This issue contains the usual pot-pourri of news of readers' writings, researches and movements, but many other good things as well. There are the further details of the Tenth International Systemic Workshop, to be held at Nottingham University, 6-8 September, including the texts on which many of the papers will focus. There is also Part 2 of Michael Halliday's annotated bibliography of his works, in which one can clearly trace the development of his view of language. But there is perhaps a particular emphasis in this issue on the contribution of systemic linguistics to computer models of language - and so indirectly on the potential contribution of computing to systemic linguistics - in David Birch's insightful review of Anthony Davey's important book Discourse Production and in Bill Mann's valuable article on 'Systemic Encounters with Computation'. But there is also a review by Frances Austin - which includes a detailed discussion of the perfect/perfective in English - of Leech and Svartvik's Communicative Grammar of English (which in its emphasis on various types of meaning appears to reflect something of the systemic functional view of language), and the final piece is a short but thought-provoking article by Paul Chilton. He is the first, so far as I know, to apply Halliday's 1970 distinction between 'modality' and 'modulation' ('epistemic' and 'root' or 'deontic' modality in other terminologies) to the notion of 'meaning potential' to ask: 'Does can mean always mean 'has the ability to mean' or does it sometimes mean 'is permitted to mean'? A nice question!
NEWS OF FORTHCOMING EVENTS

TENTH INTERNATIONAL SYSTEMIC WORKSHOP

TUESDAY 6th - THURSDAY 8th SEPTEMBER, 1983
ANCHASTER HALL, UNIVERSITY OF NOTTINGHAM, ENGLAND

The theme of the conference will be the contribution that Systemic Linguistics can make to the analysis of texts, both spoken and written.

We attach a set of six short texts and we hope that wherever possible givers of papers will make use of one or more of these texts for their illustrative material.

As usual, about half the conference will be devoted to the conference's theme, while the other half will be more generally based.

Further details about the Workshop will be sent to anyone who attended the Toronto Workshop, the Birmingham Workshop or the Sheffield Workshop, and to anyone who has offered a paper.

Anyone else who would like further details should write to:

Margaret Berry or Chris Butler
Department of English Studies or Department of Linguistics
University of Nottingham
NOTTINGHAM
NG7 2RD
ENGLAND

Further offers of papers still welcome.
Utilization of Mineral Salts. A clear distinction should be drawn between the absorption of a salt and the subsequent utilization of it or its component ions. The term utilization is employed in a loose sense for the incorporation of mineral elements into the relatively permanent constituents of the cell walls and protoplasm or for their participation in fundamental metabolic reactions. Absorption of the ions or molecules of salts does not necessarily mean that they will be utilized. Many of the ions absorbed by a plant remain for more or less indefinite periods in the ionic state in the cells. Sooner or later many of these ions are usually incorporated either into the structure of more complex but unassimilated molecules synthesized by the plant such as storage proteins, calcium oxalate, glycosides, etc., or into the protoplasm or cell walls. There may, therefore, be a considerable time lag between the absorption of an ion and its utilization, while some of the absorbed ions may remain indefinitely as such within the cells. Furthermore, some mineral elements may be utilized in one organ of a plant, subsequently released by disintegration of cell constituents, translocated to other organs of the plant, and there re-utilized. Redistribution of minerals which have accumulated in cells but have not actually been utilized is also of common occurrence in plants (Chapter 17).


---

Text B

The sea which lies before me as I write glows rather than sparkles in the bland May sunshine. With the tide turning, it leans quietly against the land, almost unfecked by ripples or by foam. Near to the horizon it is a luxurious purple, spotted with regular lines of emerald green. At the horizon it is indigo. Near to the shore, where my view is framed by rising heaps of humpy yellow rock, there is a band of lighter green, icy and pure, less radiant, opaque however, not transparent. We are in the north, and the bright sunshine cannot penetrate the sea. Where the gentle water taps the rocks there is still a surface skin of colour. The cloudless sky is very pale at the indigo horizon which it lightly pencils in with silver. Its blue gains towards the zenith and vibrates there. But the sky looks cold, even the sun looks cold.

I had written the above, destined to be the opening paragraph of my memoirs, when something happened which was so extraordinary and so horrible that I cannot bring myself to describe it even now after an interval of time and although a possible, though not totally reassuring, explanation has occurred to me. Perhaps I shall feel calmer and more clear-headed after yet another interval.

Opening paragraphs of Iris Murdoch *The Sea, the Sea,* Harmondsworth: Penguin 1979
The going's a bit softer here than it might have been at the Curragh. But just look at the crowd we've got!

Believe me, half a dozen kids is quite a crowd on an Irish beach, even in high summer. And this is October. Honest.

Smashing day. Smashing beach. And the natives are very friendly.

The fact is, there are hundreds of really gorgeous beaches in Ireland. Especially on the South-Western peninsulas, near to the Gulf Stream. If you saw Ryan's Daughter you'll know the kind of place. Miles and miles of glistening sand. Undiscovered. Unspoilt.

And the roads are nearly as quiet! No traffic jams. No parking problems. No sweat.

If you tried really hard, I suppose you could find a crowd or two somewhere. At sporting events. In the dance halls. In a few of the pubs. At fairs and festivals, concerts and theatres. And, of course, at those world-famous Irish racecourses. But they're the last places I want to think about on holiday.

If you want the experience of a lifetime— one you won't find anywhere else in the world— come on over to Ireland. There's plenty of room.

Just don't all come at once, that's all.

---

Advertisement for tourism in Ireland, Sunday Times Supplement, 13 March 1983.

---

Text D

MICK is alone in the room, sitting on the bed. He wears a leather jacket.

Silence.

He slowly looks about the room looking at each object in turn. He looks up at the ceiling, and stares at the bucket. Ceasing, he sits quite still, expressionless, looking out front.

Silence for thirty seconds.

A door bangs. Muffled voices are heard.

MICK turns his head. He stands, moves silently to the door, goes out, and closes the door quietly.

Silence.

Voices are heard again. They draw nearer, and stop. The door opens. ASTON and DAVIES enter, ASTON first, DAVIES following, shambling, breathing heavily.

ASTON wears an old tweed overcoat, and under it a thin shabby dark-blue pinstripe suit, single-breasted, with a pullover and faded shirt and tie. DAVIES wears a worn brown overcoat, shapeless trousers, a waistcoat, vest, no shirt, and sandals. ASTON puts the key in his pocket and closes the door. DAVIES looks about the room.

ASTON. Sit down.

DAVIES. Thanks. (Looking about.) Uuh... .

ASTON. Just a minute.

ASTON looks around for a chair, sees one lying on its side by the rolled carpet at the fireplace, and starts to get it out.

DAVIES. Sit down? Huh... I haven't had a good sit down... I haven't had a proper sit down... well, I couldn't tell you... .

ASTON (placing the chair). Here you are.

DAVIES. Ten minutes off for tea-break in the middle of the night in that place and I couldn't find a seat, not one. All them Greeks had it, Poles, Greeks, Blacks, the lot of them, all them aliens had it. And they had me working there... they had me working... .

ASTON sits on the bed, takes out a tobacco tin and papers, and begins to roll himself a cigarette. DAVIES watches him.

All them Blacks had it, Blacks, Greeks, Poles, the lot of them, that's what, doing me out of a seat, treating me like dirt. When he come at me tonight I told him.

Pause.

ASTON. Take a seat.

DAVIES. Yes, but what I got to do first, you see, what I got to do, I got to loosen myself up, you see what I mean? I could have got done in down there.

Opening of Harold Pinter The Caretaker, London: Methuen 1960
Arnold's figures incidentally three overs one maiden one wicket for three are some indication as to how he has been tying the batsmen down he begins now his fourth over from the city end bowling to Wadekar comes in and bowls now and Wadekar plays that down in front of him Arnold had a look it hit him on the pad whether it was pad only I wouldn't like to say but it A.. Arnold had a look he didn't in fact appeal but it taxed Wadekar a good deal and he's now gone out and removed a foreign body from the pitch though he went so far down the pitch in order to do it that I don't think the it can have had much relation perhaps he hit the ground he played the stroke perhaps he dug a bit of the pitch away 'cos it was a bit of a jab Arnold comes in and bowls to Wadekar again beats him outside the off stump through to the wicket-keeper every over of Arnold's so far has contained a ball or several balls which have threatened to bring wickets the Indians are having to battle Arnold comes in again bowls to Wadekar Wadekar plays that one out all right on the off side doesn't get a run it goes into the covers Underwood fields

Transcript of an excerpt from a BBC radio commentary on the third Test Match between England and India, Friday 5th July 1974. Collected and transcribed by C.S. Butler, University of Nottingham
Transcript of an excerpt from a conversation between three children:
Edmund (E) 12.5 years, Daniel (D) 7.10 years and Debbie (Deb) 11.4 years. The children are playing a computer game called 'Adventure Land'. The object of the game is to find a way through the land and its attendant dangers to a point where treasure is to be discovered. Geoffrey (G), who gets drawn into the conversation, is Edmund's and Daniel's father. Collected and transcribed by Hilary Hillier, University of Nottingham, 16.11.80
TENTH LACUS FORUM  The 1983 forum will be held at Laval University, Quebec, Canada from 7th to 11th August. One of the most important parts of any Lacus forum is the Presidential Address, and since this year the President is Michael Halliday, those with interests in systemic linguistics will have a particularly strong reason to attend.

LACUS MEMBERSHIP FORM

LACUS/ALCEU, the Linguistic Association of Canada and the United States / Association de Linguistique du Canada et des États-Unis), is a tax-exempt non-profit educational and scientific organization incorporated in the State of Illinois. Its purpose is to promote the objective study of language. LACUS/ALCEU espouses an interdisciplinary philosophy pursuing both theoretical and applied linguistics, emphasizing no single theoretical bias.

The association holds an annual FORUM of four and half days duration, during the month of August, during which members present papers. The abstracts for each meeting are evaluated by the Board of Directors of LACUS, all of whom are professional members, representing several campuses from Canada and the USA. The meetings are scheduled to alternate between the United States and Canada. The Proceedings of each annual FORUM appear in book form a few months after each conference. LACUS members automatically receive a free copy and are entitled to purchase additional copies from the publisher at a discount. The Association was inaugurated at Lake Forest College, Lake Forest, Illinois, at a conference held from August 18-21, 1974. Since then conferences have been held in Toronto, Ontario; El Paso, Texas; Montreal, Quebec; Buffalo, New York; and Calgary, Alberta. The 1980 conference was held in Houston, Texas, and in 1981 we will be at York University in Toronto, Ontario.

Professional membership in the organization costs $16 U.S. or $18 Canadian, professor emeritus membership $12.50 U.S. or $14.50 Canadian, student membership $11 U.S. or $13 Canadian, and joint husband-wife membership costs a membership-and-a-half. Joint membership entitles both members to all the rights and privileges of membership, except that they will receive only one copy of the Forum. The membership year runs from July 1 of one year to June 30 of the next. Membership retroactive to 1974 constitutes a Founding Membership and entitles the member to one free copy of each Forum which has appeared to date. LACUS is governed by a set of By-Laws which are sent to every member upon joining the organization.

please detach here

LACUS MEMBERSHIP APPLICATION

Professional Membership ..................................................$20, U.S. or $25 Canadian
Professor Emeritus Membership $12.50 U.S. or $14.50 Canadian
Student Membership ...................................................$12 U.S. or $15 Canadian
Joint husband-wife membership = a membership-and-a-half (entitles you to one copy of Forum)

Professional Membership . . . ; Professor Emeritus Membership . . . ; Student Membership . . . ; Joint Membership . . . ;
Name: Mr. Mrs. Miss Ms ..........................................
Highest academic degree held and institution where received ..........................................................
Institutional Affiliation ..................................................Current Academic Rank and Department ..................................................
Institutional Address and Zip/Postal Code ..................................
Institutional Phone .....................................................Home Address and Zip/Postal Code ..................................
Home Phone ...............................................................
Prefer mailings to be sent to home address ; institutional address ; other: ..............................................

I enclose $ ................................(U.S. dollars/Canadian dollars) for membership to begin as of July 1, 19...

Return to: LACUS, P.O.B. 101, Lake Bluff, Illinois 60044 U.S.A.
Saturday, August 28

7:30 - 8:30
Breakfast, Vanier/Founders Servery

9:00 Peter Frits: "How does a story mean what it does", Winters 104

André Golding: "A case study of applying systemic linguistics to high school English education", Winters 105

E.L. Smith, Jr.: "Functional types of scientific prose", Winters 106

9:45 Jean Urc: "Languages in multi-lingual classrooms in the UK", Winters 104

Yun Malley: "The Semantic field of homicide", Winters 105

David Mendelsohn: "The identification of genre and other aspects of meaning in a foreign language: a strategy for learners", Winters 106

10:30 Coffee break, Winters Junior Common Room

11:00 Gunter Kress: "The development of textual structure in children’s writing", Winters 104

Richard W. Bailey: "Negotiation and meaning: revisiting the 'context of situation'", Winters 105

Linda Gerot: "Integrative work: an exploration in what makes reading comprehension test questions easy or difficult to answer", Winters 106

11:45 Stephen Bernhardt: "Text structure and graphic design: the invisible design", Winters 104


12:30 Lunch, Vanier/Founders Servery

2:00 Business meeting, Stedman Lecture Hall A

3:00 Ad Hoc workshops, Winters 104, 105, 106
The International Systemic Workshops meet annually, bringing together linguists working in the neo-Firthian tradition. Under the guiding influence of Robin Fawcett, past workshops have met in Colchester, Nottingham, Norwich, Cardiff, Sheffield and Birmingham. This year’s workshop in Toronto is sponsored by the Applied Linguistics Research Working Group of Glendon College, York University. Maurice Elliott, Master of Winters College, has generously made facilities available.

This workshop could not have been held outside the United Kingdom without considerable support which the organizers wish to acknowledge: The British Council, The British Academy, The Social Sciences and Humanities Research Council, The York Ad Hoc Fund, The Dean of Research, The Dean of Graduate Studies, The Master of Winters College, and The Principal of Glendon College. We would also like to acknowledge the contribution of scholars who chose to come at their own expenses so that others might enjoy institutional support.

R.J. Handscombe
for The Organizing Committee

PROGRAM

Wednesday, August 25

10.00 – 5.00 Registration, Lobby, Winters Residence
5.00 – 6.00 Cash bar, Winters College Senior Common Room
6.00 – 7.15 Dinner, Vanier/Founders Servery
7.30 Keynote address
Chairman: Robin Fawcett
Welcome: H. Ian Macdonald, President of York University
Speaker: M. A. K. Halliday
Stedman Lecture Hall A
9.30 Cash bar, Winters College Senior Common Room

Thursday, August 26

7.30 – 8.30 Breakfast, Vanier/Founders Servery
9.00 Plenary Session: “A demonstration of the Nigel text generation program”, William Mann and Christian Matthiessen, Stedman Lecture Hall A
10.30 Coffee Break, Winters Junior Common Room
11.00 Robin Fawcett: “On the potential complexity of reading a sentence”, Winters 104
12.00-13.00 Lunch, Vanier/Founders Servery
2.00 Carol Mack: “A systemic phonology of Isthmus Zapotec prosodies”, Winters 104
2.30 Ivan Lowe and Carl Whitehead: “The casual systems of Korefe and English”, Winters 105
3.00 Martin Phipps: “Computer-assisted text analysis and the CLOC package”, Winters 105
3.30 Tea, Winters Junior Common Room
4.00 J.C. Catford: “Rest and ‘Open transition’ in a systemic phonology of English”, Winters 104
Jonathan Fabini: “What do surface markers mean? Towards a triangulation of social, cognitive and linguistic factors”, Winters 105
Terry Lyne: “The macrofunctions applied to lexiconemic work”, Winters 106
4.45 B.H. Celfry: “The study of knowledge structures from a cognitive and anthropological viewpoint”, Winters 104
David Young: “Some applications of systemic linguistics in EFL”, Winters 105
Roy O. Freedle: “Some interactions between false starts and fill pauses and levels of cohesion in children’s recall of texts”, Winters 106
5.30 Jim Martin: “Generating schematic structures”, Winters 104
Barry Caulfield: “Motivation of transitivity systems”, Winters 106
6.15 Cash bar, Winters College Senior Common Room
7.00 Dinner, Vanier/Founders Servery
8.30 Keynote address
Chairman: Richard Handscombe
Welcome: David V. J. Bell, Dean of Graduate Studies, York University
Speaker: Ruqiai Hasan
Stedman Lecture Hall A
10.00 Cash bar, Winters College Senior Common Room

Friday, August 27

7.30 – 8.30 Breakfast, Vanier/Founders Servery
9.00 J. L. Lenka: “Ideology, intertextuality and the notion of register”, Winters 104
Annabel Kramer-Dale: “A systemic approach to linguistic theories”, Winters 105
Bill Dounce: “Explanation in discourse analysis”, Winters 106
9.45 Margaret Berry: “Roles and rules: how to constrain them”, Winters 104
Gwen S. Fewelbaum: “Systemic grammar and the analysis of written texts”, Winters 105
Jim McNaughton: “The phonological signalling of text structure”, Winters 106
10.30 Coffee break, Winters Junior Common Room
Two volumes of selected papers from the Ninth International Systemic Workshop are due out later this year, both edited by James D. Benson and William S. Greaves and published by Ablex. The contributions are as follows:

Systemic Perspectives on Discourse: Selected Theoretical Papers from the 9th International Systemic Workshop

M.A.K. Halliday: 'The Roots of Systemic Theory'
Ruqaiya Hasan: 'Meaning, Context and Text: Fifty Years After Malinowski'
William C. Mann and Christian M.I.M. Matthiessen: 'A Demonstration of the Nigel Text Generation Computer Program'
William C. Mann: 'An Introduction to the Nigel Text Generation Grammar'
Cynthia J.M. Farr, Ivan Lowe and Carl Whitehead: 'Explanation in English and Korafe'
Joseph E. Grimes: 'How to Recognize Systems'
Erich Steiner: 'Working with Transitivity: System Networks in Semantic Grammatical Descriptions'
Robert Veltman: 'Comparison and Intensification: an Ideal but Problematic Domain for Systemic-functional Theory'
Christopher S. Butler: 'Discourse Systems and Structures and their Place within an Overall Systemic Model'
Erlain C. Davies: 'On Types of Meaningfulness in Discourse'
J.R. Martin: 'Process and Text: Two Aspects of Human Semiosis'
J.L. Lemke: 'Ideology, Intertextuality, and the Notion of Register'
Peter H. Fries: 'How Does a Story Mean What It Does? A Partial Answer'
M.P. Jordan: 'Non-Thematic Re-Entry'
J.C. Catford: 'Rest' and 'Open Transition' in a systemic Phonology of English'
Carol C. Mock: 'A Systemic Phonology of Isthmus Zapotec Prosodies'
James Monaghan: 'On the Signalling of Complete Thoughts'

Systemic Perspectives on Discourse: Selected Applied Papers from the 9th International Systemic Workshop

R.W. Bailey: 'Negotiation and Meaning: Revisiting the "Context of Situation"'
Stephen A. Bernhardt: 'Text Structure and Graphic Design: the Visible Design'
Fred Bowers: 'Judicial Systemics: Function and Structure in Statutory Interpretation'
B.N. Colby: 'Prolegomena to a Comparative Study of Revolutionary and Traditional Texts in Guatemala'
Barbara Couture: 'A Systemic Network for Analyzing Writing Quality'
Michael Cummings and Al Regina: 'A PROLOG Parser-Generator for Systemic Analysis of Old English Nominal Groups'
Jonathan Fine: 'What do Surface Markers Mean? Towards a Triangulation of Social, Cognitive and Linguistic Factors'
Linda Gerot: 'Integrative Work: an Exploration in What Makes Reading Comprehension Test Questions Easy or Difficult to Read'
A.A. Lyne: 'Ideational, Interpersonal, and Textual Macrofunctions Applied to Lexicometric Work on French Business Correspondence'
Karen Malcolm: 'Communication Linguistics: A Sample Analysis'
Yon Maley: 'The Semantic Field of Homicide'
Christine C. Pappas: 'The Cohesive Harmony and Cohesive Density of Children's Oral and Written Stories'
Catherine Pettinari: 'A Comparison of the Production of Surgical Reports by Native and Nonnative Speaking Surgeons'
Linda S. Rashidi: 'Complexity of Reality in Lawrence Durrell's The Alexandria Quartet'
Donald Ross, Jr.: 'What Surface-Structure Parsing Can Tell Us about Styler'
E.L. Smith, Jr.: 'Functional Types of Scientific Styles'
Geoffrey J. Turner: 'Discourse Structure: Social Class Differences in Answers to Questions'
David J. Young: 'Some Applications of Systemic Grammar to TEFL, or Whatever Became of Register Analysis'
As Network goes to press the Editors are still waiting for two important contributions, which are expected VERY shortly, and one or two papers reflecting activity in areas since the book was first planned are also being considered.

NEWS OF RECENT PUBLICATIONS

There is a strong German flavour to the recent publications this time:

The major work in systemic linguistics to appear since the last issue of Network is the published version of our Reviews Editor's Ph.D. thesis:

STEINER, Erich.1983.Die Entwicklung des Britischen Kontextualismus.Heidelberg: Julius Gross Verlag (pp. vi + 439). This book is in German, and it will give readers of that language an impressively full overview of the roots of Systemic Linguistics. Note then, that the emphasis on context in the German name for the work of Firthian-Halliday linguists ('British Contextualism') does not imply that the contribution of the concept of register is appreciated while that of system in modelling grammar itself is not. The Roots are traced back beyond Firth to Sweet, Wegener, Gardiner and Malinowski, but the two major chapters are devoted to Firth and Halliday respectively. One more feature of this book is the thorough treatment it gives to the 'Schools Council Programme in Linguistics and English Teaching 1967-71', of which Michael Halliday was Director. Offers to review this book for Network would be welcome.

The other two books in German that readers may like to know about are the following:

Pritscher, Ursular F.,Die Funktion der Register in den drei Versionen von "Lady Chatterley's Lover" von D.H. Lawrence. (The Function of Register in the Three Versions of "Lady Chatterley's Lover" by D.H. Lawrence), Wurzburg: Verlag Konigshausen und Neumann, 1982, 210 pp., DM44. -

This study, which is the author's Ph.D thesis from the University of Cologne (Koln), tries to bridge the gulf that still exists between the literary and the linguistic approaches to the analysis of texts. She does this by applying to the interpretation of literary texts the system and the concepts of linguistic analysis developed by the London School of linguistics.

Following in the footsteps of Halliday and Macintosh, who have used some of their concepts for a similar purpose in some of their shorter essays, the author makes especially extensive use of the concepts of speech and register, the investigation of which has remained one of the foremost interests of this school of thought.

Lawrence's Lady Chatterley novels lend themselves most obviously to such an undertaking, as in them Lawrence puts speech variety to a more extensive and surprisingly new use, differing in this respect too from his pre­decessors in English literature. The present analysis of the three versions of this novel being based on a linguistic system, it thus allows new insights into Lawrence's techniques of dialogue writing and characterisation, as well as into the development of those techniques in the process of the creation of Lady Chatterley's Lover. At the same time, this study proves a justification for the concept of 'register' as such, and for the use of 'register' for the analysis of literary texts.

Because of this twofold orientation, the actual analysis of the novels is preceded by an extensive and critical evaluation of all the studies and research in ethnos psycho-, socio- and theoretical linguistics which have become relevant for the development and elaboration of the concept of 'register'. Most attention and room have been given to the theory of the London School of Linguistics, with M.A.K. Halliday as its main exponent. His findings, originally scattered in a considerable number of publications, are summarised and shown to form a systematic whole, with only minor gaps, which the author was able to fill in the course of this study.

In the course of this review, concepts such as the symbolic and the indexical functions of the use of register, or such as 'speech style', are clearly differentiated and elaborated, on the basis of semiotics and the theory of interaction - as are other central but controversial concepts currently discussed in linguistics.
The very detailed linguistic analysis of the Lady Chatterley versions shows an increasingly exact observation and rendering of speech varieties. The use Lawrence makes of register in the third and final version, Lady Chatterley's Lover, largely validates the theoretical findings of the first part of the present study. However, the results of the analysis stress the mood and the intention of the speaker as decisive factors in language choice. More and more, Lawrence relies on the use of register to define a situation, and less and less explicitly does he state influential factors of situations in the context of dialogues. The insights resulting from the linguistic interpretations show some of the problems of the research on Lawrence in a new light, and help to resolve certain controversial literary interpretations.

Rainer Rath, 1979, Kommunikationspraxis, Gottingen: Vandenhoeck & Ruprecht pp. 252, price DM 17,80 (£4.50)

This book should interest all those working on the analysis of spoken discourse. The author deals with the following:

1. The question done in East and West Germany on spoken discourse;
2. The question of layers (ranks?) between discourse on the 'upper end' and 'utterance units' (German 'Ausserungseinheiten' corresponding to 'acts' within the Birmingham approach) on the 'bottom end' of discourse;
3. Ellipsis and 'Ausklammerung' as a means of achieving maximum economy in discourse. 'Ausklammerung' is a grammatical device in German, where what would otherwise be a discontinuous predicate is made continuous in order to reduce load on memory, e.g.
   a) Hugo regte sich über das, was du ihm gestern sagtest, auf.
   b) Hugo regte sich auf über das, was Du ihm gestern sagtest.
   (predicates are underlined);
4. Paraphrase and correction as cohesive devices.

The book is based on the author's extensive work on the corpus of spoken German of the "Freiburger Forschungsstelle, Institut fur deutsche Sprache". The terminology used in the book shows no trace of British (and hardly any of American) influence. The phenomena discussed, however, are well known to everybody who has worked on spoken discourse, and the book is highly recommended for all those who are able to read German.

Now to publications in English:

Ellis, Jeffrey and Ure, Jean (Eds.). 1982. Special issue of the International Journal of the Sociology of Language (No. 35) on 'Register range and change'. This issue includes Braj B. Krachu's article 'Socially and Linguistics: the Firthian tradition', in which the author re-evaluates the Firthian tradition in the light of the contemporary search for a 'socially realistic linguistics'. The article is written with much insight and displays a fairly intimate knowledge of the history of Firthian linguistics, especially at SOAS, London.

NUKESPEAK

Two books have appeared recently which, while not specifically systemic or Firthian, are likely to interest many readers. Both employ methods from linguistics to unveil the ideology underlying the proliferation and defence of nuclear arms.

Aubrey, (ed.) 1982 Nukespeak, the media and the bombs, Comedia. pp. 135 £7.50 pbk £2.50

A collection of 10 essays that examines how metaphor and jargon used in government propaganda and the British media can disguise the senselessness and avoidability of nuclear proliferation (from a review in New Scientist 6.1.83). This book contains an essay by Paul Chilton, who also contributes a short article to this issue of Network.


Finally, two recent reviews that may be of interest that we have noted are the following:


If you find a review of a book that might interest Network readers, please drop us a note to tell us about it.

PAPERS AVAILABLE IN MIMEO FORM

PAPERS BY ERICH STEINER

1983a 'Language as reflection of and instrument in activity: a proposal towards the analysis of spoken discourse in children's talk.'

The first section outlines a theory of activity as developed in the writings of Vygotsky, Luria and Leont'ev. The predictions of this theory for the structure of texts produced in activities lead to the development of a method of textual analysis. This method is presented in some detail in the second section.

The method focuses on the context dependency of the language used, on thematic progression in the texts, the development of Theme and Rheme, largely in terms of participant roles and lexical items over which Theme and Rheme extend, and, through these, on the development of ideational subject matter. The paper attempts to clearly separate linguistic and logical methods of analysis, while employing them both where necessary. The linguistic framework within which the author develops the method presented here is that of Systemic Linguistics.

The third section tries to evaluate the method, emphasizing the overall importance of the concepts of action and situation for any meaningful textual analysis, pointing to work within political economy and artificial intelligence, where both of these concepts are used as key terms.

The paper is a first, intermediate report of the author's work within the Child Language Development Project at the Polytechnic of Wales.

1983b 'The interaction of language and music as semiotic systems - the example of a folk ballad'

This paper has three parts:

1. The analysis of a story narrated in a folk ballad in terms of the theory of activity advocated by the author in earlier papers (cp the author's Working with Transitivity system networks in semantic grammatical descriptions and the above paper).
2. The analysis of the same story in terms of a framework for textual analysis focusing on TRANSITIVITY, aspects of textual meaning (Theme-Rheme, thematic progression, Given-New) and cohesion.
3. The analysis of the musical accompaniment of the ballad in terms of the systems from which musical structures are derived (foreground/background, tonal harmony and others). This involves the development of a systemic approach to music.

It is finally shown how the linguistic and the musical resources interact in producing a text, and how this text, in turn, can only derive meaning (i.e. "be understood") if it is interpreted against the conceptual structures provided by the theory of activity illustrated at the beginning.

Address: Anglistik, Bau 35, Universität des Saarlandes, Im Stadtwald, D-6600 Saarbrücken, West Germany.

PAPERS BY OLUWOLE ADEJARE

Texture as a communicative device in poetry: the example of Hopkin's 'God's Grandeur'.

Adejar suggests that 'a serious limitation is imposed upon the practical utilization of texture for text analysis, particularly the library text.' He quotes Halliday and Hasan (1976:328) to summarise what the paper is about: the linguistic analysis of literature is not an interpretation of what the text means; it is an explanation of why and how it means what it does. He continues: 'Texture, therefore, can only explain but not interpret texts. If so, linguistics destroy its traditional image of a literary mid-wife which often fails to deliver live babies. But it need not necessarily be so.'
Towards a systemic textlinguistics

The author discusses the need for a systemic textlinguistics in the light of the shortcomings of existing models. The framework is built upon the crucial notions of situation, meaning and text. The question of levels of text meaning and analysis is also discussed. Towards the end of the paper Adejare concentrates on applications and demonstrations of the method he outlines in this paper.

Norm and deviation: its application and limitation in 'literary' text analysis

The paper advocates a systemically inspired stylistics. He discusses critically the terms 'norm' and 'deviation' as applied within stylistics and literary criticism, outlining the contribution of a systemic approach.

Address:
Department of English Language, University of Ife, Ile-Ife, Nigeria.

INVITATION

POETICS AND LINGUISTICS ASSOCIATION

The Poetics and Linguistics Association was formed to bring together linguists, poeticians and literary theorists in order to promote interest in the relationship of linguistics to literature and the analysis and teaching of literary texts and critical theory.

Interests in the membership include semiotics, speech act theory, discourse analysis, metrics, translation, narrative theory, dialect, ideology, pragmatics and drama, pedagogical stylistics, metaphor and irony etc.

If you would like to become a member of the association please send a cheque for £3.50 (made payable to Poetics and Linguistics Association) to: Dr. Ronald Carter, Dept. of English Studies, University of Nottingham.

WELCOME TO A SISTER NEWSLETTER

There is a new newsletter, News on Functional Grammar, which gives information on this 'sister' theory to systemic linguistics. 'Functional grammar' is the name of the theory developed by Simon Dik and others. Its general approach to sentence grammar has a good deal in common with systemic grammar, though I think it might be fair to say (without having made a thorough study of its literature, however) that it is, in terms of its goals and methods, closer to the T.G. paradigm than most systemic linguists are, and it does not seem to show the interest in register variation, discourse and relationships out to the wider culture that is typical of many systemic linguists. Note that the term 'functional' in Dik's 'functional grammar' is used in a rather different sense from that which it usually has in 'systemic functional grammar' (or indeed as 'functional grammar' has in Halliday's forthcoming Short Introduction to Functional Grammar).

The first issue gives details of (1) a colloquium on functional grammar to be held in June 1984; (2) the Functional Grammar Foundation and Fund; (3) how to obtain a functional grammar bibliography, and summaries of the contents of the five books published so far on the theory (all, except one by Simon Dik, being collections of papers, typically detailed studies of specific aspects of certain languages.)

To receive the newsletter write to: Functional Grammar, Institute for General Linguistics, Spuistraat 210, P.O. Box 19188, 1000 GD Amsterdam, Netherlands.
RONALD BERESFORD writes:

'My activities include:

a) the phonological development and assessment of children
b) the phonology of dysphasic speech
c) the early acquisition of 'meaning'
d) pragmatics in infancy

Specifically, I am working on a speech assessment manual, which I am discussing with publishers. Recent writing includes a review of Pam Grunwell's 'the nature of phonological disability in children' (for BAAL) and an article for the Bulletin of the Institute of Acoustics, 'Applied Acoustics and Speech Pathology'.

Last April I gave a paper at the Colloquium of the British Association of Academic Phoneticians on 'Alaryngeal Speech'.

Address: Sub-Department of Speech, School of Education, University of Newcastle, Newcastle-upon-Tyne NE1 7RU

DAVID BIRCH writes:

'I noticed you mentioned your intention to publish bibliographies, and you suggested literary stylistics. Readers may be interested to know that the forthcoming issue of Indian Journal of Applied Linguistics has a bibliography in its Bibliographic Focus Section compiled by me on stylistics. It's in three broad categories: Linguistic and Literary Stylistics; Structure and Text Stylistics and Quantitative and Computational Stylistics. The reference (and don't be fooled by the date, Indian Journals tend to be a little erratic) is IJOAL 6/1, January 1980, 113-129. Libraries should be receiving their copies any time now (if they have not already done so). I also have a paper in the companion issue (IJOAL 6/2 June 1980, 38-56) on 'Varieties of Stylistics: Linguistic and Literary'.

I have also noted with considerable interest the beginning of the Halliday annotated bibliography, and can't resist sending you a reference which I'm sure will never appear in any of Michael's official bibliographies, but which may be of interest to future biographers. The article was written while he was a lecturer at Peking University in Peking; It is a review of the 11th Annual Drama Festival on February 15th 1948, and he concentrates in particular on Ma Yangshyang's productions. The reference is: Michael Halliday, 'Chinese Drama Festival', Asian Horizon, 1/2 Summer 1948, 44-48. I wonder if he remembers writing it? I found the article whilst working in the closed stacks at N.U.S. on a paper I'm writing about Victorian philologists in the Straits Settlements. It's nice to know we all have humble beginnings!'

Address: Dept. of English Language and Literature, National University of Singapore, Kent Ridge, Singapore 0511

CAROL MOCK writes about her own and her students' research in systemic linguistics:

'In 1969 I completed a Ph.D thesis on a Ghanian language, written from the then-current perspective, with Halliday as my supervisor. The title is: 'The Units of the Nzema Language: A Systemic Analysis'.

The introductory chapter of the thesis describes Nzema phonology from a systemic vantage point; of particular interest there is the way the various phonological oppositions (or systems) operate at different phonological ranks in such a way that the 'distinctive features' of individual segments are often pre-selected at a higher rank. The remaining chapters deal with the grammatical options that are possible within each rank: sentence, clause, group, word, morpheme - although it turns out that all the choices at the level of morpheme are determined at higher ranks. In addition to the concepts of unit, element of structure, class and system, and the general pattern of realization in which elements at one rank were expounded at the next lower rank, it proved necessary to recognize various syntactic markers - morphemes which functioned directly as realizations of specific options at the clause rank.

This thesis is available for consultation at the University of London Library, from which microfiches should also be obtainable. There is also a copy of it in the African Languages Institute of the University of Ghana, Legon.'
are made simpler by incorporating the formal device of association rules, from the generative school of autosegmental phonology (a variety of phonology in the MIT tradition that interestingly enough admits its intellectual debt to the Firthian tradition of prosodic analysis).

As for other research within the systemic orientation, I have in a yet unpublished form a system network of the options that generate the personal pronouns of Chocho. Chocho, like other Popolocan and Mixtecan languages of Mexico, has a very intricate pronoun system (or set of systems); in addition to person and number, there is age-grading respect-grading and for certain combinations of these features, sex distinctions as well.

There is a young Mexican linguist who completed a thesis under my supervision for her licenciatura degree, who also has an interest in systemic linguistics. The name is Iraiz Hernandez Suarez, and currently she has a teaching post at the regional university in Vera Cruz, Mexico. Her thesis, written (in Spanish) from a systemic point of view, is a description of the morphological options available to nouns in Tarascan (or better, Purepecha); it was written for the Universidad de Veracruz, Xalapa. Unfortunately I cannot lay my hands on it at the moment to pass on its title. Purepecha, one of the languages studied by Morris Swadesh, has the capacity to add an astounding number of suffixes to its verbs to specify many aspects of the clause; when such verbs are nominalized, other affixes are added as well, to indicate whether the deverbal noun is an agent (e.g. 'farmer') or the action itself ('farming') or the location ('farm') or the resulting object ('crop'), etc. Thus a network for nominal systems includes most if not all the verbal systems as well: transitivity, agent-orientation, location, etc. I believe the only missing systems are those which specify tenses.

Address: Route 2, Box 96, Marshfield, MO. 65706

ERICH STEINER writes:
'I am now finishing my time of research with the Polytechnic of Wales Child Language Development Project (Academic year 82/83). I would not like to leave, however, without expressing my deeply felt gratitude to my colleagues associated with the Child Language Development Project, Robin P. Fawcett in particular. During my stay at the Polytechnic, they provided an atmosphere of intellectual stimulation and personal friendship, which made my time here extremely rewarding, both from a personal and from a professional point of view.

A short reference to the more precise nature of my work at the Polytechnic can be found in the section 'Papers available in mimeo form'.

Institutional address from 15.10.83 onwards: Dr. Erich Steiner, Anglistik, Bau 35, Universität des Saarlandes, Im Stadtwald, D-6600 Saarbrücken, West Germany.

MARY WILLES writes:
'You will find my subscription herewith, and may I add that if there were some sort of competition to find out the best linguistic value for money I reckon that Network would be way by several lengths.

A group of people here are concerned to examine, if they can, the process of development of the ability to make visual representations of the seen world. The small part of the literature that I have read is in extreme contrast to the literature of language acquisition, and is, for the most part, polemical. There is very rarely any attempt to make comparisons or contrasts with the way in which children learn to talk and the way in which they learn to make recognizable, interpretable drawings. Willetts' work seems to be exceptional here. Are there any readers of Network who share this interest?'

Please respond to Mary Willes at: West Midlands College of Higher Education, Gorway, Walsall, WS1 3BD

ALAN DUTHRIE writes (in a letter which includes an invitation which out-of-work linguists might like to follow up):
'Since Ghana's latest revolution we have had an unseasonal long vacation. Both before and since, our department is exceeding short of staff (for mainly economic reasons): short-term, or independently wealthy, or otherwise unemployed, linguists would be welcome! My own teaching includes an elementary background (Firthian) on non-core linguistic areas to first-year students (none next session for lack of staff); sociolinguistics elective; basic phonology and grammar of Ewe to native speakers; semantics both of Ewe and of English to final-year students, based on Fawcett, Halliday, Chafe, Longacre, Grimes, etc.

I have a 200-page typescript, 'A Linguistic Study of Ewe', covering phonology, orthography, grammar, lexis, semantics, with diagrams, accompanied by analytical exercises, intended for native speakers, but usable by anyone else (tone-marked, with English translations) probably without the exercises. I envisage various editions of different contents for different users drawn from the same total. I wonder if an outside publisher would be interested?

A revised version of my 1980 Workshop paper on a shorter Ewe text, 'Displaying Semantic Structure', is needing publication. It would fit into a volume on discourse analysis. About 25 pages, including diagrams.

(Incidentally, I have popularized linguistics to the limit in a series of articles, 'Translating the Bible into English', in the 'Harvester' magazine published by Paternoster Press, Exeter, appearing bimonthly 1982/83.)

I have also had in mind a wider and non-applied version of the above, 'Representing Linguistic Structures', covering phonological, grammatical, and semantic structures, exemplified from several languages; but nothing concrete yet till the above existing papers are out of the way.

Address: Department of Linguistics, University of Ghana, P.O. Box 61, Legon, Ghana.

JIM MARTIN writes:

'I thought I'd better do some reporting in my Network editorial capacity.....

First, I am just back [March 1983] from a very stimulating six month study leave. The workshop in Toronto was a great start - very inspiring. I was particularly impressed by the sense of commitment I felt in almost all the delegates; not to any particular model of language per se, but a commitment to developing models that can be used to do something beyond what linguists normally do. Nick Colby's overpowering presentation dealing with genocide in Guatemala was particularly moving; I take it as a real compliment to the work carried on by so many at the conference that he felt it appropriate to make use of that forum for his remarks. My second lasting impression has to do with a feeling of confidence and security I had not noted among a similar collection of linguists before. Systemic linguistics looks much more now than it did ten years ago like surviving and making a lasting contribution to the study of language and culture in this century. No small amount of the credit for this is due to you, Robin, for organizing the workshops, this newsletter, and for the personal contacts you have built up with so many working in the theory. My thanks to you for all you have done.

From Toronto I went to Marina del Rey to work with Bill Mann and Chris Matthiessen (and as it turned out Sandy Thompson) on their text generation project. I had a fine time playing the role of the radical descriptive/ethnographic semiotician Bill had intimated I take on in order to critique their discourse work. I must say I left L.A. somewhat puzzled as to how to reconcile social and cognitive approaches to language and culture, toying with the idea that a more fully developed dynamic potential might make them feel better. In any case, I was stuffed with food for thought.

In Manila I worked for four months at the Language Study Centre of the Philippine Normal College which very graciously, through the good offices of Dr. Fe Diones, gave me a place to work and cooperated generously in every possible way. In the mornings I spent my time studying and in the afternoons catching up on the work presented in materials unavailable to me in Australia. I collected a corpus of oral narratives from Tagalog speaking children, comparable to that studied in my Ph.D thesis, and will carry on analysing these with a view to contrasting participant identification in a language like English which has definite and indefinite articles with what happens in a language like Tagalog which does not, but where definiteness is one aspect of THEME. Towards the end of my visit I gave a couple of lectures in the Language Study Centre on systemic linguistics (their first ever exposure to this funny British stuff) and another lecture on conversational structure to the Linguistic Society of the Philippines. It was a wonderful opportunity to study a language and culture completely different from my own, and I look forward to returning when the opportunity arises.

Just a week after returning to Sydney I attended the Macquarie Workshop on Discourse Analysis organised by Ruqaiya Hasan. John Sinclair was the focus of activities, giving two plenary sessions on different aspects of the discourse analysis being developed by him and his colleagues at Birmingham, and a final plenary summing up by means of a number of controversial remarks (many of which were, perhaps needless to say, hotly contested by both Ruqaiya and myself). I gave one plenary session on issues, drawing mainly on my Information Sciences Institute discussions last September. Overall the week-long workshop was divided into four sections: casual conversation led by Michael Halliday, literary narrative led by Paddy O'Toole, classroom discourse led by Dick Walker and exposition led by myself. Readers will not be surprised that the week had a rather systemic flavour. The reports of the workshops and the plenary papers will be published some time in the near future - for news of this publication (or publications) readers might contact Ruqaiya Hasan. The week was an extremely stimulating one, which certainly got me thinking about discourse again after some months working on other things, and thanks and credit are due to to Ruqaiya Hasan who tirelessly overcome a host of problems, many of which decended in a lump at the last minute, to bring the workshop to so successful a resolution.

Research-wise, Michael Halliday and Robert Spence are carrying on their work in connection with the text generation project at ISI; Joan Rothery and I have received a three year grant to carry on our work on children's writing, and Cate Poynton has joined us in this project; the graduate students whose work was presented in Network 4 are all foraging ahead in their work on various aspects of register and genre; and the
4th year honours work of 1982 was of an exceptionally high quality. All in all a very exciting place to come back to. All the more so with Gunther Kress moving to the N.S.W. Institute of Technology, just down the road from us here at Sydney.' And less formally but also of general interest:

'I am loving being back - eating, friends, beach etc. but hating departmental politics and all that stuff. Ughhh. I am busy wasting time deciding what to work on. Too many choices, all of which seem interesting. Perhaps some Tagalog related things before I forgot it all; have been thinking a lot about Whorf. He badly needs a reinterpretation along the lines of Ruqaiya's Malinowski one [in her Keynote Address to the 1982 Toronto Workshop] Send a copy of your Saussure paper [in the Invited Lecture to the 1982 LACUS Forum] unless it is very like one on that topic you sent before. I too have been thinking a lot along these lines and use a lot of Saussure and Hjelmslev in introducing anything I do in systemics these days. It is incredible how much lip-service is paid to Saussure, and how little attention in practice. In particular the arbitrariness of the signifié and the importance of paradigmatic relations (though it really took Hjelmslev to sort them out) is so downplayed outside of systemics. 

Address: Dept. of Linguistics, University of Sydney, Sydney N.S.W. 2006, Australia.

MALCOLM WILLIAMS writes:
'I am a Ph.D student in the Department of Linguistics at Leeds University and was introduced to 'Network' by Dr. Leach. My research is in the area of contrastive studies between English and Arabic, more specifically textual cohesion and development in the two languages.

Address: Department of Linguistics and Phonetics, The University, Leeds LS2 9JT.

REINHARD HARTMANN writes:
'Conor Ferris is back from his year at Scarborough College (University of Toronto). Steven Dodd is preparing for his exchange next session. He may also teach his course on Systemic Linguistics there...Reinhard Hartmann reports a full house of plenary and section papers for the LEXeter '83 conference on lexicography in September, just after the Nottingham System Workshop. He also gave a paper at the Hatfield Discourse Conference. The collaborative volume Lexicography: Principles and Practice will be published this year by Academic Press...Gregory James has been offered a senior EFL post in Hong Kong. He will be organising the biennial conference of the Association of Lecturers & Tutors in English to Overseas Students (SELMOUS) at Exeter in March...Alex Baird (School of English) devotes part of the M.A./Diploma course in Linguistics to systemic topics...Reg Roberts who has been teaching some applied Systemic Linguistics at the School of Education, is retiring at the end of the session...There are several new Exeter Tapes titles of interest in the new 1983 catalogue, bringing the total to over 400...Following last year's experiment in linking all outside lectures into a series, this session features, among others, Roland Sussex, Kay Wikberg, Herbert Penzle and Marcus Wheeler on the theme of 'English in contact with other languages'. Further details from the Language Centre, University of Exeter, EX4 4QH.'

BRAJ B. KACHRU writes with an implied challenge to our American readers:
'It seems to me that in the United States the University of Illinois at Urbana-Champaign is one of the few places where Firthian and Neo-Firthian Linguistics (let's not quibble on terminology) is introduced in various courses. Michael Halliday's occasional visits of course help a lot. I have currently several graduate students working in areas of linguistics in which Michael's theoretical framework is very valuable. I have no doubt that Network will help my students in locating sources.'

How far is it still true that systemic linguistics is not taught much in the U.S.A.? The number of Americans at the Ninth International Systemic Workshops in Toronto would suggest that there is growing interest in this approach, and that this is therefore likely to be being translated into taught courses. Please write in and tell us about the situation in your University or college.

BARRY CALDER:
You will recall from the last Network that Barry had a very serious motor cycle accident some months ago. It is encouraging to be able to report that he has now got movement back into his upper body and both arms, although he is likely to remain paralysed from the waist down.

He has shown immense courage in facing up to, and overcoming, his immense difficulties, and he intends to return to teaching linguistics at the Doncaster Metropolitan Institute of Higher Education. We look forward to your next contribution to Network, Barry!
LINDSAY SILVESTER, who teaches General Linguistics, Literary Stylistics and German Linguistics at Portsmouth Polytechnic, writes:

'I am a lecturer in linguistics and EFL (very often exploiting techniques acquired in the one subject to aid explanation in the other) and I have been using systemic linguistics as a base for teaching students of

As for research, up till now this has centered on linguistic and psycholinguistic problems of English students studying German. Part of this dealt with stylistics, in the sense that I did a frequency study of various elements such as co-ordination, subordination, cohesion, etc. to be found in the German essays written by English students, comparing them with German essays written by German students. This was fairly fruitful -

This was written up for an M. Phil thesis and part of it was given as a paper at the 1975 Stuttgart AILA Conference. It was published in the proceedings of that conference.'

Address: School of Languages and Area Studies, Portsmouth Polytechnic, Hampshire Terrace, Portsmouth PO1 2EG.

ROBIN FAWCETT will be visiting linguists in Australia in August and September, supported by the British Council. He will be with MICHAEL (formerly 'Paddy') O'TOOLE, BOB HODGE and others at Murdoch University

attending (and giving the keynote address on 'Language as a resource' at the annual meeting of the Applied

Online: School of Languages and Area Studies, Portsmouth Polytechnic, Hampshire Terrace, Portsmouth PO1 2EG.

If you would like to review a book, please let us know.


At the first LACUS forum in 1974 Robert J. O. Pietro called for a 'reassessment of grammar as an exercise in programming rather than as a scientific explanation or description' (di Pietro, 1975:54). The idea was by no means new; Victor Yngve had been saying much the same sort of thing some years before (Yngve, 1960), and despite the dominance of the transformational approach at the time, there were two researchers attempting to incorporate a systemic model of language into an automaton in the early seventies. Terry Winograd (1972) concentrated on developing a sentence based understanding-oriented system, while Anthony Davey went on to look at a discourse-based performance-oriented system (cf. Talmi, 1978 & Flower & Hayes, 1979), and which he published in 1978 as Discourse Production. This book, though dealing with a very small and non-interactive universe of discourse - a game of noughts and crosses - turned out to be a relatively unnoticed book. Its significance has, I think, been vastly underrated, and it marks, for all its various deficiencies, an important time in the history of systemic linguistics and its struggles against the monolithic transformation model. Davey demonstrates with a style that, whilst being easy to read for most of the time, borders on the eccentric at times (e.g. 'what is sauce for the direct object should be sauce for the prepositional object too.' (p. 49)), the weakness of the transformational generative model (pre-1974) by presenting the strengths of a systemic-functional model based on Hudson (1971), and its ability to be validated by means of a computer program producing discourse. The question of how satisfactory we might consider his systemic model to be, ten years after he was working with Hudson(1971) - and most of us, I think, would have a very serious reservations about its usefulness - should not detract from the obvious achievement Davey obtains in this book. He approaches language from an A.I. viewpoint, and this seemed quite naturally to lead him to a British linguistics approach which does not present the practical difficulties of a sharp dichotomy between language in virtual time and discourse in real time (see Kachru, 1981). Davey's book shows the ease with which a form-based systemic model can handle a procedural approach to language, and therefore points the way for helping us to further our understanding of the production and reception of discourse (cf. Winograd, 1975). By simulating a model.
of discourse production on a computer — though, of course, there is never any question of accepting that a computer actually works in the same way as the human mind — Davey is able to test whether a complex procedural model of the operations involved in the generation of discourse actually works. I think he shows quite clearly that it does (cf. Goldstein & Papert, 1977). We've certainly not been helped in doing that in the past because of the empirical inadequacies of a modular-based transformational generative (or indeed a descriptive-structural) approach (see Ringen, 1975; cf. also Levesque, 1977 & Levesque & Mylopoulos, 1979). Davey demonstrates that a model which concentrates on virtual systems is consequently more inefficient in its operating systems in real time by giving a working, testable, alternative, and you don't need the sort of arbitrary decisions of, say, Itkonen, to make the model respectable (cf. Hammarström, 1978), or the product acceptable. Consider the following produced by Davey's program:

"The game started with my taking a corner, and you took an adjacent one. I threatened you by taking the middle of the edge opposite that and adjacent to the one which I had just taken but you blocked it and threatened me. I blocked your diagonal and forked you. If you had blocked mine, you would have forked me, but you took the middle of the edge opposite the corner which I took first and the one which you had just taken and so I won by completing my diagonal." (p.151)

True, it isn't the result of interaction, and true, it looks fairly mundane, but there's not a lot wrong with it as a monologic commentary on a game of noughts and crosses. To get to the point where a program can produce discourse like this is not, of course, easy. Davey recognises this and devotes a good 75% of the book to a description of the grammar that is used to generate such discourse. And though we can't deny the inadequacies of a model that isn't interactive, the discourse produced represents an efficient underlying grammar for the purpose of this particular universe of discourse.

But, then, the point of the book is not, it seems to me, to show the complexities of computer programming (is purposefully kept to a minimum) or to praise the effectiveness of Hudson's non-semantically oriented grammar, but to present a defence of a procedural approach. Rather than concentrating on a grammar that discovers structures and patterns as an end in itself, Davey has chosen a model which by its very nature concentrates on the operations and procedures which give rise to, and organise, those patterns. His concern is not in the presentation of a program that can be made commercially viable (cf. Sigurd, 1981) but one which supports theoretical assumptions. The program is able to validate the underlying grammatical model as Fawcett (1980) points out, you don't need to be a computer scientist to judge whether computer-generated discourse is any good. Human plausibility is therefore as important a criterion by which to judge a system as empirical adequacy, and the aim is therefore to 'lead us from understanding data toward the broader domain of understanding understanding.' (de Beaugrande & Dressler, 1981:220).

Davey works from the assumption that intelligence is based on non-random applications of procedures to particular tasks (cf. Papert, 1980), and uses a grammar that assumes that system networks express knowledge by means of procedures. Of course, systemic linguistics has moved on (contrast for example Hudson, 1976; Halliday, 1978 and Fawcett, 1980) and so has A.I. and cognitive science (see Winograd, 1977, 1979 & 1983; Winston, 1977; Krechel, 1981; Sager, 1980), and Davey's work in the early seventies can be attacked in all sorts of ways, not least of which would be to criticise his non-interactive account of communication. But we would gain little, I think, in steadily working through the deficiencies of his grammar. What, I think, still of use — and is the point of this review — is that Davey has demonstrated that a systemic model can produce discourse in an automaton which takes some notice of how information is organised into a sequence of sentences. His emphasis upon an INFORMATIONAL component of language enables him to develop an awareness in the grammar of the modifications made by a language user in the light of what he knows about the state of the addressed information (cf. Narasimham, 1981). And that was a distinctive first in this kind of work, because for the first time discourse in real time became the focus of the model. Davey worked on the principle 'that you treat your hearer like the taxman; give him nothing you don't have to.' (16), and though we can't actually observe the mechanisms of the mind, we can, as Davey does, construct a model which assumes that the product of discourse is a mental activity governed by procedural choices and which, as a computer program, can be tested in real time. In a world where the ideal psycholinguistic tests are illusory, the alternative proposed by Davey merits much greater attention than it seems to have received. It is, I think, essential reading for all who are interested in researching, using, teaching and being taught, systemic linguistics.
REFERENCES


-(1979), 'Beyond Programming Languages', *Communications of the Association for Computing Machinery*, 22,391-401.

Winston, Patrick. (1977), *Artificial Intelligence*, Addison-Wesley:Reading (Mass.).

DAVID BIRCH
NATIONAL UNIVERSITY OF SINGAPORE
A grammar which its authors claim makes a new approach to the subject would probably be most fruitfully written about by one of those for whom it is primarily intended: i.e. the fairly advanced student, for example the first-year university student from overseas. A native-speaking awareness of the problems of such a reader must be limited and I have so far had no chance to discuss the Grammar with any one of them.

The book is divided into four 'Parts', of which the first two, on 'Varieties of English' and 'Intonation', are brief (20pp. out of 290). The remaining Parts are entitled respectively, 'Grammar in use' (134pp.) and 'Grammatical Compendium' (120pp.). This is a departure from the usual presentation of grammatical information, and it is the main way in which the book differs from A Grammar of Contemporary English (Randolph Quirk et al., Longman, 1972) and the simpler version, A University Grammar (Randolph Quirk and Sidney Greenbaum, Longman, 1973) from which two grammars it derives. This division, which is, roughly speaking, semantic as opposed to formal, is skilfully done. It has led, especially in the main Part, 'Grammar in use', to fairly drastic reorganization of the material and it is here, perhaps, that the cross-referencing, particularly within the book itself, is of greatest value. Certainly, this is one of the book's merits and is not as tedious as one might expect.

To take a brief instance of how the information is regrouped into two parts, one may look at prepositions. The 'Grammatical Compendium', arranged alphabetically by topic in the manner of an index, assumes a basic knowledge of the principles of English grammar. It deals with prepositions in three short paragraphs. The reference to A Grammar of Contemporary English, however, enable the reader who wishes to follow through the complexities of English prepositional usage in full and conventional detail. In A Communicative Grammar the first two paragraphs are virtually lists of prepositions, one of single words and the other of complex and phrasal prepositions. The third paragraph explains the difference between prepositions and the prepositional adverbs as exemplified in the sentences:

He stayed in the house

and

He stayed in.  (#746)

It indicates which prepositions can be used with the adverbial sense. In 'Grammar in use', however, prepositions appear under the heading 'Concepts', and the explanation of their use is very detailed - although not the same as in A Grammar of Contemporary English. Here, they are interspersed with adverbs and adverbial usage, so that, for example, the section headed 'Place, duration and distance' deals almost exclusively with prepositions; the section 'Frequency', immediately preceding, is concerned mainly with adverbs; and the succeeding section, 'Manner, means and instrument', contains a mixture of both. Although mixed up in this way, the parts of speech are clearly designated as they occur, so there can be no confusion over the formal classification. This is, however, a complete re-organization of the material in A Grammar of Contemporary English, where prepositions come in Section 6 and adverbs and their functions in Section 8, completely divorced from each other. In 'Grammar in use' these mixed sections follow logically in semantic terms from verbs and tense, where adverbs have already made their appearance and are continued directly in a section headed 'Time-when'. The diagrams are more representational and frequently pictorial in A Communicative Grammar, especially those relating to place and position, and the explanations are altogether simpler. In one short example, dealing with the overlap and possible confusion between in and on, A Communicative Grammar states:

'There is a difference between surface and volume in:

We sat on the grass. (SURFACE: i.e. the grass is short)
We sat in the grass. (VOLUME: i.e. the grass is long).

This is extended to surface and area with another pair of examples:

'Robinson Crusoe was marooned on a desert island (SURFACE: i.e. the island is small).
He was born in Cuba (AREA: i.e. Cuba is a large island, and a political unit with boundaries).'

Here the instances chosen seem questionable but the differentiation drastically simplifies the abstract, conceptual and almost philosophical discussion in A Grammar of Contemporary English. Although the same, or virtually the same, information is embedded in this discussion of 'dimension types', which includes much numerical apparatus, and the same types of examples are given, it requires much greater skill and time to extract the relevant points and see how they relate to English in everyday use, whether spoken or written. The clear explanations in A Communicative Grammar should prove of immense value to a foreigner attempting to use a notoriously difficult and fluid set of words correctly and idiomatically. Of course, the aim of A Grammar of Contemporary English is different in that no native speaker requires to know when to use the various prepositions...
but is rather seeking explanation as to why and is interested in shades of meaning of which he may be only dimly aware as he uses them.

For overseas students one imagines that this third Part, 'Grammar in use' would be the most useful section of the book. I wonder, however, how far they would trouble themselves to consult it often, outside a formal class, especially for spoken English. Friends and acquaintances from Europe, the Middle and Far East (a fair sample of the students to whom this book is addressed) readily make themselves understood. Indeed, in all but trivia their grammar and use of the correct register is of a high standard and they show little inclination to pursue it to perfection. A Japanese friend, who has two degrees in English (from Japanese universities), has spent two years studying in England, and is a university lecturer in English in Japan, nonetheless still has difficulty in placing the definite article idiomatically. She could usefully refer to those parts of the book, mainly dealing with nouns, where the usage is clarified. But I doubt if she would. Just as we recognize AmE (American English), CanE, SAfE, and even to some extent Indian English, so, she contends, we should accept JapE. It is an English lingua franca in Japan, and, for her, that ends the argument. Our language is, perhaps, our chief export and once exported we have little control over it. This clearly impinges on the effectiveness of English as a World Language. How are non-native speakers to cope with our highly complex verb system, for example, and is the language likely to suffer a diminution of the many nuances of meaning it can at present convey? These are points which A Communicative Grammar raises, but it is not part of its purpose to answer them and so they must be left undiscussed here.

The points raised, however, do reveal one section of the book - and the same holds for its two source grammars - that could be clarified. This is the section dealing with verbal aspect, and particularly the perfective. Of the three grammars, only two mention the notion of 'completeness' in connection with the perfective, and that tangentially. A Communicative Grammar says: 'ASPECT concerns the manner in which a verbal action is experienced or regarded'. This is much the same statement as the other grammars given: 'for example as complete or in progress' (880) [my underlining]. Yet when combined with the progressive the example given for the present is: 'He has been writing letters all morning.' (882) This does not necessarily imply completeness; it could mean that 'he is still writing'. The example is given without comment.

The example for the same combination in A University Grammar, on the other hand, does carry overtones of completeness - even if the action could be resumed at a later time: 'He has been eating my chocolates.' The notion of 'complete' or 'incomplete' seems to come from the semantic context of the sentence as a whole rather than from the form of the verb, or even the particular verb used. And yet the remark prefaced to the group of sentences containing this example in A University Grammar is (p.48): 'Limited duration (or completeness) and current relevance can be jointly expressed with the perfective progressive.' [my underlining]

The 'current relevance' is the meaning chiefly associated with the perfective aspect here and in A Grammar of Contemporary English, which adds another dimension with (342): The perfect progressive denotes a temporary situation leading up to the present moment. The progressive overtones of incompleteness and emotional colouring can also be found:

- simple perfect: John has lived in New York since 1970.
- perfect progressive: John has been living in New York since 1970.

The meaning difference is slight, but the use of the progressive indicates that the speaker considers John's residence in New York to be temporary. [my underlining]

Here 'incompleteness' is related to the progressive, as one would expect, but there is no mention of the 'completeness' of the perfective being in conflict. To add still more to the confusion A Grammar of Contemporary English also states alongside an example of the simple past:

I read a book that evening (COMPLETION: the speaker reached the end of the book before the end of the evening.)

and by the following example of the past progressive (3.39):

I was reading a book that evening (INCOMPLETION: there is no implication that the reading was complete in the course of the evening.)

The three grammars, then, present a very confusing impression. That the 'complete' concept, found in A Communicative Grammar and A University Grammar but not mentioned in A Grammar of Contemporary English, is an essential part of the perfective is demonstrated by Bernard Comrie in his book Aspect (Cambridge University Press, 1976). He discusses the relation of the terms 'perfect' and 'perfective' and says:

'The precise differentiation of tense and aspect is particularly important in considering the perfect, e.g. English John has read the book as opposed to John read the book' (p.5). And he adds a footnote:

And he adds a footnote:

In this book the terms 'perfective' and 'perfect' are used in quite different senses from one another. He treats 'perfect' as tense and 'perfective' as aspect. Normally, and especially in English, perfective and progressive cannot combine and are shown as 'aspectual oppositions' in the diagram on p.25. By this careful distinction of the terms, Comrie succeeds in clarifying what appears as total confusion in the three linked
If such things are bewildering to a native English speaker, they must be even more perplexing for many non-native speakers, especially those who have no formally marked verbal aspect in their own languages. The concept is notably difficult within the English grammatical system since, although English possesses the concept, it is also not formally marked. It may seem unfair to select such a complex matter for adverse comment but it does point to a limitation in all three grammars. Indeed, taken together they present a more confusing picture than each does on its own.

There are other quibbles that one can find. Is different from really BrE nowadays and different than AmE? Students very rarely use different from and their usage is about equally divided between different to and different than. A reputable scholar admitted to me recently that he finds himself increasingly using different than, usually when the particle is separated from different - and in writing as well as in speech. Even if the usage was originally American - one cannot be sure - what really is current usage and what standard of usage are the writers of A Communicative Grammar seeking to present? This is a matter that ought to have been clarified more carefully. In the opening Part, 'Varieties of English', the various divisions of usage which the Grammar attempts to mark are clearly described and the designation of varieties throughout 'Grammar in Use' is particularly commendable, as is the indication of alternative constructions when AmE differs from BrE. On the other hand, the second Part, 'Intonation' (a daunting topic to which so many general books on language devote so much of their space - usually at the sensitive beginning) seems extraordinarily brief. This, presumably, can be accounted for by the assumption that the intended reader already has a grasp of English pronunciation. For such a reader this Part is lucid and probably adequate. Depending, of course, on whether one considers phonology as part of grammar or outside it, one could argue the case for an extension from pure intonation to pronunciation, paying particular attention to sounds notoriously difficult for certain overseas speakers. Has anyone yet tried to deal with the correct distribution of non-phonemic features, or marginally phonemic, such as voiced and unvoiced th, which play such an important part in achieving a non-foreign sounding accent? Could this have been the place to try?

In general, however, the book is admirably designed. The simplification of the formal grammatical part makes me wonder if this would be more within the competence of native English undergraduates. Year by year they seem less able to tackle even A University Grammar and I have now been forced to compile my own brief 'Introduction to Grammar' to help them before they are confronted by its mass of detail. And would they find the preceding Part, 'Grammar in use', more interesting and informative than the rather stark information contained in conventional grammars? I suspect they might, and that this could be a way of rescuing grammar from the 'dry as dust' and daunting 'mathematical' image that it has been for many students at present. I should like to have the opportunity to use A Communicative Grammar with undergraduates experimentally over the next few years.

FRANCIS AUSTIN
University of Liverpool

BIBLIOGRAPHIES

This section consists entirely of the second part of Michael Halliday's annotated bibliography. The third and final part will appear in Network No. 6. (We are holding for a future issue a valuable annotated bibliography of the systemic writings of Peter Fries, as well as a bibliography of the writings of Ruqaiya Hasan.

ANNOTATED BIBLIOGRAPHY OF PUBLICATIONS RELATING TO SYSTEMIC THEORY: BOOKS AND ARTICLES BY M.A.K. HALLIDAY

Descriptors:

1. Semantics
2. Lexicogrammar: syntax
3. Lexicogrammar: morphology
4. Lexicogrammar: Lexis
5. Phonology
6. English
7. Other languages
8. System networks
9. Realizations
10. Functional components
11. General theory
12. Comparison with other general theories
13. Applied linguistics (language in education)
14. Other applications of linguistics
15 Text and discourse
16 Child language and language development


The distinction is drawn between lexical and semantic organization in language. Many lexical patterns arise as the realization of semantic ones: certain words are more likely to co-occur because of their relatedness in meaning. But there is also a type of purely lexical organization, known as collocation, whereby words display co-occurrence tendencies that cannot be explained in terms of their meanings. Unlike grammatical patterns, which are deterministic, all such lexical patterns are probabilistic in character.


A lengthy three-part article on two of the three principal systems of the English clause. The first part presents an outline of the transitivity system in fairly traditional terms, based on the oppositions extensive/intensive and, within extensive, of effective/descriptive. These generate structures based on the 'transitive' roles of Initiator, Actor and Goal, and accommodate a voice system on active/passive lines. Other roles discussed in some detail are those of Beneficiary, Range, Attribute and Condition. Part 2 describes the systems of theme and information, giving a rather fuller and more systematic coverage of the area dealt with in no. 14. In the final part, the system of transitivity is revisited, and transitivity and theme are shown to be related as systems 'deriving from two of the three functional components of the semantics of a natural language. The English transitivity system is now reinterpreted in 'ergative' terms, with the notion of causation as the organizing principle and a voice system based on the opposition of middle/non-middle. Ergative systems generate structures centred around the roles of Affected and Causer (later called 'Medium and 'Agent'). The transitive interpretation is valid as showing the difference among the various clause types, while the ergative interpretation represents what is general to all clauses in the English language.


An account of the systems of theme (theme selection, prediction, identification and substitution) and of information in Modern English, with paradigms and some examples from recordings of spontaneous speech.


A reprint, with additional material, of two articles: (1) 'The tones of English', Archivum Linguisticum 15.1, 1963, 1-28; (2) 'intonation in English grammar', Transactions of the Philological Society 1963, 143-159. The first sets up a phonological system for English intonation, in terms of five primary tones and a number of subsystems of secondary tones. The second shows how different selections within this system function as the realization of numerous sets of options at a higher level. This case is argued for treating these as grammatical systems rather than attempting to relate intonation directly to distinctions in semantics.


An inaugural lecture, ranging around various topics in the area of language and culture. Two aspects of Modern English are discussed: the 'tendency to nominalization', and the move from a transitive towards an ergative mode of the representation of processes. The attempt to relate these directly to cultural
factors is treated with reserve; but they can, it is suggested, be related to each other and to other features with the language itself.

(1, 2, 6)


A condensed account of the formal relations between systems and structures, and of the nature of realization illustrated by the derivation of an English clause from its systemic description.

(2, 8, 9)


A brief and simple sketch of the concepts of system and structure and their place in linguistic description, with illustration from the English clause.

(2, 8)


A textbook of English intonation for foreign students, with a detailed introduction describing the primary and secondary tones of the language, their relation to rhythm, and their meanings in different environments. (The materials are arranged in four parts of ten units each, and the entire course is available on tapes.) The treatment is based on the analysis into phonological and grammatical systems presented in no. 15 above.

(5, 6, 13)


An interpretation of the structure of the English clause in terms of the experimental, interpersonal and textual functions. (1) Deriving from the experiential function, the transitivity system is realized through configurations of Process, Agent, etc., with two possible interpretations, a 'transitive' and an 'ergative'. (2) Deriving from the interpersonal function, the mood system is realized through a two-part structure of Modal + Propositional elements. (3) Deriving from the textual function, the theme and information systems are realized through structures of Theme + Rheme, and Given + New. The mapping of these structures one on to another determines the final shape of the clause.

(2, 6, 10)


Consideration of two problems in Modern English: (1) Why are two distinct semantic systems, that of modality ('probable, possible, certain') and that of 'modulation' ('inclination, permission, obligation'), realized by the same set of forms (the modal auxiliaries)? (2) Why are the different moods, declarative, yes/no interrogative and WH-interrogative, realized by particular variations of 'word order' (sequence of elements in the clause)? An explanation of both is offered in terms of interrelations among the functional components of the grammatical-semantic system.

(1, 2, 6, 10)

RESEARCH INVITATION

Is there any recent graduate in linguistics with interests in Systemic linguistics and/or child language, who has no job to go to but who would like to base her/himself at the Polytechnic of Wales, living off Social Security or a private income (and with the possibility of a little part-time teaching, if that isn't incompatible with it) and working on the Polytechnic of Wales Child Language Project at the computer-processing stage? We are now at the point when we shall start getting results back out. There could also be some dullish typing-in work to do (and this may be payable), and you could register for an M.Phil/Ph.D, (if this is not compatible with receiving Social Security). For further discussion ring me (0222 842016), preferably between 6 and 10 p.m. or write to the editorial address. (I should make it clear that I have not checked out the current rules relating to Social Security in such cases; that is something you would need to do).

Robin Fawcett
There is a rumor abroad that systemic linguistics has recently encountered computation for the first time. Not so. They have been seeing each other for years. There are no full-grown children to speak of, but the encounters and the interest have progressed from a modest acquaintance to something much more diverse.

The earliest computational work in the systemic framework was not Winograd’s famous SHRDLU program, but another effort which he observed. He writes:

During the 1966-67 academic year I was a student in the Department of Linguistics at University College, London, on a Fulbright grant. I took the regular courses, which included courses on systemic linguistics from Halliday, Hudson, and Dixon (as well as others on phonetics, Swahili and TG). At the time, they had a research grant which included, among others, Huddleston and a fellow named Alex Henrici. Henrici had some computer background and was interested in some of the computational aspects. One part of the project involved doing and cataloging systemic analyses for a large number of sentences from English scientific text. Henrici was the computer person in charge of data processing for that [Winograd 83b].

Henrici worked to produce grammatical statistics of English from a corpus of 135,000 words of scientific text, divided into high, middle and low strata, reflecting differences in breadth of circulation and audience. All of the syntactical analysis and recording of grammatical features was done by hand.

Henrici’s work is the only instance we know of statistical computation in the systemic framework. Most work has involved the computer much more directly with the systemic theoretical constructs themselves, with the computer manipulating individual systems in an appropriate way. This concentration on qualitative computation, symbol manipulation at the level of one’s theoretical interest, is also characteristic of computational linguistics as a whole. There is proportionately very little work at the level of indexing, counting, and numeric summarization. (Of course, there are people who are doing statistical work on text, but they do not tend to identify themselves with the field of computational linguistics.)

*In fact, there is at least one other: the Polytechnic of Wales Child Language project, which was described in Network No. 4 (December 1982) pages 23-26, uses a specially designed relational data base to compute the grammatical structures (defined in terms of a systemic grammar) produced by almost 120 children each talking in two types of situation.
The next encounter was in Winograd's work [Winograd 72]. In his program, a systemic grammar was the skeleton of an analyzer of incoming sentences. The program was responsive to many kinds of information, semantic as well as syntactic, distributed in specialist procedures. Davey says of the program:

Winograd built only a simplified version of Halliday's (1967) now superseded grammar into SHRDLU, but even this gave his system a great advantage over its predecessors.

The SHRDLU work is still the most widely known use of systemic linguistics among computer scientists. Systemic ideas remain prominent in Winograd's excellent computational linguistics textbook [Winograd 83a].

After graduation Winograd taught computer science at MIT for several years. Among his students was David McDonald, an undergraduate. McDonald became convinced of the value of the systemic approach, and it influenced his later graduate work on computer-based text generation. McDonald has said that all of his work on text generation is systemic. However, in his writings the orientation is usually more structural than functional, and the points of specific incorporation of systemic precedents are hard to identify. McDonald's doctoral dissertation at MIT presented a text generating computer program, particularly designed to have a generation algorithm of limited power [McDonald 80]. Part of his current work at University of Massachusetts at Amherst seeks to extend systemic precedents and convey systemic notions to computer science students.

Before McDonald's work, but only recently published, Anthony Davey was working on text generation at Edinburgh. His program was the first to make a systemic grammar the centerpiece of attention, and it generated the most fluent English text yet written by a machine [Davey 79]. Even though the work was finished in 1973, the text which it generated is unsurpassed today. The grammar draws on various systemic sources, but follows Hudson [Hudson 71] most closely. The program's task was to comment on transcripts of games of tic-tac-toe (noughts and crosses); while its strategic knowledge was deliberately made incomplete, it was particularly good at controlling how much to say, suppressing verbose redundancies and exhibiting a rich and diverse command of pronouns and substitutionary forms.

Davey was centrally concerned with creating a model for discourse. The computer was simply a medium of experimentation which had decisive advantages over pencil and paper. He writes:
First of all, then, the model defines a motive for discourse. The speaker's knowledge is compared with the knowledge that the hearer is presumed by the speaker to have of the subject matter, and the motive for discourse is to reduce any discrepancy revealed by comparison. ... We are forced to structure the missing information, and to say how parts are taken from this structure into discourse units. Finally, we are forced to say how a sentence and all its constituents are built to do particular jobs; we must say how referring expressions work, and in particular how determiners, modifiers and pronouns are used. We must attend to the semantics of tense and aspect, and may occasionally use modal verbs.

For Davey, as for many workers in computational linguistics, the computer serves first of all as a way of forcing oneself into creating an account with a certain sort of wholeness, completeness relative to the task. Because the machine cannot fill in the details from its intuition and good sense, having none, those details must be specified as part of the account, which raises new questions and forces reexamination of old ones. With this wholeness there is a second benefit, a compatibility of the parts; both are hard to achieve without the discipline of computer expression of the account. Although necessarily some simplification and short cutting occur in any such account,

... the program may have the virtues of its vices. The programmer oversimplifies because the rules he is specifying for the computer program to follow must be explicit, complete and coherent. Even the very limited and simple grammar incorporated in the present model was improved from its original state by the computer's demands. ... The correction and development of a program not only results in a program that works, but may also stimulate new understanding. What the theory owes to the program, then, is likely to be simplicity, clarity, and a procedural language in which to express certain thoughts about psycholinguistic events.

At some point, Martin Kay became interested in the systemic framework as well. Halliday and Kay spent time together in 1980, and Kay's Functional Unification Grammar has a strong systemic flavor [Kay 79], [Karttunen & Kay 83, Kay 83]. Kay believes that it will not be difficult to find a general way to invert modern systemic generators, thus creating processes which could parse according to arbitrary given systemic grammars. Such a development would open up a broad new area of research in computational linguistics, where there has been more interest in parsing than in generation, but an absence of functional theories. (Possibly some progress in this direction will come from Michael Cummings at York University, who is now working on a Prolog parser-generator for Old English Nominal Groups.)

Kay previously called this form simply Functional Grammar.
Several graduate students at the University of Pennsylvania, including Steven Bossie, have developed and are using a systemic grammar in their dissertation work on various aspects of text generation. The grammar, which is formally a Unification grammar, has been developed jointly by several students. The first to finish, Kathy McKeown, developed a text generator which creates paragraph-length explanations of technical concepts having to do with a certain computer data base [McKeown 82]. Her work is a notable example of computer science work on discourse, grounded on empirical studies of published texts.

At the University of Kentucky, Michael McCord developed a refinement of Hudson's 1971 model, motivated in part by a desire to make it more easily implemented (as a parser, apparently) on a computer. He is sensitive to the fact that notational devices which are convenient for small expository examples may be unmanageable in large grammars. McCord's changes primarily regularize the ways that certain sorts of structures are realized and prevent cancellation of earlier work by later work in realization, a possibility which Hudson allows but which generally leads to "backtracking" and hence to computational collapse in analyzing with large grammars [McCord 75].

McCord also developed a formalism for stating systemic grammars for parsing. This formalism, called PSGL, is a possible source of ideas for parsing according to other systemic functional grammars, but the area is unexplored [McCord 77].

Near the time of Halliday's 1979-1980 visit to the U.S., I began development of a new text generation system called Penman. Our previous work had slighted the grammar, so one of the aims of the Penman design was to make the program fluent by incorporating a particularly capable grammar. Partly under the influence of Davey's newly published work the systemic framework was selected. Shortly afterward, Christian Matthiessen joined the project to build the grammar and instruct the team in the systemic way. Later, Halliday joined the project in a consulting role. The direct computational work of the project began with a program developed by Mark James working with Halliday during the summer of 1980.

The result, the Nigel grammar, is the largest systemic grammar of English in a single notation. It refines prior work in several ways. It represents a single point of development of its parts, reconciling grammar fragments which had accumulated over many years. It fills in some gaps and
presents several major revisions: the accounts of tense, clause complexes, modifiers in the nominal group, prepositional phrases, circumstantialia, range, dependent clauses and portions of determination are all new. Nigel's treatment of various aspects of realization, especially ordering, is more explicit.

We have seen a third benefit of creating a computational account in working with Nigel: The computer can work out the consequences of the account. Nigel's syntax has been exercised extensively, for example in generating hundreds of declarative sentences under a random choice discipline, revealing both formal errors and unintended structures. These kinds of tests are not really possible without the computer because of the amount of tedious work which would be required, and because of people's tendencies toward error in such work.

Nigel also extends prior work in the direction of being more explicit about the circumstances in which each grammatical feature is chosen. Each system is given an associated procedure, called a chooser, which is capable of making a principled choice among the alternatives. The chooser employs an explicit method of investigating its circumstances, employing an "inquiry language" for which English and formal forms have been defined. As a byproduct, the systemic notion of a function has been extended in a semantic direction [Mann 82a, Mann 83]. The grammar has been exercised extensively, revealing some persistent tendencies toward error among systemicists, and leading us to formal identification of about 50 integrity conditions that a systemic grammar in Nigel's notation should satisfy. Development of the inquiry semantics of Nigel is now incomplete, but is expected to be complete in a draft form some time this year [Mann 82a, Mann 82b, Mann 82c, Matthiessen 83].

Halliday has said that Nigel and its associated developments (in pre-syntactic text synthesis) are a test of the functionalism of the syntactic framework. Computation is playing several roles in this test, shaping the process of defining the text generator, forcing extensions of the methodology in semantic directions, and exhibiting the consequences of particular definitions. Other computational systemic work, especially Davey's, has likewise tested the framework, with incomplete but very encouraging results.

There is every reason to expect that the systemic framework will be the most influential linguistic framework for text generation work in this decade, and possibly long afterward, and that as
time goes on the encounters between systemic linguistics and computation will become more
provocative and diverse for both parties.

References


University Press, 1983.


[Mann 82a] Mann, William C., The Anatomy of a Systemic Choice, USC/Information Sciences
Institute, RR-82-104, October 1982.

[Mann 82b] Mann, W. C., An Introduction to the Nigel Text Generation Grammar Computer Program,
Presented at the 9th International Systemic Workshop, Toronto, August 1982.

[Mann 82c] Mann, W. C. and Christian M. I. M. Matthiessen, A Demonstration of the Nigel Text
Generation Computer Program, USC Information Sciences Institute, Marina del Rey, CA 90291,
Workshop, Toronto, August 1982.

[Mann 83] Mann, W. C., and C. M. I. M. Matthiessen, Nigel: A Systemic Grammar for Text Generation,
USC/Information Sciences Institute, RR-83-105, February 1983. The papers in this report will
also appear in a forthcoming volume of the Advances in Discourse Processes Series, R. Freedle
(ed.): Systemic Perspectives on Discourse: Selected Theoretical Papers from the 9th
International Systemic Workshop to be published by Ablex.

(Matthiessen 83)] Matthiessen, C. M. I. M., "The systemic framework in text generation: Nigel," in
Nigel: A Systemic Grammar for Text Generation, USC/Information Sciences Institute,
RR-83-105, February 1983. This paper will also appear in a forthcoming volume of the Advances
in Discourse Processes Series, R. Freedle (ed.): Systemic Perspectives on Discourse: Selected
Theoretical Papers from the 9th International Systemic Workshop to be published by Ablex.

195-212.


This research was supported by the Air Force Office of Scientific Research contract No. F49620-79-C-0181. The views and conclusions contained in this document are those of the author and should not be interpreted as necessarily representing the official policies or endorsements, either expressed or implied, of the Air Force Office of Scientific Research of the U.S. Government.
The politicisation of linguistics is increasingly in evidence. Chomskyan theory has, interestingly, been attack from the New Right (G. Sampson, Liberty and Language, 1979; reviewed by D. Lightfoot, Journal of Linguistics (1983), although Chomsky's New Left politics were never more than indirectly present in TG. Paradoxically, TG was as abstract as it was in order to preserve the notions (1) of universal human creativity, and (2) free-will in historically concrete situations. The TG account of 'competence' was thus uncoupled from the contingent 'performance'. However, Chomsky's political writings bear eloquent testimony to an awareness of linguistic manipulation by the powerful in both totalitarian and 'democratic' societies: but TG could not model linguistic coercion and manipulation, because it was, ultimately, a model of the human ability not to be constrained, except by rules and forms of sufficient generality to distinguish 'creative' behaviour from random and arbitrary acts (Cf. Chomsky, Reflections on Language, 1976). That is not to say, of course, that TG grammarians have not tended to evolve into the kind of technocratic would-be elite that Chomsky has always condemned!

Do we have in Systemic Linguistics a model that is able to handle both potential creativity and contingent constraint? The two aspects are not always disentangled by systemicists. This is reflected in our definition of 'meaning potential' as 'what a performer can mean', where, entrapped by the very socio-semantic snare ('network'? we should seek to capture, we can mean can (able to) mean, or we can mean can (permitted to) mean. Systemicists might also give more attention to metaphor, including the socio-political metaphors implicit in their own technical terms (such as 'choice', 'selection', 'pluralism', 'production'), in the emphasis on individual performers, and in some accounts of register that seem to regard situation-types as natural givens determinative of 'choice'.

The ambivalence of 'can mean' is relevant to the problem of the relationship between sociosemantic ('second-level') networks and formal meaning networks. One is able to mean, if one wants, something other than what one is allowed or sanctioned to mean in certain sociosemantic networks or situation types. The question of preselection of predictability is thus focal for critical linguistics. We also need to reconsider the question: 'whose meaning is being conveyed?' together with the notion of 'production' in this perspective. If there are constraints on meaning in certain situations, whose meaning is produced? We may well need to distinguish between producing and uttering, and recognise explicitly that an individual performer's utterance in certain situations is a constrained 'choice' of meanings from a potential produced or controlled at certain power points in social structure. A critical systemic linguistics will have to make explicit the socio-political model from which its register systems and socio-semantic networks are derived, or at least it will have to do so to fulfill most of the claims for relevance that most systemicists make. It is not merely a matter of the pragmatics of interaction between individuals, but of the production and control of meaning potential by powerful sectors, including the media.

Many of these matters emerge in the critical linguistic studies in the now well-known work of Fowler, Hodge, Kress, Trew and others. The implications of their work for systemic linguistics have yet to be fully worked out. It is hoped that the current project on the language of nuclear weapons and 'deterrence' will have a considerable bearing on the question of the extent to which meaning-and meaning exchange- can be constrained or extended in particular situation-types. Far from this being a 'misuse' of neutral 'scientific' theory, as some might suggest, it seems to me that such a development is merely to render explicit what has always been implicit in systemic theory (perhaps all linguistic theories) - namely, that they rest on conceptions of social reality.

PAUL CHILTON, Department of French Studies, University of Warwick, Coventry CV4 7AL.

*Paul Chilton is editing a book on this topic for the Francis Pinter Open Linguistics series (Series Editor: Robin P. Fawcett), and in the last issue of Network (p. 15) interested potential contributors were invited to write to him. He has had a very encouraging response, and the book is now a definite project. It is not too late, however, for others who might wish to consider contributing to discuss this possibility with him.