grabs.

4.3 Reliability and Validity

Reliability and validity are central issues for this (and all) scientific research, because they establish the consistency and truth, and, thereby, the objectivity of the research findings (Neuman, 2000; Peräkylä, 1997; Silverman, 1993). However, the principles of reliability and validity are not applied to all research in the same way. Many texts provide detailed discussions on conventional understandings of reliability and validity in qualitative and quantitative research (e.g., Neuman, 2000).

In research that uses traditional *quantitative* methods the concepts of *reliability* and *validity* are primarily concerned with "how concrete measures are connected to constructs" (Neuman, 2000, p. 164). Though in research that uses traditional *qualitative* methods these terms are rarely used. This is not because qualitative researchers do not accept the principles of reliability and validity. Instead, it is because they shy away from using terms that are often associated with quantitative research.

In conversation analytic research traditional concerns of reliability and validity are re-specified. This is because the reliability and validity of the data rests on the conversation analytic reliance on the use of recordings and transcriptions of authentic, naturally occurring interaction. What this means is that the reliability and validity of this conversation analytic study on the organisation of turn-taking for deep hypnosis requires that the data consist of audiovisual recordings and transcriptions of authentic, naturally occurring hypnotic interactions.

Further, while most conversation analytic studies depend on the use of audio-*only* recorded data, CA scholars recommend the use of audio*visual* data for the study of face-to-face interaction, in all settings, because of the relevance of nonvocal activities in talk-in-interaction (Atkinson & Heritage, 1992a). Moreover, considerable evidence from the pilot study indicated that using audio-*visually* recorded data for the study of the integration of nonvocal activities with talk was essential for a reliable and accurate account of naturally occurring interaction in the hypnotic site.

4.3.1   Reliability

The *reliability* (or consistency) of the data was ensured through the use of quality audio-visually recordings that captured both parties on film throughout the interaction (Lomax & Casey, 1998; Peräkylä, 1997). Audiovisual recordings provide a permanent record, which "serves as a control to the limitations of intuition and recollection" (Heritage, 1984; Heritage & Atkinson, 1992, p. 4), as scholars of hypnosis have also noted (e.g., Kubie, 1967). Audiovisual recordings further enable the repeated and detailed study and transcription of a swift series of complicated proceedings, by the researcher, and others who may wish to check the "claims [that] are being made, thus making analysis subject to detailed public scrutiny and helping to minimize the influence of personal preconceptions or analytical biases" (Heritage & Atkinson, 1992; Kubie, 1967). Accordingly, the use of recorded data helps establish the *objectivity* of the research.

Further, while undertaking this study, the researcher took steps to minimise the influence of her own personal preconceptions or analytical biases and thereby took steps to establish objectivity by presenting and examining the audiovisual recorded data together with data transcripts for conference and data workshop audiences around Australia. This permitted a number of experienced scholars to inter-rate the reliability of the transcripts and check the validity of the claims being made.

4.3.2 Validity

The *validity* (or truth) of the data was ensured through the study of authentic, naturally occurring hypnotic interactions. In conversation analytic studies the validity of the interaction is *not* a problem of the research design. This is because the validity of the talk and actions, as trustworthy, are decided *in situ* by the participants themselves (Garfinkel, 1967; Peräkylä, 1997; Sacks et al., 1974). To elaborate, participants' procedures for deciding the validity of each others talk as appropriate to the interaction are displayed through their own actions. Simply, it is in the very nature of how participants' talk to one another that a speaker displays their understanding of the other prior turns' talk. In addition, "while understandings of other turns' talk are displayed to co-participants, they are available as well to professional analysts, who are thereby afforded a proof criterion … for the analysis of what a turn's talk is occupied with" (Sacks et al., 1974, p. 729).

As Sacks, Schegloff and Jefferson (1974) go on to explain,

> [s]ince it is the parties' understandings of prior turns' talk that is relevant to their construction of next turns, it is THEIR understandings that are wanted for analysis. The display of those understandings in the talk of subsequent turns affords both a resource for the analysis of prior turns and a proof procedure for professional analyses of prior turns – resources intrinsic to the data themselves. (Capitals in original, p. 729)

It is in this way that the validity (or truth) of the findings were established.

Further, an aspect of validity that is an issue for this (and other) research concerns the *generalisability* of the research findings (e.g., Neuman, 2000; Peräkylä, 1997; Pomerantz, 1990; Sacks, 1995a; Woffitt, 2001). "Due to their work-intensive character, most conversation analytic findings are necessarily based on relatively small databases" (Peräkylä, 1997, p. 214). This raises the question:

> How widely can the results, derived from relatively small samples, be generalized? (Peräkylä, 1997, p. 214)

From a traditional statistical point of view, studies based on small samples have limited generalisability. However, conversation analytic research approaches generalisability in a very different way. As Woffitt (2001) explains,

In CA, a collection of data is taken to be a series of (candidate) instances of a specific phenomenon, each of which is considered to be worthy of detailed analysis to discover how its features were produced by the participants. The objective is to identify the recurrent organizational properties exhibited by the instances in the collection. (p. 73)

Further, because of the pervasiveness of the turn-taking practices and structures or "machinery," Sacks argued,

Now if one figures that that's the way things are to some extent then it really wouldn't matter very much what it is you look at – if you look at it carefully enough. And you may well find that you got an enormous generalizability because things are so arranged that you *could* get them; given for a Member encountering a very limited environment, he has to be able to do that, and things are so arranged as to permit him to. (Sacks, 1995a, p.485)

In addition, this study maximised generalisability by adopting a comparative approach. "The comparative approach directly tackles the question of generalisability by demonstrating the similarities and differences across a number of settings" (Peräkylä, 1997, p. 214). Note that while the unusual nature of the work restricted the number of participating hypnotists to two, and the work-intensive nature of the conversation analytic method restricted the number of interactional sites to six (hypnotist and client dyads), each hypnotist (randomly) selected three well-trained clients from their own large databases of several hundred well-trained clients. Accordingly, the use of a comparative approach helps establish the generalisability of the research findings.

 Also, this study focused on the similarities and differences in the ways in which the hypnotists and the deeply hypnotised clients take turns at talk to discover how the participants to sustain a profound state of deep hypnosis. This focus on turn-taking practices and structures in deep hypnosis made possible a direct comparison with the turn-taking practices and structures in ordinary conversation. The reader will recall that ordinary conversation is considered to be "the primordial form of talk-in-interaction, one from which others are departures and, indeed, derived" (Sacks et al., 1974; Schegloff, 1999, p. 407). It is for this reason that conversation analytic studies of ordinary conversation assume their results to be generalisable to all other ordinary conversations. And it is for this reason that a comparative analysis with ordinary conversation is relevant for understanding

the "special" features of social interaction between the hypnotist and the well-trained client during deep hypnosis.

That said, the findings of this turn-taking study are not *directly* generalisable to all other deep hypnosis interactions between hypnotists and well-trained clients. As stated at the outset of this book, this study is concerned with the type of hypnosis that is administered through talk in human social interaction under naturally occurring (i.e., non-experimental) conditions in real world clinical practice. So the findings cannot be directly generalised to any site where deep hypnosis is administered in other ways, such as, through drugs or the reading of scripted texts under artificially controlled conditions. However, this is not to suggest that the findings of this study have no wider relevance for the practice of hypnosis and deep hypnosis in other sites. On the contrary, they have something say about "social practices that are possible" (Peräkylä, 1997, p. 215) in *any* hypnosis site.

Moreover, for this CA informed study on the organisation of turn-taking for deep hypnosis, "efforts to assure the accuracy and inclusiveness of recordings that the research is based on as well as efforts to test the truthfulness of the analytic claims that are being made about those recordings" (Peräkylä, 1997, p. 201) – helped the researcher establish the objectivity of the main study. The main study is thus able to objectively "analyse singular instances, formulate rules, and 'test' these with comparable other instances" (ten Have, 2000, p. 136).

4.4   Stages of Data Analysis

As established in Chapter 3, the underlying assumptions of CA have implications for how researchers work through the stages of data analysis towards producing accounts of turns at talk as social action.

The stages of the data analysis for this study were aimed at answering the following specific conversation analytic questions:

- What is the shape of the turn-taking organisation device for deep hypnosis?

- How does the shape of the turn-taking organisation device affect the distribution of turns for deep hypnosis?

- How is deep hypnosis adapted to or constrained by the particular form of turn-taking system that operates on it?

Data analysis proceeded through the following stages:

1. *"Unmotivated looking"* (Psathas, 1995, p. 45) at the data. In accordance with CA's requirement for unmotivated looking the author avoided an analysis that was based on pre-formulated conceptualisations of what hypnosis should look like. Instead, the first stage of the analysis involved an unmotivated examination of the recorded naturally occurring (i.e. non-experimental) interactional data. Repeated listening and viewing of digitalised recordings facilitated the development of detailed transcripts, and the selection and rendering of digitalised sketches. By re-listening, re-viewing and re-transcribing the data knowledge of the subject matter and the turn-by-turn organisation of the talk in each interactional site was built. That is, the trajectory of the analysis began "with the noticing of some feature of the talk," whether vocal or nonvocal, and was "pursued by asking what—if anything –such a practice of talking [or not talking, or moving or not moving] has as its outcome" (Schegloff, 1996, p. 172); and

2. Consulting the transcripts with the raw data to ensure accuracy of details for the turn-taking analysis of numerous instances of similar phenomena enabled the author to document the commonalities and differences, and to discover how turn-taking is organised and managed during deep hypnosis.

4.5 Summary

This chapter has provided details of the research design and analytic method of this study on the organisation of turn-taking for deep hypnosis. The chapter initially reported results of the pilot study on the hypnotic induction event to provide some wider context for subsequent analytic chapters. Next the chapter presented the research design for the main study, with a description of how the sites and the participants were selected, the data collected and processed and ethical clearance obtained. Then reliability and validity issues were discussed in relation to the main study. The chapter concluded with details of the stages of data analysis.

The next chapter, Chapter 5, is the first of two analytic chapters in this study on the organisation of turn-taking for deep hypnosis.