

SHORT REPORT

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'The axial rethink' – making sense of language: an interview with Christian M.I.M. Matthiessen

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Abstract

Christian M.I.M. Matthiessen is a leading scholar in Systemic Functional Linguistics (SFL). Together with William C. Mann and Sandra A. Thompson, he developed Rhetorical Structure Theory, a discourse analytical framework which he has continued to expand and extend using insights from the architecture of SFL. Some of his other contributions are in the area of functional language typology, theoretical modelling of the dimensions of language and comprehensive paradigmatic description of English lexicogrammatical systems. In this interview, he discusses his early experience in linguistics and his motivations for working with Systemic Functional Linguistics. The interview also sheds light on the interaction between SFL and other linguistic schools in the European and American linguistic traditions, and indicates the distinctive contributions of SFL to linguistic science. The discussion contributes to the history of linguistics and the debates on the meta-theory of language.

Keywords: Axial relations, History of linguistics, Meta-theory of language, Systemic functional linguistics

Introduction

One notable contribution of Systemic Functional Linguistics (SFL) to the language sciences is its emphasis on the importance of maintaining a balance between the paradigmatic and syntagmatic axes in linguistic analysis, what Matthiessen (2015a: 151) has described as the 'axial rethink' in the history of linguistics. In this interview with Christian Matthiessen, we focus on the 'axial rethink' from the point of view of his own life-journey through linguistics. This report is based on the first of an on-going series of interviews conducted with him beginning from September 29, 2016 in his office at The Hong Kong Polytechnic University by three of his students: Isaac N. Mwinlaaru, Wang Bo and Ma Yuanyi. Our objective here is to contribute to the history of linguistics, in general, and of Systemic Functional Linguistics, in particular, and also to indicate some theoretical research gaps that need scholarly energy among linguists, or at least systemic linguists. We take as our point of departure some of the reflections Christian Matthiessen himself provides in his introduction to IFG4 (Halliday and Matthiessen 2014) and explore the landscape of linguistics during the early days of his academic career.

Christian Matthiessen is a leading scholar in Systemic Functional Linguistics, and has been a close research collaborator of Michael Halliday since the 1980's. His contribution to linguistics within this period is notably the development of Rhetorical Structure Theory (RST) in collaboration with Bill Mann and Sandra Thompson, a framework he has continued to revise and refine for text analysis (cf. Mann et al. 1992; Matthiessen and Teruya 2015; Matthiessen: Rhetorical system and structure theory: The semantic system of RHETORICAL RELATIONS, *forthc.*). More recently, he has advanced a field-oriented framework for studying particular registers and register variation (see e.g. Matthiessen 2015b, c) and this framework together with RST, provides a systematic semiotic resource for the investigation of semantic and rhetorical properties of texts.

His interest in SFL, however, dates back a little earlier before his personal encounter with Michael Halliday. He recalls a mini-thesis he did on *Hallidayan Linguistics* in 1979 while studying in Lund University. Since he began working with Halliday, Christian Matthiessen has contributed enormously to extending initial systemic descriptions of English and, with the publication of his 1000-page *Lexicogrammatical Cartography: English Systems* (1995), he has produced what has been noted as the best implementation of Halliday's systemic theory in language description. In his two revisions of *Halliday's Introduction to Functional Grammar* (2004, 2014) he has emphasized the paradigmatic axis of language, and related the grammar more explicitly to its systemic ecology. From the very start in his scholarly career, Christian Matthiessen has also been fascinated with the theoretical modelling of language and has been committed to making explicit connections between various dimensions of language (see e.g. Matthiessen 2007). It is this commitment that has led Michael Halliday to describe Matthiessen as the "de facto cartographer" of Systemic Functional Grammar. This aspect of his scholarship was already evident in his fascination with system networks while working on the Penman Project, leading to the development of a system network of well over 1000 systems for English lexicogrammar. Although this explicit theoretical representation of language has not yet become commonplace in linguistics, they are most likely going to serve as important models in future as linguists increasingly see the need to study language more scientifically and explicitly for various applications.

Another area where Matthiessen has made an enormous contribution in the language sciences is in the field of functional language typology, in general, and systemic typology, in particular (cf. Teruya and Matthiessen 2015; Mwinlaaru and Xuan 2016; Kashyap: Language typology, *forthcoming*). His earliest work on language typology is his application of systemic theory to Akan (Niger-Congo: Kwa) phonology (Matthiessen: Notes on Akan phonology: A systemic interpretation (1987), unpublished) and lexicogrammar (Matthiessen: Notes on Akan lexicogrammar: a systemic interpretation (1987), unpublished), predating contributions by other systemic scholars that were later published in a volume edited by Paul Tench (1992). Over the past 25 years or so, Matthiessen has had the opportunity to contribute to comprehensive descriptions of several languages across different genetic families through Ph.D. research supervision, including Arabic (Afro-Asiatic: Semitic), with Mohamed Ali Bardi; Bajjika (Indo-Aryan: Bihar), with Abhishek Kumar Kashyap; Chinese (Sino-Tibetan: Sinitic), with Eden Li; Dagaare (Niger-Congo: Gur), with Isaac N. Mwinlaaru; French (Indo-European: Romance), with Alice Caffarel; Japanese (Japonic), with Kazuhiro Teruya; Òkó (Niger-Congo: Benue-Congo), with Ernest Akerejola; Thai (Tai-Kadai: Tai), with Pattama Patpong; and

Vietnamese (Austroasiatic: Vietic), with Minh Duc Thai. Notable publications in this area are the volume he co-edited with Alice Caffarel and James R. Martin (Caffarel et al. 2004), including his comprehensive chapter on ‘Descriptive Motifs and Generalizations’ (Matthiessen 2004) and a recent contribution in *The Routledge Handbook of African Linguistics*, with Isaac N. Mwinlaaru and Ernest S. Akerejola (Mwinlaaru et al. 2018). In fact, it was the interest in the description of various languages that attracted Matthiessen into linguistics and that subsequently sparked his strong fascination with systemic functional theory. He recalls his early interest as follows:

... it was all because I got interested in descriptions of language, and that started in high school. In high school, I liked reading around beyond what the curriculum suggested. On the one hand, I found that in physics, chemistry, mathematics, that was very hard, because they didn’t provide the kind of intermediate material, just a bit beyond the high school curriculum; whereas with grammar, it was possible. But then, on the other hand, I was very dissatisfied with the kinds of grammar we were provided with in high school. I thought they were not systematic, and not explanatory and so on, so that was another reason I was prompted to read around. So I discovered certain publications like Otto Jespersen (e.g. Jespersen 1924, 1933), and also an introduction to what I later learnt was Generative Semantics by a Swedish linguist, Alvar Ellegård (1971), and that was very interesting, because he took the aspects of grammar that were left as arbitrary ... and explained them in terms of pseudo-semantic structures, with a bit of predicate and logic, and so on.

Thus, it was the quest for systematic accounts of grammar that led Matthiessen to launch into a search for a meta-theory or rather descriptive models that could help him make sense of language. It is also important to note that the kind of linguistic models Christian encountered at this early stage of his academic career were meaning-oriented and as he recalls, he found this insightful. This would have an implication for his future university education, where he was introduced to generative syntax, fashionable in the mid 1970s. In the rest of the report, we will discuss how he came to problematize the dichotomy between the semantic, resource-oriented approach to language and the syntagmatic approach, both of which existed in the literature. We will highlight the contribution of Michael Halliday in this area and discuss how his systemic framework interacts with other functional approaches that were part of its background.

Confronting the paradigmatic-syntagmatic imbalance

Perspectives on language as a resource (‘paradigmatic’) and language as a structural organization of elements (‘syntagmatic’) did not come with Systemic Functional Linguistics; they are not new in linguistics. Both approaches have been available since the time of the ancient Greeks although in different forms. Linguists have often maintained a strong dichotomy between the two, leading to entrenched positions and long-standing controversies as to which is the right approach to the study of language. In ancient Greece, the Platonic and Stoic philosophers can be considered as explorers of language as a resource, a paradigmatic system, in modern terms. They talked about the notion of sign and conceptualized language as a system of signs. They considered the semantic function of language to be ‘primordial and paramount’ (Seuren 1998: 24),

and their approach later led to the idea of stylistic patterns in language use. The Alexanderine philologists, on the other hand, viewed language as a rule-based, conventionalized system that had no room for (stylistic) exceptions; exceptions to the rule were considered infelicitous and needed to be expunged from the language. Ferdinand de Saussure, who is credited with introducing the terms ‘paradigmatic’ and ‘syntagmatic’ axes, theorized the two points of view as dichotomies; and the American structuralists continued to focus on the syntagmatic aspects of language, finally culminating in the more radical formalist generative approaches that followed the Chomskyan revolution. Although paradigmatic approaches to language were developed in the recent history of linguistics, notably among linguists of the European tradition, the syntagmatic approach have dominated the scene for a very long time. When Christian Matthiessen studied linguistics at Lund university, Chomskyan generative syntax was in its most fashionable period. He recounts the disjunction between his earlier exposure to linguistics in high school and his experience at Lund university as follows:

... when I began to see grammar as really a construction of meaning, it was all syntagmatic, but it seemed very insightful. And around the same time, I came across a book in Swedish, translated into English as *New Trends of Linguistics*, and that was by Bertil Malmberg (1969), who was at the time, the professor of linguistics at Lund University. He had a very interesting chapter on the European tradition, Saussure and European structuralism and so on. That to me also seemed fascinating. The notion of the axial differentiation between syntagmatic and paradigmatic ... I had this syntagmatic insight into semantic structural analysis of grammar, including for example, negatives as higher predicates and so on. And then I had the European insights, which seemed very useful for phonology, for morphology, and for a bit of lexical semantics. But to me — and I had no way of mapping this, I couldn’t see how they belonged together. Then I entered university, through a correspondence course, when I had to do an awful eleven months of military service. But what kept me alive was this correspondence course in English linguistics, and then I got to do a bit more reading. But in any case, even when I arrived in linguistics at the university, I still had the sense that I couldn’t put these two insights [i.e. the syntagmatic and paradigmatic insights] together.

Once I got into linguistics at the university, I was doing English linguistics, at some point I studied philosophy, at some point I studied Arabic, studying Arabic as a language learner. But in linguistics, of course, the prevailing approach at the time was Chomsky’s Standard Theory, or Extended Standard Theory, so the basic text book for syntax was Akmajian and Heny (1975), a thick book on Standard Theory, and it included little examples of writing rules, systems for tag questions, passive, active voice, and so on. But we were encouraged to read around, and the programme wasn’t dogmatic at all. Our Linguistics Department was housed in the former villa of the Rector Magnificus, the president, or vice chancellor, of the university. So, it was really like a home, and what used to be the huge formal dining room had been turned into a library, and it was quite an extensive library. I was allowed even when I was an undergraduate student to stay there for hours and I would just browse and browse late into the evening. That was equivalent of Googling things, walking

around the library, and looking things up. As I said, we were encouraged to read around, so I read different approaches to language, different theories, and became familiar with Chomsky's theory. I was very disappointed, because it had nothing to do with meaning. What I discovered later was generative semantics, but also Tagmemics, for example, we had Milan Bílý who was doing a Ph.D., coming from Czechoslovakia, and representing the Prague School. There was also stratificational linguistics, which seemed interesting.

It was when I came across some writings by Michael Halliday that things finally clicked! I think the first writings were from his collection of papers, called *Explorations in the Functions of Language* published in 1973. When I came across this book fairly early in the second half of the 1970s, it was a very recent publication. One of the things that clicked was this: suddenly I saw the connection between the European insight of paradigmatic and syntagmatic, and the ability to describe structure in a semantically transparent way. That was the system network and its realization statements. I suppose I had a visual of orientation, so to me the system network was very appealing. I sensed you could map something out in terms of the paradigmatic organization. At the time, the network metaphor was nowhere near as prevalent as it is today a model of organization; we were still largely in the era of trees [i.e. tree diagrams]. So, that was really the way in.

The excitement that Christian Matthiessen experienced at this point already indicates some of the distinctive features of SFL he talks about in the later part of the interview, namely, the foregrounding of paradigmatic organization as a way into the grammar and the focus on meaning as primary in the description of language.

But as he indicates, in addition to Halliday's writings, 'there were other nudges and pushes' that defined the kind of linguistics he came to be engaged in. In those days, Jan Svartvik, who was a corpus linguist from the team lead by Randolph Quirk, started to work at Lund University as a new professor of English. The London-Lund Corpus — the first extensive corpus of spoken English, which had been recorded by Randolph Quirk in London — was given to Jan Svartvik and his team at Lund University to transcribe. This unique new corpus then became the source for Ph.D. students using the framework presented by Michael Halliday and Ruqaiya Hasan in their 1976 book, *Cohesion in English*. Through reading this book, Christian Matthiessen came across another aspect of SFL, and had linked up the insights in grammar with discourse and discourse patterns.

A little later, Christian Matthiessen read Halliday's (1978) *Language as Social Semiotic*, and he wrote a mini-thesis titled *Hallidayan Linguistics* (1979) for a project. For him, this was a 'detective' work to piece different information he had gathered together in order to make sense of them since there were no overviews on SFL available for him to consult to. As he recalled, he did get access to Margaret Berry's (1975, 1977) two volumes of introduction to *Systemic Linguistics*, published in 1975 and 1977 respectively, but they were rather on Halliday's (1961) scale-and-category theory, while more recent developments such as the theory of metafunctions had not been included. Indeed, as Christian Matthiessen notes, one challenge of this period of history was the technological constraints on access to information:

This of course takes us back into the 1970s; and as you recall, the 1970s was a very different period of time. One of the extraordinary differences is precisely with the Internet and the technology that enables us to rapidly find out about a field. That was not possible at all, unless you had special connections and so on, so that was part of the way I got into it.

Linguistics at UCLA and the M.A.K. Halliday's connection

It was University of California, Los Angeles (UCLA) that provided the right environment for Christian Matthiessen to find the right connections to people and ideas. When he got a scholarship to study linguistics at UCLA, he took his foundation of SFL with him. It was a totally different environment from Lund University: though linguistics at UCLA was extraordinarily rich and varied, there was no scholar working on SFL.¹ Instead, the scholars there worked on African linguistics, generative linguistics, early “West Coast Functionalism” and phonetics. He felt excited and took the chance to learn more about various theories and descriptive frameworks, such as William E. Welmers’s overview of languages spoken in Africa (cf. Welmers 1973), Paul Schachter’s fieldwork course on Akan. He also took a course trying to learn Zulu for a year, taught by a wonderful poet from South Africa.

During the second half of his first year at UCLA, however, he met Michael Halliday by pure chance:

But then, in the second half of my first year at UCLA, by pure chance, I met Michael Halliday. Again, it was striking in those days that unless you were part of the network of academics, it was virtually impossible to find out where people were and what academic activities they were engaged in. I didn’t know where Michael Halliday was; all I had were hints from publications (e.g. he had written the foreword to *Cohesion in English* at Stanford University) — but I’m sure I didn’t know that he’d moved to Sydney University to take up the first chair in linguistics there. But during my first year at UCLA, I thought I should try to be an academic tourist and visit different universities. I made one trip from Los Angeles to Stanford University, just to get a sense of what that famous university was like, what the campus was like — it turned out to be a beautiful campus. So, when I had arrived at Stanford University, I looked up a well-known linguist — Tom Wasow — in his office. He very kindly invited me in and talked about what they were doing in linguistics and recent activities, and he showed me the programme of a recent special workshop on intonation. There were various well-known names, Bolinger, and I think also Ken Pike, and Michael Halliday, so I said, wow, Michael Halliday was here? Tom Wasow said, ‘yes, in fact, he is still with us, he’s here as a visiting scholar’. He could tell that I suddenly got very interested, and then he told me Halliday was giving a series of lectures. He looked up the schedule. Amazingly, it turned out that Halliday was giving a lecture at that time, one that would finish in about ten minutes, so I asked Wasow ‘where, where, where!’ He told me, and I dashed out of his office, found the classroom, then I stood outside and waited for Halliday to come out. Then he came out together with Ruqaiya Hasan. I sort of shyly introduced myself, and said I was very interested in his work. He told me that he would move from Stanford University to UC Irvine and

said, 'well, why don't you attend my ten-week lecture series there?', giving me the name of the host and organizer — Benjamin Colby, a Professor of Anthropology. So I did that. It took me four hours commuting by bus going down from LA, and four hours going back. [...]

The sense I got when I started attending Michael Halliday's lecture series was: for the first time ever, here I met a linguist [...] who had special insight into language, and whose work was about language, not about linguistics, in the first instance — meaning, he wasn't trying to solve jigsaw puzzles coming from linguistic theories. He was trying to get a deep comprehensive understanding of language. That to me was one of these really fundamental experiences in terms of giving me the conception of the *thing*. Later when I went down to Sydney to work, I thought about all these privileged students in Sydney University who have had Michael Halliday for years, but they never had this kind of sense of the order of magnitude of difference between him and other big names in linguistics. So, that to me was something very very important, and it resonated with something that he and I discussed later — his sense of what you do in first-year linguistics. What I have seen in many places was that in first-year linguistics you introduce jigsaw puzzles based on rule systems, and, at the time of my undergraduate days, it was some form of transformational grammar or generative phonology. He said that's not what you do in first-year linguistics; what you do in first-year linguistics is to enable the students to get a sense of language, to reflect on language, to really sense language.

About three weeks into Halliday's course, Christian Matthiessen noticed a job advertisement, in which a computational linguistics project needed a research assistant familiar with SFL to serve as a research linguist. It was a brilliant opportunity for him, as he was perhaps the only scholar familiar with SFL in Los Angeles. The contact person for the job "turned out to be a brilliant linguist and world expert on Quechua — David Webber" and he arranged for him to meet with the project leader, Bill Mann (cf. Matthiessen 2005).² It turned out that Bill was leading a research into text generation by computer at the Information Sciences Institute (ISI). Bill and his research team had started from the second half of the 1970's and had done some exploratory work on text generation by computer. Moving into the 1980's, other researchers were beginning to establish text generation as part of computational linguistics, but Bill wanted to do text generation in a fresh way, so he and his team had initiated a survey of linguistic frameworks that could provide a central resource in their project on text generation by computer, including different variants of generative linguistics and SFL. Based on the survey, Bill determined that by then the best approach they needed was SFL. One reason was the systemic functional commitment to comprehensive descriptions of grammar, and another was the systemic organization of the description of the grammar as a meaning-making resource. Matthiessen informed Bill Mann about Halliday's lectures, as he recalls:

[...] for the remaining seven weeks or so, Bill Mann also went to the Halliday lecture series, and I got a ride with him. By car, the journey was only around forty-five minutes — an improvement over my four-hour bus journey! After the lecture series

had ended, Bill invited Michael to ISI for a day — Michael flew up by a commuter plane. I remember the three of us had lunch at The Warehouse, a restaurant in Marina del Rey designed to look like a trading place on an island in the South Pacific. Using his paper placemat, Michael drew two contrasting diagrams to illustrate the difference between the generative approach to the description of a language and the systemic functional one.

Bill succeeded in convincing Halliday to join the project as a consultant, and he also hired Matthiessen as a research assistant. That was the start of the Penman Project, in which they developed a Systemic Functional Grammar for text generation in English. Bill named their grammar the Nigel grammar (see e.g. Mann and Matthiessen 1985; Mann 1985; Matthiessen 1985), following the pseudonym of the young child in Halliday's (1975) case study of learning how to mean. Their description of clause grammar was based on a research project at UC Irvine initiated by Benjamin Colby. It was also in this project that Mark James and Michael Halliday produced a systemic clause grammar of between 80 and 90 systems (reproduced in Halliday 2005: 268–284). Eventually, working with other researchers, Matthiessen expanded the systems to over a thousand, which he drew on when producing an account of the grammar of English organized as a map of system networks (Matthiessen 1995). The reason why Nick Colby initiated the project at UC Irvine is very interesting, although it still remains a research vision that can be explored as linguistic science evolves. Christian Matthiessen recalls that:

He [Colby] had the notion that he wanted to explore culture through text, thus using text as a gateway into culture. But, in order to do that, you needed to be able to process large volumes of text automatically, so he started this computational parser for Systemic Functional Grammar. That was his long-term vision — a system for parsing and understanding text that would be culturally interesting. The Irvine project remained a vision, but we developed the initial systemic clause grammar into a generation grammar.

It was useful to me to be in the context of linguistics at UCLA, once I finally got to meet Michael Halliday, and attend his series of lectures. Because by then, by the time I attended the lecture series, I had seen quite a few really top US-based linguists. On the one hand, UCLA was very good. It was judged the second-ranking department of linguistics in the US after MIT, and it was much more varied than MIT, so I think that's significant. But also, there had been a Linguistic Society of America meeting in LA in December in 1979. As a student, I was roped in to help at the conference, so I saw a number of people — quite well-known, including, for example, Jim McCawley, and I was asked to assist him when he gave his talk. He was a very very nice man. After the talk, I said I heard he was doing something on language and logic. He grinned and said 'yes, I happen to have a manuscript of this in my bag here, since you were interested, why don't I give you the manuscript to read?' So that was first experience of Jim McCawley, who was in the Generative Semantics tradition.

Thus, Christian benefited greatly from the context of linguistics at UCLA. Of emphasis here is the deployment of the notion of the systemic, or rather axial, organization of

language in an application context, in this case, in a computational context. So we witness the development of a semiotic theory of language that brings together the paradigmatic and syntagmatic organization of language into a coherent theoretical tool for language description and subsequently the use of this description for computational application. It is important to note that the computational application itself puts pressure on the theory and description for more explicitness and systematicity, and this results in the refinement and extension of the system networks deployed. It is also interesting to note how Christian Matthiessen's own scholarly development mimics the chronological development of what he notes as the 'axial rethink', namely his initial sense of confusion by the disconnect between semantic and syntagmatic approaches to grammar, how this is resolved through his discovery of Halliday's writings and his subsequent application of this in refining the systems of English and for computational application. Rather than being sheer coincidence we can see this as a reflection of the times. He came into the discipline at a transitional moment and was enthusiastic to participate in it as an active agent in transforming the field according to his capabilities.

Distinctive properties of SFL

Christian Matthiessen agreed that when talking about the distinctive properties of SFL, scholars from different areas may have different opinions. For instance, for Bill Mann and David Webber, when they did their survey for the Nigel project, the distinctive property of SFL was its high priority given to comprehensive descriptions that are meaning-oriented. Thus, for them, SFL was very different from Chomsky's theory that takes small areas of language and develops very sophisticated accounts in order to arrive at something one could plausibly claim to be universal. He also referred to an article by Maurice Gross (1979) with a provocative title — "On the Failure of Generative Grammar" — published in *Language*, which highlighted the narrow focus of Chomsky's theory. According to Gross, generative linguists had failed to produce anything comprehensive by way of description, and they had no commitment to comprehensive descriptions of language as a meaning-making resource.

Another aspect of the distinctive property of SFL is Michael Halliday's foregrounding of the paradigmatic axis. Christian Matthiessen has the following to say on this:

Another aspect it seems to me is that Michael Halliday, in my view, is the only linguist who has foregrounded the paradigmatic axis, and organized the theory and description of language around the paradigmatic axis, showing that this gives you the insight into language as a complex and abstract system. In my chapter in the *Halliday Companion* on Halliday's theory of language (Matthiessen 2015c: 151), I call it 'the axial rethink'. He does not start from structure, but rather from paradigm, from system (see e.g. Halliday 1966). This gives you a unique insight into language, a number of things flow from that insight; but at the same time, he maintains the connection with the syntagmatic. To me, one of these foundational insights into the organization of a system of some kind is, in this case, language. So, I would cite that, too, as distinctive.

It must be emphasised that Halliday also maintains a connection between the paradigmatic and the syntagmatic axes, by positing the paradigmatic axis as an

organizing principle of language and the syntagmatic axis as the realization of systemic choices in structure, the reflexes of meaning in form.

A related distinctive property of SFL is that Michael Halliday (e.g. 1992) is the only linguist, who has theorized the connection between system and instance, with his notion of the cline of instantiation. Looking at the history of linguistics in the twentieth century, we can easily observe the tension between people focusing on text, discourse, performance, or *parole*, and the people focusing on system, competence, or *langue*. This tension has always been like a chasm between the two, because nobody has theorized the connection between the two. However, with the cline of instantiation, a number of insights are made possible, such as being able to understand language in probabilistic terms by looking at relative frequency in text. Thus, unlike Saussure who created dichotomies between different vectors of language, Michael Halliday considered these as complementarities such that we have a complementarity between system/language and instance/text, a complementarity between paradigmatic and syntagmatic axis and also complementarities between writing and speech as different modes of expression (cf. Halliday 2008a). A view from any point of the complementarity will lead to different results, and the best approach is a holistic one, one that allows the investigator to look at all the possible angles.

SFL and other functional approaches: Convergence and divergence

In this section, we are interested in where SFL converged with and diverged from functional theoretical approaches that were part of its background and those that were current during the early stages of its development. We discussed them along two dimensions, those of the European linguistic tradition and those of the American tradition. As we have done in the preceding section, we will focus on Christian Matthiessen's own experience with these frameworks as a systemic linguist and their possible influence on his scholarly world view.

Connection between SFL and the European linguistic tradition

As a follow up to some of the issues he raised on the distinctive properties of SFL, we asked Christian Matthiessen to elaborate on the relationship between Saussurean linguistics (the Geneva School), and by extension, other European traditions of linguistics such as the London School and the Prague School. He notes the following:

[...] You certainly have had a number of systemic functional linguists writing about Saussure, making connections, important ones being Ruqaiya Hasan (e.g. 1987, 2014, 2015) and David Butt (e.g. 2001, 2015). I think more so than Michael Halliday himself, although he did make the connection.

To me, it was interesting, because I felt that in my linguistic 'kindergarten', I was brought up with Saussure: on the one hand, the readings that I did before I entered linguistics at Lund University. On the other hand, because the first professor who retired while I was there — Bertil Malmberg — was the one who introduced Saussurean linguistics onto the Swedish linguistic scene, starting in the 1930s. He was born in 1913, and passed away in 1994. So, that's his generation. He was a young scholar in the thirties. His languages were Romance languages, so he started as a Romance scholar. He was very well versed in the Romance tradition, including not

only Saussure, but also the Geneva school commentary on it, and what Spanish-writing and Spanish-speaking linguists have done, and so on. He really had a very firm grip on that. While he hadn't met Saussure himself, because he was born in the same year that Saussure died, he had met a number of the next generation, like André Martinet, Louis Hjelmslev and Roman Jakobson, for example. So, he really knew the European structuralists, and Roman Jakobson.

To him, Saussure was a master, and Roman Jakobson was a master. I think he must have known Roman Jakobson fairly well. I remember, once a group of us visited him in his vacation home, which was on the east coast of Sweden. Bertil Malmberg said he had hosted Roman Jakobson there, and Jakobson had looked out the window across the Baltic Sea towards Russia, and said that I had to flee, and I'll never come back. He did in fact towards the end of his life return to Russia.

That was part of Malmberg's background, and he knew Louis Hjelmslev and members of his group, and so on. I felt this, I've grown up with this, and we had a special study of Hjelmslev's (1953) *Prolegomena* in our linguistics (actually the original Danish version, from 1943), not with Malmberg, but with another linguist in our department — Thore Petterson. This was very much part of the tradition. I felt I understood the situation. I remembered Michael Halliday said to me that Firth thought Saussure was a bit overrated. So, I tended to take the Firthian line that people tend to overrate Saussure a little.

That's against the background of having had a Saussurean 'kindergarten,' being very much part of that and very much valuing it. But Saussure died far too young at fifty-six. The European structuralists were not able to take it much further. Part of it was that they didn't have a theory that would allow them to organize around the paradigmatic — so I think that's Michael Halliday's contribution more than that of any of the Continental European structuralists. I felt they were a bit stuck. Malmberg himself said he saw it as a great tragedy — it was a pity that the Geneva School turned out to be 'metalinguistics'. In the Geneva School, they kept talking about reading Saussure, re-reading about Saussure, and about new notes and so on. Malmberg, while he himself contributed to the understanding of Saussure, felt that what needed to be done was to develop Saussure. That was what people like Hjelmslev, for example, and Martinet and other linguists were in fact doing.

While it's important to make the connection, I think one doesn't have to go back to Saussure every time to quote him and ground one's work in his. A couple of years ago, I went back to Saussure to re-read his work. What struck me was, it would be such a nice study for an analysis of evaluation and appraisal, because he's very dismissive about various things. So, it's an interesting kind of discourse from the point of view of that kind of discourse in linguistics, how you dismiss, how you try to create new space and so on.

Mathesius and the earlier Prague School functionalists were more interesting, because they actually got on with the work of describing language. So, the Prague

School was very good from that point of view. Reading those scholars, you get the descriptive part — and much more extensively. Interestingly, Michael Halliday worked out the functional principles when investigating Chinese before he became aware of the Prague School work. This is what he has told me. He studied in China; and again we didn't have the World Wide Web; we didn't have flow of translations in the way that we have now. The Prague School got isolated during WWII and then afterwards too because of the Stalinist period, it was very difficult for people to travel, and conferences were more restricted in any case. That took a while. But once he saw the parallels, he was very engaging with the Prague School and made sure that he would refer to and promote Prague School work also in the West. So, I think that's a connection.

Importantly, we also need to make a connection with the US American anthropological linguistic tradition, as Michael Halliday has done — and let me take that as an aside, a footnote, to Saussure. When people say he is the founder of modern linguistics, I say, yes, well, *but*, by which I mean it's important not to undervalue descriptive work, in thinking about what got linguistics in the 20th century energized. After his earlier work in historical linguistics, Saussure didn't do much by way of description, but in the USA, they did — Franz Boas and Sapir and others. I would give them equal weight actually in energizing linguistics in the 20th century. To those who keep celebrating only Saussure as *the* founder of modern linguistics, I would say: read Boas's work on Kwakiutl, and consider his collaboration and co-authoring with a speaker of the language, George Hunt. Boas made much more of an institutional contribution than Saussure; they were born within two years of each other, but Boas had the fortune of living until 1942, and was able to train a couple of generations of anthropologists and anthropological linguists. That of course was important, the flow of American anthropological descriptive linguistics into Michael Halliday's thinking.

In summary, therefore, while Saussure had some influence on SFL, at least, in the introduction of the paradigmatic and syntagmatic differentiation, which has been picked up and redefined in SFL, the Saussurean influence was not a very direct one, compared to more empirical work of the Prague School and Franz Boas, the American-based anthropologist.

Connection between SFL and the American linguistic tradition

Focusing on the American tradition of linguistics, we limit our focus on the work of Kenneth Pike in relation to his theory of Tagmemics. Kenneth Pike is important for having personal connections with J. R. Firth, Michael Halliday's Ph.D. supervisor, and Halliday had had the opportunity to interact with him on a number of occasions. On whether there has been some collaboration at some point at the early stage of SFL between scholars of SFL and Kenneth Pike, Christian Matthiessen makes the following statement:

I think there are certainly resonances having to do, for example, importantly, with very broadly orientation to meaning with the interest in text and with a sense of the

centrality of description. That makes sense if one thinks of tagmemics as [...] continuing the American anthropological tradition from Sapir to Pike; and Mary Haas, as Sapir's student, and Pike being roughly contemporaries on the American scene.

Then another aspect of Tagmemics is in the Summer Institute of Linguistics and the Wycliffe Bible translators. In that engagement with the description of languages that are very varied, an ethnographic orientation, a support of application, there's certain resonance (though not the application of Bible translation, in the case of SFL). Anecdotally (it's probably been written up somewhere) (cf. Bendor-Samuel 2002), I remember Michael Halliday telling me that in the fifties, Kenneth Pike was invited over to London by J. R. Firth — or at least he was around and invited, when Ike (Eisenhower) was running for an election or re-election, there was a political slogan "We like Ike". The London linguists turned this into "We like Pike". So, that was nice. I've been fortunate enough to meet Pike a number of times and to chat with him, learning from him about his sense of key differences between Tagmemics and SFL.

Also, there was one very important meeting of the LACUS Society, in 1983 at Laval University in Quebec, where they had the founders of three great traditions in linguistics — Ken Pike (Tagmemic Linguistics), Michael Halliday (Systemic Functional Linguistics), and Sidney Lamb (Stratificational Linguistics, later renamed Cognitive Linguistics, and now known as Relational Network Theory, cf. García et al. 2017).

If you consider these three traditions in relation to the notion of applicable linguistics (cf. Halliday 2008b), you could say all three are applicable. Certainly, in Tagmemics, the notion of being able to apply the linguistics was important in the context of the work on Bible translation, developing orthographies, and so on. That contributed to the understanding of the relation between grammar and discourse patterns. So, a lot of work was done in that area, also on translation, on discourse organization, rhetoric and so on.

But if you compare Tagmemics with SFL, then SFL has a much broader range of applications. Applications of Tagmemics were largely restricted to the context of the Summer Institute of Linguistics, but while the strongest early one for SFL was undoubtedly education, many more have been added, so in terms of the range of applications, SFL has covered many more different institutional settings than Tagmemics. Of course, Tagmemics put its emphasis on the descriptions of many different languages.

I had a sense that in terms of influences between SFL and Tagmemics, it was more a case of maintaining a dialogue than of direct borrowings. It would perhaps be harder to point out anything in SFL where there was a direct influence or borrowing from Tagmemics. We have more of recognition of parallel notions, like the notion of levels in Tagmemics, and the notion of rank in SFL, for example. Or one could compare the notion of the tagmeme in Tagmemics with the notion of a function and

its realization by class in SFL. Tagmemics, unlike SFL, never moved in the direction of taking the paradigmatic as the primary organizing axis. So, that's again a fundamental difference.

Sadly, I would say Tagmemics is now a dead metalanguage, and is no longer really used. I could see the beginnings of this already, when Ken Pike was still alive, maybe in the late 1970's, and certainly in the 80's. When it ceased to be the primary kind of linguistics taught within the Summer Institute of Linguistics. I remember talking to one of Pike's follower, Ruth Brend, who did a lot of editing of tagmemic work. When she was at University of East Lansing, she had Ph.D. students in Tagmemics, but then she stopped supervising work using Tagmemics, as she told me in a conversation we had in the mid 80's I had with her. She said she would no longer supervise somebody using Tagmemics, because she felt if she did, they wouldn't be able to get an academic position, they wouldn't be able to take this into institutional linguistic contexts. That was the beginning of the end of Tagmemics. But it continued to be used elsewhere, outside the US, e.g. in important descriptive work at Mahidol University on various languages spoken in Thailand.

One would have to be very careful not to attribute the decline to Tagmemics itself, or at least only partly, because at the time the context was that of the dominant generative linguistics at the time. Their interest in language was so different from Pike's that they didn't engage with him, and they didn't understand the importance of his contributions. But other folks did. If you look at the introduction or forward to Talmy Givón's 1979 book, *On Understanding Grammar*, there he cites Pike as one of the key influential linguists together with Bolinger. But certainly, he emphasized the importance of Pike's work.

Epilogue

In summary, in this academic conversation with Christian Matthiessen, we have discussed developments in linguistics for the past half century, focusing on his own life journey through the discipline and the contributions of Systemic Functional Linguistics. Using his academic journey as a metaphor, we witness a dichotomy created in language studies by the paradigmatic and syntagmatic differentiation in language. Christian Matthiessen first came into contact with meaning-oriented approaches to language through his own curiosity in high school, although these semantic approaches to language such as Generative Semantics were essentially syntagmatic in their orientation rather than paradigmatic. His encounter with generative linguistics in university created a kind of disequilibrium in his understanding of the nature of language, and his persistent search led him to Michael Halliday's 'axial rethink'. That is the conceptualization that language is a system of meaning-making resources that are organized paradigmatically as choices and realized as a regularized, patterned structures, and that the system is elastic enough to allow constant innovation by language users to create new meaning. Christian Matthiessen has been part of the development of this rich theory of language, by both refining it and implementing it in different ways. He has extended the descriptive

accounts on English grammar in further delicacy and expanded systems that had been sketched earlier by Michael Halliday, making more explicit the nuances in English lexicogrammatical system (see e.g. Matthiessen 1995, 2014; Halliday and Matthiessen 2014). Beyond English, his research on language typology has shed more light on how the different metafunctions (ideational, interpersonal and textual) result in different alternative systems and structures in particular languages to reflect the functions of language in the speech fellowship (see e.g. Matthiessen 2004). His explicit theoretical modeling of language will hopefully contribute to a more scientific study of language in the near future in a way that will greatly advance the applicability of linguistic research (see e.g. Matthiessen 2007b, c).

We have also discussed with Christian Matthiessen some convergences and divergences between SFL and functional approaches to language that were part of the background of SFL's early development. Since the 1960's, when SFL began to develop, however, many functional approaches to language study have evolved, with many theoretical resonances with SFL, but that have also made new major strides that have not been part of the empirical preoccupation of SFL. Many of these are approaches that have developed and continue to develop from the typological work of Joseph Greenberg and the American West Coast Functionalism, notably work on grammaticalization, construction grammar and the plethora of approaches that operate under what has come to be called 'cognitive linguistics'. Systemic linguists, to a very large extent, have not engaged with these approaches, and we recommend that new research and theoretical energy should be spent on incorporating insights from his approaches into SFL while keeping an eye on SFL's commitment to language as a social semiotic system.

Endnotes

¹Christian Matthiessen adds the following clarification: "There was an indirect connection: Paul Schachter had engaged very seriously with Dick Hudson's Daughter Dependency Grammar (DDG) (Hudson 1976); but while SFL was a major source for DDG, it had already moved in a different direction — understandably, since Hudson had set out to provide answers to Chomsky's questions about language using first SFL (Hudson 1971) and then DDG (Hudson 1976) as non-transformational alternatives to Chomsky's transformational grammar. When I talked to Schachter and Hudson about the connection, they had not met, and I remember being happy to be able to convey to them their mutual admiration for each other. Hudson had generously met with me a few times in the late 70s when I had found cheap January flights from Copenhagen to London to enjoy the brilliant offerings at theatres there — grateful for opportunities to see plays with John Gielgud, Alec Guinness, Tom Conti, Douglas Fairbanks Jr., and Penelope Keith."

²David Webber was a full-blown descriptive typological linguist, who did his Ph.D. thesis on one of the varieties of Quechua in Peru.

Authors' contributions

The interview was conducted by BW, YM and INM with Professor CMIMM. The interview questions were first raised by INM. BW and YM were responsible for recording, transcribing, revising, and compiling a list of references. INM and BW further revised the manuscript based on the reviewers' comments. CMIMM also read the draft and made revisions. All authors read and approved the final manuscript.

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Competing interests

The authors declare that they have no competing interests.

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