

15:30-17:15

Poster Session

19:45

Banquet / Awards Ceremony - music and dancing

Grand Salon

Posters

Hochelaga 6

A. Thematic – Causes and Development

A1. Psychological basis for onset of stuttering

N. Mizokami and K. Hayasaka, Hiroshima Univ., Japan

This study was designed to investigate which environmental factors influence the onset and development of stuttering. Data of 885 three-year-old children were collected through questionnaires completed by their parents. Questions consisted of two scales for evaluating the parent-child semantic relationship and the degree of children's disfluency. By analyzing the answers, we concluded that when parents show dominant and over-protecting attitudes toward their children's speech, and fail to listen to their children's talk, the degree of child disfluency increases. As a consequence, such attitudes will become severe and this will eventually bring on stuttering.

A2. Genetic aspects of stuttering in South Korea

M. Shin and S.E. Lee, Hallym Univ., Yonsei Univ., Korea

This study investigated the genetic inheritance of 229 stuttering males and females between ages 2 and 45. Subjects were divided into three age groups. 55 percent of subjects reported a family history of stuttering. Females who stuttered were more likely than males who stuttered to have stuttering relatives. Among the preschool and school-age groups, subjects without language difficulties were no more likely than adult subjects to have a family history. Adult subjects without language difficulties were more likely to have a family history. Stuttering-onset ages were earlier for subjects with a family history of stuttering than for subjects without it.

B. Thematic – Definition, Measurement and Assessment

B1. Descriptive study of fluency in four year-old children

B. Touzet, M. Sverdlik and G. Fioca, Buenos Aires Univ., Argentina

This paper will describe the design and present partial results of the research that has been carried out, by the Area of Teaching and Investigation of the Argentina Stuttering Association. The purpose of the research is to describe the variables that characterize the normal development of fluency and fluency disruption in four-year old children. A longitudinal study has been implemented. A total of thirty two spontaneous speech samples from interviews with eight children will be analysed and the findings described.

B2. An inter-judge reliability study on the subtypes of SSI-3

H.S. Sim, M. Shin and E. Lee, Ewha Univ., Hallym Univ., South Korea

This is a preliminary study towards the development of a Korean stuttering evaluation instrument. The SSI-3(Riley, 1994) was conducted by several judges and researchers on the same subjects in order to find out the extent to which the severity evaluations regarding three subtypes (frequency, duration, physical concomitant) yield agreement between the judges and the researchers, and whether or not the agreement level changes according to the subjects. The results showed that the frequency score is more reliable than the duration score and the physical concomitant score.

B3. Special qualities of stuttering children based on the U type capacity distribution hypothesis

K. Hayasaka, Hiroshima Univ., Japan

We often notice that there are different distribution curves in academic skills and behavioural tendencies in stuttering children, compared to those of non-stuttering children. For example, some stuttering children are very slovenly while some others are very meticulous. In this study we sent questionnaires to the teachers of language classes in the Kanto Region of Japan. The results were analysed. Findings indicated that all groups tend to be nervous but each group's result is different. This report suggests that subdivision is necessary when investigating stuttering.

C. Thematic – Intervention

C1. Increase of stuttering remission period with help of special treatment

T. Bortnik-Skljarova and O. P. Skljarov, Russia

The purpose of this study is to show that using prolonged (stretched/delayed) speech as a method of managing stuttering is less effective long term than therapy that teaches the speaker to have normal speech rate and rhythm.

The long-term maintenance of improved fluency was evaluated in three groups of stutterers receiving traditional delayed speech intervention and/or intervention based on behaviour modification leading to normal speech rate and rhythm. As a result of the findings we no longer exclusively use delayed speech as a method for the successful management of stuttering long term.

C2. Stuttering: Clinical case studies

N. Azevedo, Universidade Catolica de Pernambuco, Brazil

In this work, I intend to analyze the speech of three mothers whose children presented with stuttering, and who came to the Phonoaudiologist clinic for help. The sessions were recorded on audiocassettes and later transcribed and analyzed. Discourse clips that best exemplify the nature of the analysis, were isolated. The analyses were first applied to the subjects' discourse functions and, following that, the passages were analyzed inter-discursively with respect to discourse properties in particular, whether the subjects' language, when speaking about stuttering, was considered a point of debate, or conflict.

C3. Stuttering and medication: A look at the symptoms

J. Van Borsel, C. Beck and J. Delanghe, Ghent Univ. Hospital, Belgium

The results are presented of an analysis of the literature on drugs and stuttering with particular reference to the symptoms and the response time reported. Both the literature on stuttering as a side-effect of medication and the literature on pharmacological agents used for treating stuttering were studied. Hardly any specific associations between particular pharmacological agents and particular speech characteristics could be found.

C4. "Emotion and speech" treatment approach for young children who stutter

H. Kobayashi and N. Mizokami, Kanazawa Univ., Hiroshima Univ., Japan

The purpose of this study was to determine an approach to treatment that focused on an emotional component based on the U hypothesis (Uchisugawa and Hayasaka, 1988) in addition to a speech component. A preschool boy participated in this study. He received treatment for stuttering at age 3 years and 9 months. The results show that the fragility in the emotional/speech areas that were seen at first session improved, and the number of within-word disfluencies decreased. The adjustability and effectiveness of the "Emotion and speech" treatment approach with young children who stutter are discussed based on these results.

C5. Effects of selective serotonin reuptake inhibitors (SSRIs) on speech fluency

F.L. Lu, K. Gopal, H. Gooding and K. Shiflet, Univ. of North Texas, USA

Selective serotonin reuptake inhibitors (SSRIs) reportedly cause several extrapyramidal symptoms including speech disfluency. This study investigated the effects of two SSRIs, Sertraline and Fluoxetine, on speech fluency in clinically depressive speakers. Subjects included ten depressed persons taking SSRIs, ten depressive persons not receiving SSRIs, and ten normal controls. Each subject recited 15 sentences and the "Rainbow Passage." Speech samples were measured for the proportion and type of disfluency characteristics. Preliminary analysis did not reveal observable disfluency in any subject group. Factors including severity and type of depression, dosage of medication, and mechanism of SSRIs will be discussed.

C6. Reducing stuttering blocks by relaxation of the valsalva mechanism

W. Parry, National Stuttering Association, USA

This presentation encourages speech language pathologists and researchers to pay closer attention to the possible involvement of the body's Valsalva mechanism in certain common manifestations of stuttering — including forceful closures of the mouth and larynx and delays in phonation. Involvement of the Valsalva mechanism would tend to be greatest when the stutterer anticipates the need to use effort to force out words. This presentation will suggest ways in which the effectiveness of stuttering therapy might be enhanced by educating stutterers about the Valsalva mechanism and teaching them techniques to relax and control it during speech.

C7. REMOVED

C8. Group therapy for school-aged children who stutter and their parents

S. Jelcic Jaksic and M. Lasan, The Croatian Association for People Who Stutter "Hiko Freund", Croatia

This academic year for the first time, The Croatian Association for People who Stutter "Hiko Freund", organized group therapy for school-aged children and their parents. The intervention employed an integral therapy approach to stuttering. Six children participated. These boys and girls ranged in age from 7–11 years old. The children met once a week for an hour at a time. Once monthly, at the same time as the children met, parents and/or other family members attended an organized education and group counselling program. Attendance at group therapy included identical pre- and post-therapy evaluations. The results of therapy will be discussed.

C9. Employing the MSAM in attaining, maintaining and transferring fluency in the schools

K.M. Monkhouse, USA

The purpose of this presentation is to provide school-based clinicians with a practical model for working with students who stutter. The model consists of a four by four matrix in which four sequential steps of skill acquisition interact with four increasingly difficult environmental complexity levels. Of special value are the visual guidelines it provides for counselling students, teachers and family members in establishing appropriate expectation levels for the therapeutic process. The MSAM (Monkhouse Skill Acquisition Model) has been used successfully for many years in a private practice setting, where the author, a fluency specialist, serves as a consultant /mentor to clinicians in school-based programs.

C10. Global special therapy for stuttering

I. Kejklickova, P. Florian, P. Stanicek, Czech Republic

At the Private clinic LOGO we have both children and adults from the age of 3 to 52 with a diagnosis of stuttering. Through our complex conception of diagnosis and re-education we have experienced successful treatment for this world-wide problem. This Poster is about the management of patients in our ward and about the methods of treatment.

C11. Model of formation of speech fluency in stuttering teenagers and adults

H.Y. Rau, and E. Kazbanova, Moscow State Pedagogical Univ., Russia

The purpose of this research was to study speech rate and rhythm in teenagers and adults who stutter. The rehabilitation of fluency in the speech of people who stutter can be achieved by complex training in the development of coordination of speech rate and a rhythm.

Twenty-two stuttering subjects took part in this research during which a method of correction and development of speech rate and rhythm were used. As a result of this training attention to and control over the speech was increased, skills for fluent speech were developed, and subjects could estimate the rate and a rhythm of their speech.

C12. The use of cognitive behavioral therapy with people who stutter

E. Klein and B. Amster, LaSalle Univ., USA

People who stutter typically have a history of stuttering, therapy, relapse and fluency failures following a predictable course. Although stuttering therapy can be helpful, it is essential that PWS reconsider their beliefs about themselves, communication and functioning in the world. Cognitive behavioural therapy techniques deal with automatic thoughts, underlying assumptions, and cognitive distortions that can have negative effects on the individual. This study investigates cognitive behavioural techniques and their effects on PWS. Case studies explore changes in attitudes about communicating before, during and after cognitive behavioural treatment. Measures of social anxiety, perfectionism and dysfunctional thoughts will be obtained and examined.^v

D. Thematic - Outcomes and Efficacy of Interventions

D1. The evaluation of stuttering treatment methods

L. Harutyunyan and M. Harutyunyan, Pedagogical Univ. of Samara, Russia

A great number of scientific investigations have revealed differences in brain functioning between stutterers and non-stutterers. We assumed, therefore, that the effectiveness of stuttering treatment outcomes could be evaluated more objectively by comparing brain functioning measured before treatment with that obtained in the post-treatment period. In this report, an example of such evaluation data will be presented. It is well-known that the voice response of a person who stutters lags in comparison with that of a person who doesn't stutter. Results of this experiment show that differences disappeared in some people who completed a stuttering treatment course which observed Lilia Harutyunyan's method.

D2. Maintenance of fluency in extra-clinical settings: Lack of empirical data?

G. Tellis, M. Henning and C. Tellis, Indiana Univ. of Pennsylvania, Univ. of Pittsburgh, USA

Long-term maintenance of fluency is the goal of many stuttering therapy programs. Thirty years of articles were reviewed to determine how many maintenance studies were conducted. Studies were reviewed for: gender, age, therapy techniques, study duration, and design. Results indicate that there are limited published maintenance studies.

E. Thematic – Language, Speech and Discourse:

E1. Semantic priming in 3 to 5 year old children who do and do not stutter

M. Pellowski and E. Conture, Towson Univ., Vanderbilt Univ., USA

This investigation tested the hypothesis that children who stutter may have slower than normal abilities to lexically encode their preverbal messages. Participants consisted of 23 three- to five-year-old children who stutter and 23 age-matched children who do not stutter. Experimental procedures involved the employment of a semantic priming task (i.e., picture–word interference task; Meyer & Schriefers, 1991). Results indicated that children who stutter exhibited significantly slower speech reaction times across three priming conditions and were less influenced by semantic priming when compared to children who do not stutter. Findings suggest that difficulties with lexical encoding may contribute to childhood stuttering.

E2. Linguistic ability of a child before onset of stuttering (A case report)

K. Chimoto, N. Ebara, R. Kubota and H. Itoharu, Tsukuba Hospital, Japan

This study examines factors that may have led to stuttering following speech therapy, in a child with a developmental language disorder. Pre-stuttering changes in language ability, fluency and articulation were analyzed in detail and reported.

It is assumed that rapid development in the child's syntax, or the discrepancy in her language abilities pre- and post-treatment, led directly to the increase in dysfluencies. This child's awareness of articulation errors and ability to self-correct did not cause an increase in, or worsening of, dysfluencies. No fluency treatment was required.

E3. Characteristic features of single-syllable word repetitions in preschool children who stutter and controls

M. van Ark, P. Sandrieser, U. Natke, R. Pietrowsky and K.T. Kalveram, Heinrich-Heine-University Dusseldorf, Germany

The purpose of this study was to investigate differences in single-syllable word repetitions between preschool children who stutter and who do not stutter. The participants were 24 children who stutter (12 of them less than 6 months) aged 2.1 to 5.0 years and a control group matched in sex and age. Speech samples consisting of at least 1000 syllables were analysed concerning frequency of single-syllable word repetitions, number of repetition units and pause duration between repetition units. It is discussed whether single-syllables repetitions shown by the two groups can be differentiated by these characteristics in order to validate the diagnosis of stuttering.

E4. Utterance function and speech fluence in children who stutter

K. Logan, Univ. of Florida, USA

Most studies that examine linguistic effects in children's fluency focus upon utterance form. This study examined the effect of utterance function upon children's fluency. Participants were 17 children who stutter who were videotaped during play. Length and complexity characteristics of resultant speech acts were compared. Results indicated that utterances fulfilling assertive functions contained significantly more syllables, words, and clauses than utterances fulfilling responsive functions. However, disfluency frequency was not significantly different within length-matched assertive and responsive utterances. Results suggest that pragmatic effects on fluency are indirect and reflect factors related to utterance form.

E5. A linguistic analysis on stuttering in Brazilian Portuguese

M. Britto Pereira, Veiga de Almeida Univ., Brazil

This study is a linguistic analysis of the various kinds of disfluencies in the speech of adult and adolescent Brazilian Portuguese speakers. The spontaneous speech of 21 stutterers was recorded on video and DAT. Disfluencies were analyzed in terms of the following: kind; length; number of attempts; size and type of word; position of accent; position on the syllable, word and phrase; syllable structure; and phonetics. Stuttering was found to occur because of a momentary impediment in speech production that was aggravated by emotional factors.

E6. Prosodic aspects of stuttering in children

E. Werkhaizer Soares, Brazil

This paper presents a linguistic study of children's stammering emphasizing its prosodic aspects. An acoustic analysis was performed on the fluent and disfluent speech of 5 children with stammering problems, within a 6 year old range. Its aim was to show acoustically the perception of prosodic alterations found by the listener. The results showed that there was a significant difference in the parameters of the segments' duration, when compared with children's fluent speech, also the melodic patterns of statement and question sentences differed from those expected for Brazilian Portuguese. Such results confirm absolutely what is perceived by the listener as a disfluent, monotonous speech, sometimes slow and with no rhythm.

E7. A preliminary analysis of characteristics of interaction between chronic stuttering Japanese children and their mothers

K. Gondo, Y. Wakaba, S. Inoue, M. Iizawa, and H. Fujino, St. Margaret's Junior College, Tokyo Gakugei Univ., PIGEON Corporation, Japan

This preliminary study was conducted as a part of the two-year interdisciplinary research project supported by the Japanese Government. Characteristics of interactions between three nine-year-old Japanese boys who stutter and their mothers were investigated. Twenty-minute play sessions of each child with his mother were analyzed. Results indicated that mothers tend to allow their children to take turns in interaction. However, they do not give their children enough time to make a longer utterance for each conversational turn and they do not allow their children to control the conversational topic. Children appeared to be too passive in interaction with their mothers.

E8. Realization of linguistic stress in preschool children who stutter and controls

U. Natke, P. Sandrieser, C. P. Bendels, R. Pietrowsky and K. T. Kalveram, Heinrich-Heine-University Dusseldorf, Germany

The purpose of the study is to compare realizations of linguistic stress in stuttering and non-stuttering children. The participants were 25 children who stutter and 25 fluent speaking children aged 2.1 to 5.0 years. Control children were age and sex matched. In a picture naming task children produced 30 words with different prosodic patterns. Vowel duration as one parameter characterizing linguistic stress was determined for fluently spoken long stressed, short stressed and unstressed syllables using narrow band spectrograms. Results are discussed with reference to prosodic development and a theory of stuttering as a developmental disorder of sensorimotor automation processes.

F. Thematic - Neurological and Speech Motor Basis of Stuttering

F1. Kinematic event sequencing in stuttering adults: Speech, orofacial nonspeech, and finger movements

L. Max, V.L. Gracco and A. Caruso, Univ. of Connecticut, USA, McGill Univ., Canada, Kent State Univ., Haskins Laboratories, USA

Kinematic analyses of lip and jaw speech movements, lip and jaw non-speech movements, and finger movements were used to examine whether stuttering and non-stuttering adults differ in the sequencing of kinematic events (in particular peak velocity) across effectors. Movement sequence length and location of the target movement within the sequence were experimentally manipulated to determine the influence of these variables. Overall, results showed more similarities than differences between the stuttering and non-stuttering individuals. Interestingly, sequencing patterns of the two groups were most similar for the speech task. Implications for models of stuttering as a disorder of timing/sequencing will be discussed. [Funding, NIH DC 03102]

F2. Motor learning impairment: A possible cause of stuttering

S. Smits-Bandstra and L.F. De Nil, Univ. of Toronto, Canada

This investigation implicates motor learning impairment as a possible cause of decreased speed and accuracy of performance in motor sequencing tasks performed by persons who stutter.

Twelve adult males who stutter and comparison subjects were asked to learn finger tapping sequences and read aloud syllable sequences. The speed accuracy and variability with which each group of subjects completed the sequences were compared after practice. An analysis of variance (ANOVA) of regression coefficients across groups revealed significant differences between groups in automaticity (as demonstrated through performance) and motor learning.

F3. Cerebral lateralization of speech processing in adult and child stutterers

K. Mori, Y. Sato, E. Ozawa and S. Imaizumi, Research Institute of National Rehabilitation Center for People with Disabilities, Hiroshima Prefectural College of Health Sciences, Japan

Cerebral lateralization of speech processing in stutterers were assessed with noninvasive brain imaging techniques, magnetoencephalography and multichannel near-infrared spectroscopy (NIRS), with which neuromagnetic and haemodynamic responses, respectively, were recorded to analysis-synthesized prosodic and phonemic minimal contrast word trains. Adult stutterers did not show normal leftward dominance for the phonemic contrast with either method. Children underwent only NIRS sessions, with results similar to those of adults, which indicates that the cerebral dominance in processing speech is in disarray even in school-age stutterers. The NIRS method may be useful in screening young stutterers and in elucidating neural correlates of stuttering

G. Thematic – Multi-cultural and Multi-lingual Aspects of Stuttering

G1. A methodology for examining adaptation and bilingualism in stuttering

N. Hall and D. Evans, Univ. of Maine, USA

This presentation offers a unique methodology for testing the oral-motor rehearsal theory of adaptation by investigating adaptation in bilingual speakers who stutter. Speakers are asked to read the same passage in one language five times, after which the passage remains the same, but the language changes. This method holds linguistic meaning constant, while changing the oral-motor movements. The results of an exploratory study with two participants are discussed relative to future research efforts.

H. Thematic – Personality and Emotional Factors in Stuttering

H1. A preliminary study of social anxiety among school-age stutterers

S. Hiroshima and T. Itakura, Gifu Univ., Japan

The Social Anxiousness Scale for Children (SASC) (Matsuo and Arai, 1998) was administered to 51 school-age stutterers, and the results were compared to those from normally fluent children. It was revealed that there were no significant differences in the level of social anxiety between the two groups. Close examination of the subtests, however, revealed that stuttering children showed higher anxiety in the subtest of Anxiety of Negative Evaluations from Others when compared to the normally fluent children. Results indicate that stuttering children tend to worry how others evaluate them.

H2. StutterismSM: Inquiry; concerning a mental condition, as a hurdle to effective treatment of stutterers

R.L. Borys, Twelve Step Programs, USA

This presentation will describe how I was able to use fluency techniques learned in speech therapy effectively to manage my stutter only after I adopted attitudes and behaviours developed by Alcoholics Anonymous and similar organizations for addiction/compulsion control. Moreover, I will initiate an inquiry into how stutterers and/or therapists may appropriate those outlooks. The psychological state that effectively made me unwilling to implement skills, learned in speech therapy, I refer to as “STUTTERISM”SM. Symptoms include lack of motivation, denial, hoping for easy remedies, defiance, and a hidden grandiosity. The remedy can be described as ‘surrender’, which I will distinguish from ‘submission’.

H3. Preliminary study on effects of temperament characteristics on early development of stuttering in children

Y. Wakaba, M. Iizawa, K. Gondo, S. Inoue and H. Fujino, Tokyo Gakugei Univ., St. Margaret's Junior College, PIGEON Corporation, Japan

Temperament is considered to be an important factor influencing the onset and development of stuttering in children. Wakaba estimates that one-third of children who stutter can be characterized as 'difficult', a higher proportion than among 'normal' children. This study examines two groups of subjects, five 'easy' children and five 'difficult' children. Four data collection strategies were used to assess the developmental history and behaviour characteristics of the children and their relationships with their parents. Temperament was found to be a contributory factor in the development in 'difficult' children of stuttering symptoms associated with tension. More subjects need to be examined before these results can be generalized.

I. Thematic – Attitudes and Stuttering

I1. Research summary on stutterers' and non-stutterers' belief systems

K.D. Gronhovd and P. Rice,

A series of projects and research studies has yielded an experimental version of a 130 item check list, based on responses from 107 stutterers and 228 non stutterers. The checklist has been used to study and compare the belief systems of stutterers and non-stutterers regarding fluent speech, fluent speakers stutterers and stuttering. It has also demonstrated that there is a potentially significant relationship between certain beliefs of stutterers and their levels of speech-related anxiety. Finally, a clinical study has suggested that the checklist may be able to track cognitive change during therapy.

I2. Effects of familiarity on attitudes towards people who stutter

R. Gabel, G. Tellis and M. Althouse,

The purpose of this study was to investigate whether knowing a person who stutters altered college students' perceptions of people who stutter. To explore this phenomenon, 195 students at three universities were surveyed regarding their attitudes towards people who stutter. The attitudes reported by students who knew a person who stutters were compared to those who reported that they did not know a person who stutters. Findings suggested that the perceptions reported by students who knew a person who stutter did not differ significantly from those reported by students who did not know a person who stutters.

I3. Occupational stereotyping of people who stutter: Effects of familiarity

R. Gabel, G. Tellis and M. Althouse, Bowling Green State Univ., Indiana Univ., State Univ. of New York, USA

The purpose of this study was to explore whether familiarity, or knowing a person who stutters, improved the occupational stereotyping of people who stutter. To answer this question, 197 undergraduate students who knew and did not know people who stutter were surveyed regarding their perceptions of appropriate career choices for people who stutter. The results of the study suggested that there were 22 that were judged to be less appropriate for people who stutter. Additionally, the findings suggested that knowing a person who stutters improved perceptions of appropriate career choices for people who stutter, thus reducing occupational stereotyping.

I4. Programs against child discrimination at schools in the Czech republic

I. Kejklickova, P. Stanicek and P. Florian, Czech Republic

Children with speech disorders often face discrimination because of their handicap, especially when starting attendance at basic (elementary) school. Our clinic proposes a comprehensive program, in cooperation with school systems, to address this problem. We describe a comprehensive conceptual program to educate students, parents, and teachers about potential discrimination faced by children with speech disorders. In the Czech Republic, legislation exists concerning the integration of children with handicaps into elementary and high schools; however, in addition to the legislative approach, we call for a humanistic approach to guarantee that children with speech disorders are not separated from the rest of society.

J. Thematic – Atypical Stuttering

J1. Diagnostic criteria of determination of cluttering in school children

Y. Filatova and L.I. Beliakova, Moscow State Pedagogical Univ., Russia

The purpose of this study is to determine the diagnostic criteria of cluttering. We have tested 55 subjects between eight and sixteen years of age. We used an adapted and modified version of Daly's Checklist for Possible Cluttering. The test results have allowed us to divide the children into four groups: pure stuttering, a mixed form of cluttering with a prevalence of stuttering, a mixed form with a prevalence of cluttering, and pure cluttering. The subjects with pure cluttering and the ones with the mixed form where cluttering dominated were studied more carefully. The results include characteristics of their oral speech, serial organization of movements and sense of rhythm, intellectual processes and attention.

J2. Speech dysfluency characteristics in patients with Parkinson's disease

S. Patel, M. Menahemi and Y. Manor, Tel-Aviv Univ., Israel

Speech dysfluency can cause communication difficulties in patients with Parkinson's disease (PD). The objective of this study was to characterize the speech dysfluency in PD patients. PD patients were assessed by a subjective fluency test. The most frequent type of dysfluency in the patients' spontaneous speech was syllable repetitions. High association was observed between speech rate and dysfluent syllables. More dysfluent syllables appeared in the patients' conversational speech than in the oral reading task.

J3. Cluttering and aphasia: A case report

D. Ward, The Univ. of Reading, UK

This paper examines the case of a 29 year-old man who was referred to the Apple House fluency clinic for a second opinion as to his speech fluency. At assessment he presented with a range of linguistic difficulties more consistent with a diagnosis of expressive aphasia. A firm diagnosis was not possible from assessment, but in the apparent absence of neurological damage, cluttering was suspected. After being sent for an MRI which revealed no abnormality, he was subsequently seen for therapy. This paper describes how, as therapy progressed, the cluttering behaviours both changed, and responded to treatment. Implications for the diagnosis and treatment of cluttering are discussed.