Preambulum

Speech is not like text. Because speech is real-time and on-line, editing is "in the open" – not hidden as it is in written text (like this foreword, for example). Since very few of us speak completely fluently without changing our minds, with consistently perfectly eloquent wordings, and without any hesitation or slips, one characteristic of spontaneous speech is that it includes phenomena such as pauses, hesitations, "err" words, truncated words, repetitions, prolonged sounds, repairs, etc.

Although studied earlier, the formal study of disfluency really took off in the 1950's beginning somewhat independently in three separate disciplines. Within stuttering research, seminal work was carried out by Wendell Johnson and his colleagues. Disfluencies were also studied within general linguistics, pioneered by Frieda Goldman-Eisler among others. Also, within psychotherapy, much work on disfluency was carried out by George F. Mahl and colleagues. During the following decades disfluency has received attention from a wide variety of other fields.

These proceedings are the result of a workshop held in Gothenburg, Sweden, the third in a series of workshops devoted to disfluency. The first, *Disfluency in Spontaneous Speech*, was a one-day event, held at Berkeley University, 30 July, 1999, as a satellite of the 14th International Congress of Phonetic Sciences in San Francisco. The second event was a three-day workshop held at Edinburgh University, 29–31 August, 2001, as a satellite of Eurospeech 2001 in Aalborg, and was given the acronym *DiSS '01*. This was also an official ISCA tutorial and research orkshop. What you are now holding in your hands are the proceedings of *DiSS '03*, held at Göteborg University, 5–8 September, 2003, as a satellite of Eurospeech 2003 in Geneva.

The name of these workshops – and consequently the title of these proceedings – includes the word "disfluency", which may or not may not be considered a felicitous term. Indeed, the phenomenon under scrutiny is known under a wide variety of different terms including "non-fluency", "dysfluency", "discontinuity", "flustered speech", "speech disturbance", "hesitation", "speech management", "own communication management", "turnholding devices", "changes of mind", "self repair", "self correction", "self editing", and even such a self-contradictory term (from an etymological point of view) as "normal dysfluency". This list gives only the more common hyperonyms. It goes without saying that the choice of term(s) depends on the particular research perspectives which are numerous. Thus, disfluency research has been carried out within (just to name a few) stuttering research, general linguistics, cognitive psychology, consciousness philosophy, phonetics, gender studies, physiology, acoustics, and, more recently, within speech and language technology which was motivated by the launching of computerised dialogue systems. This diversity is reflected in the present volume which is somewhat arbitrarily divided into seven different parts.

In the first part, *General Aspects*, **Kirsner, Dunn & Hird** take a closer look at pausing, and reviews recent research on pause analysis using a novel approach, arguing that short and long pause duration distributions are functionally independent. The second paper, by **Nicholson, Bard, Lickley, Anderson, Mullin, Kenicer & Smallwood**, address the causes of disfluency and assess the claim that, on the one hand, disfluency is a strategic device for intentional signalling to an interlocutor that the speaker is committed to an utterance, and on the other hand, that disfluency is an automatic effect of cognitive burdens. In the third paper, **Finlayson, Forrest, Lickley & Beck** study whether restricted ability to use gestures has an impact on speech fluency, thus correlating disfluency with the other communication mode.

The second part, *Production, Perception and Monitoring*, starts out with a paper by **Nooteboom**, who looks at the role of self-monitoring in the lexical bias of phonological speech errors. In another paper on monitoring, **Howell** questions whether a perceptual monitor is needed at all to explain speech repairs. Broadening the concept of monitoring from self-perception to the perception of other speakers, **Hartsuiker, Corley, Lickley & Russell** study perception of fluency in people who either do or do not stutter.

In the third part, *Disfluencies in First and Second Language Development*, **Rieger** investigates hesitation strategies of intermediate learners of German as a second or foreign language. The second paper, by **Menyhárt**, studies alterations of disfluency phenomena as a function of age.

The fourth part, *Computational Aspects*, opens with a paper by **Aylett**, who investigates how different factors influence the behaviour of an automatic speech recogniser. While automatic speech recognisers have reached accuracy levels that make such applications practical in public settings, disfluency still constitutes a problem for such systems. **Funakoshi & Tokunaga** describe a parser designed to handle ill-formed Japanese speech. **Lager** presents a computational model capable of dealing with spontaneous speech phenomena, such as hesitation and repairs. **Lendvai, van den Bosch & Krahmer** investigate how machine learning can be used for automatic disfluency chunking of spontaneous speech. In the closing paper, **Adda-Decker, Habert, Barras, Adda, Boula de Mareuil & Paroubek** compare different types of audio transcripts of French radio interviews with the goal of obtaining a better model of spontaneous speech.

Part five, *Repeats and Repairs in Different Languages*, begins with a paper by **Tseng**, who presents a study of repairs and repetitions in Mandarin Chinese. **Henry & Pallaud** study the interaction of repeats and word fragments in French. **Benkenstein & Simpson** take an acoustic look at self-initiated repairs in German, comparing phonetic differences between reparandum and repair.

The sixth part, *Phonology and Prosody*, contains two papers. In the first, **Den** presents a study of segmental prolongation in Japanese, taking into account factors such as speaker gender, word classes, word position, preceding fillers and others. In the second paper, **Savova & Bachenko** look for prosodic cues for different disfluency types, using intonation and duration to detect disfluency sites.

The final session, *Corpus and Annotation*, is represented in the proceedings by a paper by **Yang, Heeman & Strayer**, who present a tool for annotation of speech disfluency called DialogueView. In particular, they describe a specific feature called "clean play" which deletes annotated speech reparanda and editing terms, and plays back the remaining speech.

The papers included in these proceedings cover several different disciplines, and are thus illustrative of the interdisciplinary character of this area.

It has been a rewarding task to edit the ensuing suite of papers, covering a wide array of different angles and approaches to the subject matter. It is my contention and conviction that they will contribute to an enhanced understanding of spontaneous speech in general, and disfluency in particular.

<div style="text-align: right">

Robert Eklund
Västerhaninge, 2003-08-13

</div>