Translation, multilingual text production and cognition viewed in terms of systemic functional linguistics

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29.1 Introduction

This handbook is concerned with different aspects of translation in relation to cognition, a fairly recent technology-enabled addition to scholarly perspectives on translation (see e.g. Rojo, 2015; Schwieter & Ferreira, 2017; Shreve & Angelone, 2010; and also García, 2019). Complementing this approach to translation as a cognitive phenomenon, we can approach translation as a semiotic phenomenon, foregrounding meaning rather than knowledge. As we argue in Halliday and Matthiessen (1999), drawing on systemic functional linguistics (SFL), the cognitive perspective and the semiotic one are not mutually exclusive alternatives; rather, they complement one another, and should ideally together provide a more holistic account of the phenomena under investigation.

This chapter focuses on SFL as a framework for engaging with translation, identifying contributions SFL can make, as a holistic theory of language, as a resource for making meaning in context. Thus, translation is construed as the recreation of meaning in context, investigated as choices in the different modes of meaning “embodied” in language (ideational (logical and experiential), interpersonal and textual), and the primary domain of translation is seen as texts theorized as units of meaning in context.

Translation is a linguistic phenomenon in the first instance, so that is how it is theorized in SFL; but at the same time, SFL locates it within an ordered typology of systems (see below). It can be viewed, observed and investigated alongside other linguistic phenomena that are in some sense “meta” to an original text, including revising and editing, abridging and summarizing, and even performing (e.g. a play)—as an enhanced version of reading aloud; but it differs from these in presupposing that language users engaging in translation have mastered a multilingual meaning potential (see Bateman et al., 1999; Matthiessen, 2018), and as we argue in Matthiessen et al. (2008), the study of translation can be included in multilingual studies, where it enters into dialogue with language typology and comparison, studies of second/foreign language development and also machine translation (MT), since the communities of researchers involved in MT and in Translation Studies have tended to remain quite separate, even though there is considerable potential for collaboration and cross-fertilization.
I will address systemic functional contributions to the study of translation in this chapter, but first I will take a step back to locate the focus of translation—i.e. language—in an ordered typology of systems of increasing complexity in order to engage with “cognition” and also to discuss the different systemic orders within which translation operates:

In Section 29.2, I will explore the systemic location of translation in reference to the conception of language as a higher-order system in an ordered typology of systems;
In Section 29.3, I will focus on translation as a fourth-order, semiotic phenomenon, and suggest what SFL can contribute to the study of this phenomenon by offering an account of the “architecture” of language in context;
In Section 29.4, I will deal with the local dimensions of this architecture—dimensions that are manifested as fractals in the organization of all local sub-systems of language in context;
In Section 29.5, I will turn to the global dimensions of this architecture;
In Section 29.6, against the background of the two previous architectural chapters, I will highlight the notion of choice in the proposed conception of translation as the recreation of meanings in context;
In Section 29.7, I will provide a summary of the significance of the systemic functional architecture of language in context in relation to translation.

29.2 Language as a higher-order semiotic system in an ordered typology of systems

Translation is a linguistic phenomenon in the first instance—one involving different linguistic systems and processes in their contexts; but like other linguistic phenomena, it is also social, biological and material. Two or more of these different orders of manifestation of translation may be reflected in Translation Studies, but typically not all of them, so I will draw on the ordered typology of systems operating in different phenomenal realms proposed within SFL (see e.g. Halliday, 1996, 2005; Halliday & Matthiessen, 1999, 2006; Matthiessen, 2007, forthcoming).

29.2.1 Translation viewed in terms of four orders of system

We observe and theorize translators and translation as system and process in terms of an ordered typology of systems operating in different phenomenal realms. There are four types of system, ordered in increasing complexity from physical to semiotic systems. They are shown schematically in Figure 29.1 and can be characterized as follows:

- First-order systems—physical systems. These are omnipresent, extending through the whole universe, having emerged with the Big Bang on the order of 13.5 billion years ago and being subject to the laws of physics.
- Second-order systems—biological systems (physical systems + “life”). As far as we know, biological systems have only emerged under very specific conditions on our own planet (conditions that James Lovelock (1991) has called “the narrow window of life”) on the order of 3.5 billion years ago (see Wilson, 2019). In addition to being physical, they have properties transcending physical systems: they are self-replicating and are subject to evolution and natural selection, with cross-generational memory and individuation.
- Third-order systems—social systems (biological systems + “value” (social order: roles in social networks)). Social systems have the properties of biological systems, through which they are manifested; but, in addition, they impose value or social order on biological organisms and...
The ordered typology of systems operating in different phenomenal realms
populations through the organization into social role networks. They must have emerged on numerous occasions in different biological populations since the beginning of life (see Wilson, 2019). In social systems, biological individuals (organisms) take on multiple social roles, operating in the distinct role networks that characterize different social groups. In taking on different social roles (or personae), individuals become persons (see Butt, 1991; Firth, 1950; Halliday, 1978).

- Fourth-order systems—semiotic systems (social systems + “meaning”). Semiotic systems have the properties of social systems (so also of biological systems, and of physical ones); but, in addition, they carry or even create meaning. To have the property of meaning, they must be stratified into content and expression planes; and in the case of language, both these planes are further stratified: content into semantics and lexicogrammar, and expression into phonology and phonetics (or graphology and graphetics, or their analogues in the sign languages of deaf communities).

Physical and biological systems constitute material systems; they are “made of” matter, so they are subject to the laws of nature. In contrast, social and semiotic systems constitute immaterial systems; they are not “made of” matter, but, rather, impose different kinds of order on material systems—social order (“value”) and semiotic order (“meaning”).

The four orders are hypothesized to have emerged in the sequence of their order of increasing complexity; this is consistent with accounts by various scholars concerned with systems in general, such as Layzer’s (1990) model of cosmogenesis. Once higher-order systems emerge, they then develop together with lower-order systems in a kind of dialectic, as put forward e.g. by Deacon (1992, 1997) in his hypothesis of the co-evolution of language and the brain and by Dunbar (1993, 1996) in his hypothesis of the correlation in evolution between language, brain and group size.

To advance our understanding of how systems of different orders relate to one another, we need to spell out explicitly how higher-order patterns are manifested as lower-order ones—of critical importance in the study of translation, e.g. in order to relate observations focused on translation as a neural activity and observations dealing with translation as a semiotic activity. In the case of SFL, this task has only recently been put on the research agenda; but Lamb (2013) suggests that the relational networks developed by him and his colleagues within relational network theory (see Lamb, 1999; García et al., 2017) can serve as an analytical interface between system networks (semiotic order) and neural networks (biological order), since relational networks have been developed as a model of neural networks.

To summarize, translation is in the first instance a semiotic phenomenon (as both system and process)—the recreation of meaning in context, and translators are in the first instance semiotic beings—multilingual meaners recreating meaning in context. But like other semiotic phenomena, they are enacted socially and embodied biologically, as shown in Table 29.1, which indicates how translation and translators can be studied at the different orders; but, in addition, correlations across the orders are an important focus of investigation. In fact, we need the semiotic, social and biological orders of systemic interpretation of translators to articulate what has come to be called “translation competence” (see PACTE, 2003).

29.2.2 The fourth order: The complementarity of semiotic and cognitive interpretations

Most approaches to linguistic phenomena in general, and to translation in particular, would probably agree on the nature and significance of the material orders of systems—i.e. on
physical and biological systems; and while they would pay different degrees of attention to social systems, they would all acknowledge them. However, the highest order of immaterial systems, fourth-order systems, have proved to be more challenging, even at the basic stage of interpreting what kinds of phenomena we are observing and thus need to theorize. Scholars have developed two interpretations of fourth-order systems, either as cognitive systems or as semiotic systems (Figure 29.2).

In Halliday and Matthiessen (1999), we argued for the complementarity of the semiotic and cognitive interpretations of phenomena of the fourth order. For example, when researchers offer models of “cognitive processing” and explore “cognitive load” in investigations of translation, we can also develop models of semiotic processing and investigate semiotic load (related to neurological activity).

The development of cognitive science as what I would call a macro-discipline, i.e. as a discipline made out of a number of separate disciplines, is well known and well documented (see e.g. Gardner, 1985, and for a personal perspective by one of the founders, Miller, 2003), as are criticisms (see Edelman’s, 1992, early critique of the computational view of the brain). I would just add a reminder of Whorf’s (1956) much earlier contributions from the 1930s and 1940s, which are of fundamental importance in explorations of translation (see also Grace, 1981). So since cognitive science is well documented, I will focus on a complementary angle of approach to fourth-order systems—social semiotics.

Table 29.1 Properties and organizational features of the four orders of system (modes of study in italics)

<table>
<thead>
<tr>
<th>Systemic order</th>
<th>Properties</th>
<th>Translation</th>
<th>Translator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical first order: physical</td>
<td>subject to “laws of nature”, extended in space-time</td>
<td>translation in (physical) workspace</td>
<td>translator in habitat—affordances of workspace</td>
</tr>
<tr>
<td>Biological second order: biological</td>
<td>individuation, self-replication, evolution, natural selection</td>
<td>translation as neural activity (in the first instance) related to sensory and motor systems</td>
<td>translator as biological organism—eye tracking, keystroke logging, brain scanning</td>
</tr>
<tr>
<td>Social third order: social</td>
<td>role networked systems</td>
<td>translation as social behaviour—(professional) service—questionnaires, ethnographic interviews, focus groups</td>
<td>translator as professional person—questionnaires, ethnographic interviews, focus groups</td>
</tr>
<tr>
<td>Semiotic fourth order: semiotic</td>
<td>stratified systems: content—expression</td>
<td>translation as recreation of meaning in context—text (discourse) analysis, descriptions of multilingual meaning potentials</td>
<td>translator as multilingual meaner—think-aloud protocols (a kind of meta-discourse about translation choices)</td>
</tr>
</tbody>
</table>
While early cognitive science was being developed in the US, M. A. K. Halliday was working along very different lines, originally in Europe and then in Australia. He was busy creating SFL, starting in the 1950s and taking off in the 1960s, drawing on the British linguistic tradition known variously as Firthian linguistics, system-structure theory and prosodic analysis, and also referring to other functional traditions (including the Prague School, noted for its contributions to Translation Studies) and to his experience studying with Wang Li in China in the late 1940s. Like J. R. Firth, his British teacher, Halliday included social systems in his account of language, drawing on social sciences, initially in particular on Bronislaw Malinowski’s functional-contextual theory. This is important, since Malinowski had addressed the problem of translating Kiriwinan texts in their contexts into English, starting with his fieldwork in the Trobriand Islands in the 1910s (see Steiner, 2005; 2015, and Macdonald, this volume).

Halliday himself made some early contributions to the study and computational modelling of translation based on the theory that was later to emerge as systemic functional theory—scale and category theory (see Halliday, 1956, 1962; Halliday et al., 1964); and, using the same early framework, Catford (1965) published a short monograph on translation.

As SFL was developing in the 1960s, cognitive science began to take shape, one aspect of which was the emergence of psycholinguistics as a clearly recognizable branch within linguistics. In Halliday’s view, there were two problems here in relation to his development of SFL: (1) social systems were almost entirely left out in the development of “mainstream” linguistic theories, and (2) cognitive claims about language were not grounded in empirical studies of the brain (cf. Halliday, 1995). He needed a much more holistic conception of language in context, and referring to continental European semiotics, he introduced the notion of social semiotics as a way of framing the study of language and also of other systems of meaning—semiotic systems, taking the term “social semiotics” from Greimas. A number of publications by him in this area.

![Figure 29.2 Interpretation of fourth-order systems—as systems of knowledge, cognitive systems, or as systems of meaning, semiotic systems](image-url)
were collected and published as Halliday (1978), *Language as social semiotic* (LASS), which turned out to have a huge impact.

LASS foregrounded “the social interpretation of language and meaning”, and with it Halliday had not only provided the foundation for *Social Semiotics*, which became an increasingly active area of investigation, paved the way for multimodal studies, and took on a life of its own (see Kress & Hodge, 1988; Maagerø & Andersen, 2015; van Leeuwen, 2005). LASS also constituted the beginning of an alternative to cognitive science—an approach where fourth-order phenomena are interpreted semiotically as meaning rather than cognitively as knowledge.

Building on our joint work in the 1980s, Halliday and I began to articulate this line of theorizing more clearly in the 1990s, partly in the context of our work on the modelling of meaning in computational linguistics, more specifically in work on text generation by computer (which later also became relevant in work on multilingual text generation and on machine translation: Halliday & Matthiessen, 1999), but also more generally as part of positing and exploration of the ordered typology of systems presented in Figure 29.1: Halliday (1996; 2005), Matthiessen (2007, forthcoming).

In Halliday and Matthiessen (1999), we emphasized that we conceived of knowledge and meaning as interpretations of fourth-order phenomena as complementary interpretations rather than as competing alternatives. But the semiotic interpretation of phenomena of this highest order of complexity enables us to bring out features of such phenomena that are arguably not foregrounded in cognitive interpretations (or only with an effort, as when “mainstream” cognitive scientists encountered Vygotsky’s work in the 1930s; see Byrnes, 2006).

For the study of translation, the ordered typology of systems (Figure 29.1) is fundamental, since it makes it possible to identify precursors to semiotic systems that are social systems with the added feature of “meaning”; these precursors are *bio-semiotic systems* (Halliday & Matthiessen, 1999)—more specifically, sensory systems for construing our experience of the world as neural models and motor systems for enacting our intentions as muscular activities. Thus, we can compare the “translation” of visual images into meaning in bio-semiotic systems to translation between texts in two or more languages.

But there are also more specific advantages that follow from adopting the interpretation of fourth-order systems as systems of meaning rather than as systems of knowledge (Halliday & Matthiessen, 1999):

• explanation of the co-evolution of language and the brain (see e.g. Deacon, 1992, 1997; Halliday, 1995);
• understanding of the empowering role of language in individual development (e.g. Halliday, 2003a; Painter, 1999);
• addition of the interpersonal—the exchange of meaning, and so of the collective meaning potential;
• integration of language and culture both as systems of meaning, as semiotic systems, related to one another in explicit terms;
• the interpretation of individual and community multilingualism by reference to a multilingual meaning potential (Bateman et al., 1999; Matthiessen, 2018);
• and, at a more practical level, the extensive coverage of the description of fourth-order systems as semiotic systems.

While all are relevant to translation, the last four points have the most immediate impact, and the last point has significant implications for training translators by empowering them to use linguistic tools and in terms of undertaking Translation Studies equipped by comprehensive descriptions of
the languages in their contexts of cultures that are in focus. (Naturally, the focus on interpersonal considerations is crucial in particular for engagement with interpreting and interpreting studies.)

29.3 Translation as a semiotic phenomenon, construed systemic-functionally

29.3.1 Translation as semiotic order of systems: The recreation of meaning in context

Adopting the semiotic interpretation of fourth-order systems as a complement to cognitive ones, we can say that translation is the recreation of meaning in context (see Matthiessen, 2001); we can call this remeaning (alongside rewording and rewriting). This process presupposes a multilingual meaning potential (see Bateman et al., 1999; Matthiessen, 2018)—a potential that represents the meaning-making resources of the two or more languages that any translator must have mastered in order to be able to translate effectively in such a way that each language has its own integrity but is at the same time related to the other languages so as to support not only multilingual semiosis, such as translating and interpreting, but also code-switching and code-mixing.

The translator interprets the patterns of meaning in the source-language text in its context, making choices in the source-language meaning potential, and recreates these meanings by producing a text in the target language, making choices in the target-language meaning potential. Thus, central to the process of translation is choice—choice in meaning, as explored by e.g. Halliday (2013) and Matthiessen (2014); the recreation of meaning in contexts involves choices being made among options in the translator’s multilingual meaning potential. These choices are, naturally, informed by contextual considerations (as well as considerations from below, i.e. lexicogrammar in the first instance); and they are probabilistic in nature (see Halliday, 1993; Matthiessen, 2015a; Toury, 2004) and thus need to be investigated in terms of corpora, as in Hansen-Schirra et al. (2012).

29.3.2 Examples of systemic functional studies of translation

The understanding of translation as the recreation of meaning in context is central to the systemic functional approach to translation as a phenomenon and also to the study of this phenomenon, i.e. to Translation Studies; but all aspects of the holistic systemic functional theory of language in contexts are relevant to the engagement with translation—that is, all aspects of the architecture of language in context. To bring this point out, I have given some examples of aspects of SFL that have been applied in Translation Studies in Table 29.2 (although not including the growing number of contributions written in a number of languages other than English, especially in Chinese).

I will focus on some key aspects of the SFL architecture of language, indicating their significance in relation to translation. I will be concerned with the semiotic order of systems, noting that I have already indicated that in SFL all four orders of systems operating in different phenomenal realms are relevant to the study of translation, as summarized in Table 29.1, and to the theorization of translators as “multi-layered” individuals (Figure 29.1).

29.3.3 Language in context organized multidimensionally

Language in context is organized in terms of a number of semiotic dimensions, each of which is the domain of a unique type of relation. It is modelled theoretically as a vast multidimensional
network of relations, and all semiotic phenomena are defined in terms of the relations that they enter into—they are not things in themselves but, rather, nodes in networks of relations. This relational conception of language in context goes back to the 1960s, and it is entirely resonant with the general network science that has emerged in the last couple of decades since then (see Figure 29.1); see e.g. Barabási (2016). Translators operate in terms of multilingual multidimensional networks; in fact, being a multilingual speaker means having developed additional relational links, and becoming a translator means gradually growing further links.

The overall organization of language is determined by global semiotic dimensions—that is, the hierarchy of stratification, the cline of instantiation and the spectrum of metafunction; and the hierarchy of stratification organizes language in context into a number of sub-systems, each of which is organized in terms of local semiotic dimensions—that is, the hierarchies of axis and/or rank:

**global semiotic dimensions**

the hierarchy of stratification: the organization of language in context into an ordered series of sub-systems, that is, context—language, and within language: content (semantics—lexicogrammar)—expression (phonology—phonetics, or graphology—graphetics, or the two analogous expression strata in sign languages of deaf communities).

the cline of instantiation: the extension of language in context along a continuum from the potential pole (the meaning potential of a language operating in the context of culture

| Table 29.2 Aspects of SFL that have been applied in Translation Studies |
|--------------------------|---------------------------------------------------------------------------------------------------|
| **Aspect of SFL**        | **Applied to Translation Studies**                                                                 |
| all dimensions: SFL as resource in Translation Studies | Catford (1965) (pre-SFL); Wang & Ma (in press)                                                      |
| nature of translated vs. original texts | Teich (2003)                                                                                     |
| stratification:          |                                                                                                   |
| contextualism            | Steiner (2005, 2015); Matthiessen (2001)                                                          |
| instantiation:           |                                                                                                   |
| register variation (functional variation in context) | Teich (1999); Lavid (2000); Murcia-Bielsa (2000); Steiner (2004); Hansen-Schirra et al. (2012) |
| particular registers, e.g. poetry and drama process and product | Wang and Ma (forthcoming); Ma and Wang (forthcoming); Macdonald (2019, this volume) |
| metatfunction:           |                                                                                                   |
| all metatfunctions (in relation to equivalence and shift) | Matthiessen (2014a)                                                                             |
| textual                  |                                                                                                   |
| experiential             |                                                                                                   |
| interpersonal            |                                                                                                   |
| axis:                    |                                                                                                   |
| systemic (paradigmatic) |                                                                                                   |
| organization: choice     | Halliday (2010); Matthiessen (2014a)                                                              |
| probabilistic choice     |                                                                                                   |
| “level” of translation   | Halliday (1962, 2009); Halliday et al. (1964)                                                     |
(or cultural potential)) to the instance pole (texts unfolding in their contexts of situation), with intermediate patterns that have been identified in the study of language, including Translation Studies, as registers, sub-languages and text types.

_the spectrum of metafunction:_ the diversification of meaning into a range of different modes within context and the content plane of language, that is, field—ideational meaning (the construal of experience as meaning) / tenor—interpersonal meaning (the enactment of roles, relations and values as meaning) / mode—textual meaning (the creation of ideational and interpersonal meaning as a flow of text in context).

**local semiotic dimensions**

_the hierarchy of axis:_ the organization of each stratal sub-system into systems of choice among options (paradigmatic axis) and structures realizing options (syntagmatic axis).

_the hierarchy of rank:_ the organization of each stratal sub-system into an ordered series of domains or units in terms of composition, e.g. in the lexicogrammars of many languages, clause—group—word—morpheme.

Together, these dimensions define what I have called the environments of translation (Matthiessen, 2001). We can formulate this as an ecological principle:

**Ecological Principle:**

the higher the unit that you translate in terms of (i) stratification and (ii) within a given stratum, the more information you will have access to in order to make an informed choice.

Thus, if we translate texts as semantic units in their contexts of situation, we have access to maximal contextual and semantic information as we make choices in translation; but if we translate clauses as grammatical units within the lexicogrammatical stratum, we haven’t got access to semantic information, nor have we got access to contextual information—one reason why Malinowski emphasized the importance of translating texts in their contexts (see Steiner, 2005, 2015).

I will start with the local semiotic dimensions, discussing their implications for the study of translation, and then take a step back to bring the global dimensions into view.

### 29.4 The local semiotic dimensions

The local semiotic dimensions organize a stratal sub-system of language in context; they are the hierarchy of rank and the hierarchy of axis. The hierarchy of rank is like a local hierarchy of stratification except that it is based on the extension of units within each stratum, from most extensive to least extensive, e.g. from clause to group to word to morpheme in many languages (though not all).

#### 29.4.1 The hierarchy of rank (rank scale)

The ecological principle was first established by Halliday in relation to the hierarchy of rank within lexicogrammar: the higher up the rank scale we move when we translate, the more information we have access to, so the more likely it is that the translation will be effective and acceptable (see e.g. Halliday, 1959–60, 1962; Halliday et al., 1964, pp. 126–128, on this “progressive selection”, based on the grammatical scale of rank), illustrated by an example adapted from Halliday (1959–60) showing the progressive approximation in the
translation of a French clause complex into an English one as the translation process moves up the rank scale from word rank to clause rank and the combination of clauses into clause complexes. (The same principle applies as we move from lexicogrammar to semantics, and from semantics to semantics in relation to context; the domain of translation can be expanded from a lexicogrammatical domain, i.e. the clause complex, to a semantic one, i.e. the text, and by another step by text in context.)

In general, translators will translate within the most extensive grammatical domain—that of the clause complex, and also, as already pointed out, ascending from lexicogrammar into semantics—i.e. translators typically focus on meaning rather than wording when they translate, except in special cases such as interlinear glossing.\(^7\)

Staying within the lexicogrammatical stratum, we can thus say that maximally informed choices will be made within maximally extensive domains—in other words, within clause complexes. Using the rank scale, we can also set up a unit- or domain-based framework for studying empirically when translation choices lead to shifts in domain and when they do not, i.e. when the domains remain constant in the course of translation choices: see Table 29.3.

In this matrix, the domains of the source text are set out as column headings, and the domains of the translated text as row headings. If the two languages being investigated are typologically fairly similar, we can expect the defaults to be that the domains remain the same, as indicated by bold in the cells of the matrix.\(^8\) But when we investigate original and translated texts, we certainly find that choices lead to incongruence in domains; domains may be “up-ranked”, such as when a clause is translated by a clause complex, or “down-ranked”, such as when a clause is translated by a phrase.

Within the ranks in Table 29.3, we can further differentiate grammatical classes, e.g. specifying groups as nominal, verbal or adverbial; and this will allow us to compile more detailed information about equivalences and shifts between pairs of languages such as French and English. While such detailed text-based investigations have perhaps not been a major focus in studies of texts.
translated by human translators, such detail has been essential in the development of machine translation systems, a classic contribution being Dorr (1994).

Text-based empirical investigations will continue to tell us more about similarities and differences between pairs, or sets, of languages. Some grammatical areas seem to be more likely than others to vary across languages. For example, while all languages almost certainly have a system of polarity ("positive"/"negative"), and "negative" is probably always the marked option, in that it is the one needing a special marker and in that the probability of it being chosen over "positive" is 0.1 vs. 0.9 (see Halliday & James, 1993; Toury, 2004), it turns out that the realizations of "negative" are quite varied around the languages of the world in terms of rank and primary class within a given rank: see Matthiessen (2004).

29.4.2 The hierarchy of axis

The reference to polarity immediately above serves as an introduction to the other semiotic dimension that is local to the organization of a stratal sub-system of language in context: the hierarchy of axis. The differentiation in linguistics, drawing on the insights from major linguists in the European tradition from the first half of the 20th century (including Saussure, Mathesius, Firth and Hjelmslev), between the two axes of organization in language—the paradigmatic axis and the syntagmatic one—has been widely accepted in the study of various linguistic phenomena, including translation. But thanks to Halliday’s work in the 1960s (see Halliday, 1966; Matthiessen, 2015b, for a review), SFL has become unique in positing the paradigmatic axis as primary and the syntagmatic axis as “derived” from it by means of realization statements.

Treating the paradigmatic axis as primary foregrounds choice among options in meaning and follows from Halliday’s conception of language as a resource for making meaning. This is obviously absolutely central to the conception and study of translation (see Halliday, 2013; Matthiessen, 2014): translated texts are the “product” of innumerable choices, and the process of translation is a process of making innumerable choices. Translating text is primarily a matter of choosing among the options of the source-language meaning potential and those of the target language.

One of the consequences of making the paradigmatic axis primary is that it becomes possible to differentiate paradigmatic similarities and differences among languages from syntagmatic ones. As far as translators are concerned, it is the choice that is important (see Halliday, 2010, on “pinpointing the choice” in translation); the syntagmatic marker is simply an automatic realization.

The translated text may thus be syntagmatically different—there is, as it were, a shift in syntagmatic realization; but paradigmatically it will be “equivalent”. However, differences that emerge in the course of translation are, obviously, very often systemic; translators diverge in the choices they make within the meaning potential of the language that they translate into, which may, of course, happen even when the systems of the two languages appear to be similar at that point, as in the systems of mood in different languages explored by e.g. Teich (1999), Murcia-Bielsa (2000) and Lavid (2000), who identified registerial differences among languages in the deployment of the system of mood. For another illustration, involving the systems of modality in English and German, see Matthiessen (2014).

One interesting finding coming out of systemic analyses of translations is that the more translations of the same source texts are produced, the more of the meaning potential of the target language is revealed. Different translators often make systemically related choices as they recreate the source-text meanings in the target language, but as we examine an increasing number of
translations, we are likely to find a greater range of related choices. (Of course, this principle also applies to the translators’ choices in the analysis and interpretation of the source text.)

Unless scholars undertake research projects where multiple translators are asked to translate one source text, multiple translations of the same text tend to be limited to texts that are highly valued in a given culture—certainly in the “target culture”; and this tends to happen with texts regarded as socio-politically important, sacred or belonging to high literature. As an illustration of this phenomenon (which is certainly well known but not usually construed in systemic functional terms), see my discussion of multiple translations of Charles Baudelaire’s poem *L’Albatros* in Matthiessen (2014).

### 29.5 The global semiotic dimensions

The global semiotic dimensions organize the overall system of language in context; and, importantly, they also define the interfaces between language and other (denotative) semiotic systems and, by another step, between language and systems of lower phenomenal orders (see Figure 29.1).

#### 29.5.1 The hierarchy of stratification

The hierarchy of stratification is central to translation because it can be used to specify the location of translation: as a process of recreating meaning in context, translation is located within the content plane of language operating within context. Stratification is, in a sense, the rank scale writ large, except that while the rank scale is based on the relation of composition (e.g. clauses are composed of groups, groups are composed of words, and words are composed of morphemes), the hierarchy of stratification is based on the more abstract relation of realization (e.g. meanings are realized by wordings, within the content plane of language).

The hierarchy of stratification orders strata (stratal sub-systems) of language in context from the stratum of context to that stratum that provides the interface to the material manifestation of meaning, which in the case of language is phonetics, graphetics or sign. Language is, of course, both the prototypical human semiotic and the most powerful one, and it is typically the focus of translation (allowing inter-semiotic types of translation; cf. Jakobson, 1959 (“intersemiotic translation or transmutation”); Matthiessen, 2001); but language operates in context together with other semiotic systems, such as gesture and other somatic semiotic systems in the case of spoken language and pictorial systems in the case of written language. Context provides the semiotic environment for all such denotative semiotic systems, and serves to determine the division of semiotic labour among them and coordinate them so that they complement one another in the making of meaning. This is highly relevant to types of translation involving technologically enabled channels of meaning making such as subtitling, and is related to multimodal studies informed by SFL (see e.g. Taylor, 2003, 2013).

Prototypically, translation is a semantic process—one that always references the stratum immediately above, i.e. context. There are certain exceptions (see Figure 29.3), including inter-linear glossing, mentioned earlier. This is still within the content plane of language (semantics—lexicogrammar), but if translation is broadened to include transliteration, then this would be “translation” within the expression plane (in this case, graphology—graphetics).

Once we introduce the consideration of the global semiotic dimension of organization of stratification, we can construe the traditional distinction between “literal” and “free” translation as a cline whose outer poles are low-ranking translation within lexicogrammar to translation within semantics in reference to context—or even, by another step, translation focusing not on
text per se but, rather, on comparable contexts of situation that may require quite different types of text (see Steiner, 2004) or even different (mixtures of) semiotic systems.

But here I need to take one step further in order to clarify the implications of characterizing translation as the “recreation of meaning in context”. As I have noted, this implicates the semantic stratum within the content plane of language. However, once we recognize that context is in fact also a system of meaning, as explained by Halliday (1978), we can begin to explore the differentiation between translation focused on meaning within semantics operating in context and translation focused on meaning within context, i.e. focused on cultural meanings.

Translation is usually of the first kind, i.e. focused on meaning within semantics operating in context; but the focus of translation may be located within context in the first instance rather than within semantics. This means that as long as translators recreate the contextual meanings, there may be significant divergence in the semantics of the “translated” text. One obvious example is advertising (see e.g. Steiner, 2004). Here, translators may serve as mediators between two different contexts of culture, as also in Bible translation (see Nida, 2001). The focus on context will inform the semantic choices they make, even if there is a considerable shift from the meaning of the original text (see Anwyl et al., 1991); and here investigations of comparable texts are very helpful (see Abelen et al., 1993).

### 29.5.2 The cline of instantiation

While the global dimension of stratification is a hierarchy ordering sub-systems of language from the most “abstract” (context) to the ones that interface with the human body most directly (phonetics or graphetics), the cline of instantiation is a continuum—one extended from the overall meaning potential of a language to acts of meaning instantiating this potential as texts unfold in their contexts of situation. In 20th-century linguistics, this continuum has usually been misconstrued as a dichotomy, like the Saussurean dichotomy of langue and parole and the original Chomskyan dichotomy of competence and performance.9
But what has been conceptualized as a dichotomy is, in fact, a cline or continuum, as shown by Halliday—a cline that is one of the global dimensions of the organization of language in context; this is the cline of instantiation (see Halliday, 2002, 2003b; Matthiessen, 2007, 2019). The outer poles of this cline are the potential pole and the instance pole. In the case of language, these are the meaning potential of a given language and the texts instantiating this meaning potential. Intermediate between these two poles, there are patterns of variation in instantiation. Looked at from the potential pole, these are sub-potentials or registers (characterized as “sub-languages” in the work on machine translation, e.g. Kittredge & Lehrberger, 1982); looked at from the instance pole, they are text types.

In the engagement with, and study of, translation, the cline of instantiation is of central importance for two related reasons.

First, translators translate texts located at the instance pole of the cline of instantiation; they recreate patterns of meaning in the source text as patterns of meaning in the target text. This process of recreation is thus (among other things) a process of reinstatiation, and since it involves movement up and down the cline of instantiation, it is, of course, a phased one: translators begin to translate, keep translating and stop translating once done. As researchers, we can study the different phases. Traditionally, the focus has been on the initial and final phases—on the source text as a “product” and on the translated text as a “product”;11 they can be explored using the tools and techniques of text analysis (including both “discourse analysis” and “corpus analysis”). But thanks to theoretical and, importantly, technological developments, it has become increasingly possible to investigate and shed light on the process of translating, the move in instantiation from source to target: see Jakobsen (2014, 2017), Saldanha and O’Brien (2014, Ch. 4) and see also Alves (2003).

The technological developments have enabled researchers to study translation as process in particular “from below” in terms of the ordered typology of systems presented earlier (see Figure 29.1 and Table 29.1). That is, the translation process can now be studied as a material phenomenon by tracking eye movements, logging keystrokes and even scanning the brain in action. One fascinating challenge is to relate the findings shedding light on translation as a material process to interpretations of translation as process within the semiotic order of systems. Theoretically, it has long been known in SFL that texts unfolding in their contexts of situation can be modelled as ongoing choices in the system networks that represent the potential or one or other sub-potential of a language (see Halliday, 1977; Matthiessen, 2002).

There have also been advances in the development of computational models of the process of instantiation, in particular in text generation (see Matthiessen & Bateman, 1991; Patten, 1988; Teich, 2009). But a great deal of work remains to be done in order to enable us to model and study semiotic processes of instantiation in relation to the significant findings “from below”, from observations of translation as a material process. In particular, we need more work on the computational modelling—or at least pre-modelling—of translation, and the computational models must be interpreted theoretically as a step towards incorporating semiotic processes in the overall theory of language in context. Still, we can be guided by important findings from the work on text generation, including the in-principle demonstration that the unfolding of text can be interpreted as massively parallel (see Matthiessen et al., 1988; Matthiessen & Bateman, 1991). This is important partly because it enables us to explore competing motivations that translators must entertain as they make choices in the course of translation, e.g. trying to optimize the combination of distinct metafunctional considerations.

Secondly, when translators translate texts, they obviously have to refer to the source-language meaning potential instantiated by the source text and to the target-language meaning potential instantiated as they make choices from it to generate the target text. This means that they move
from the instants pole of the cline of instantiation towards the potential pole, and from the potential pole to the instants pole. But how far up the cline of instantiation towards the potential pole do they move? This will depend on the extent to which they can stay within certain source and target registers (sub-potentials).

When they are translating texts that instantiate conventional registers, they can access the registerial “routines” instead of moving all the way up to the overall meaning potentials, even undertaking some degree of automated preparatory translation. In fact, this was, of course, the discovery made within the machine translation community in the second half of the 1970s—that automatic translation would be more effective if the MT systems could be “tuned” to particular registers, or “sub-languages” as they came to be called in computational linguistics, such as weather forecasts or stock market reports (see e.g. Kittredge & Lehrberger, 1982).

Viewed in terms of work on problem solving within AI, registers can be interpreted as “pre-compiled” solutions that have evolved to address recurrent problems (see Matthiessen, 1993; Patten, 1988). In fact, translators need such registerial adaptations embodied, because registers will differ from one language to another—as shown in SFL by e.g. Teich (1999), Lavid (2000), Murcia-Bielsa (2000), and Steiner (2004).

29.5.3 Stratification × instantiation

By intersecting stratification and instantiation, we can examine particular registers located mid-region along the cline of instantiation and view them stratically from the point of view of context (“from above”), from the point of view of semantics—the semantic strategies that constitute a given register (“from roundabout”), and from the point of view of lexicogrammar—the patterns for wording realizing the semantic strategies (“from below”). In this way, we can study comparable registers in two or more languages, drawing on parallel or comparable texts instantiating these registers.

When we examine the systems of the languages involved at the potential pole of the cline of instantiation, they may appear quite similar up to a certain point (in delicacy); but when we move down the cline of instantiation to study registerial sub-systems, we may find that there are significant differences in the way that languages have adapted to comparable contextual goals in their registers.

29.5.4 Metafunction

Metafunction is organized as a spectrum of different modes of meaning—the metafunctions that organize the content plane of language. The metafunctions organize the systems of the content plane into simultaneous strands, and they correlate with different parameters within context:

The ideational metafunction provides the resources for construing our experience of the world, organized either logically into chains of related units or experientially into configurations within units. It resonates with the field parameter within context—what’s going on in the context (in terms of the field of activity, the field of experience being created by or accompanying this activity).

The interpersonal metafunction provides the resources for enacting our roles and relations in the engagement with each other. It resonates with the tenor parameter within context— who are taking part in what’s going on (in terms of their roles and relations and value systems).
The textual metafunction provides the resources for encapsulating ideational and interpersonal meanings as a flow of information unfolding as text in context, providing speakers with the strategies for enabling their listeners in the processing of text, and listeners with the strategies for interpreting text according to the guidance they are provided with. It resonates with the mode parameter within context—the role that language is playing within the context in which text unfolds (along with other semiotic systems, and also social systems).

As translators recreate meaning in the course of translation, all three modes of meaning are in principle equally important for them to pay attention to. However, there seems to be a tendency for translators to focus more on ideational meaning than on interpersonal and textual meaning, and arguably more on interpersonal meaning than on textual meaning (see Kim & Matthiessen, 2015). In other words, translators would seem to tend to prioritize ideational equivalence over interpersonal and textual equivalence; and if this generalization is on the right track, we can expect to find more interpersonal and textual translation shifts than ideational ones. But this may depend on register (see Steiner, 2004).

We can frame translation shifts (and equivalences) in terms of the metafunctions. To do this, we can use a matrix analogous to the one designed for the study of rank-based translation shifts in Table 29.3: see Table 29.4. Here the metafunctions of the source language are set out as

<table>
<thead>
<tr>
<th>From source text</th>
<th>Ideational: logical</th>
<th>Ideational: experiential</th>
<th>Interpersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textual</td>
<td>textual &gt; textual: e.g. thematic shift</td>
<td>logical &gt; textual: e.g. complex to cohesive sequence</td>
<td>interpersonal &gt; logical: e.g. mood or modality represented by verbal or mental clause in clause complex of projection</td>
</tr>
<tr>
<td>ideational: logical</td>
<td>textual &gt; logical: e.g. cohesive sequence to complex</td>
<td>logical &gt; logical: e.g. tactic shift</td>
<td>interpersonal</td>
</tr>
<tr>
<td>ideational: experiential</td>
<td>logical &gt; experiential: e.g. clause (in complex) &gt; phrase (as circumstance)</td>
<td>experiential &gt; experiential: e.g. process-type shift</td>
<td>interpersonal</td>
</tr>
<tr>
<td>interpersonal</td>
<td>interpersonal &gt; interpersonal: e.g. mood type shift</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 29.4 Translation shifts characterized in terms of metafunction
column headings and the metafunctions of the target language as row headings. I have separated
the two modes of construing experience within the ideational metafunction—the logical and
the experiential modes, since I have found over the years that interesting shifts often take place
between them, one key reason being that languages vary in how they deploy these two comple-
mentary modes of construing experience (see Matthiessen, 2004, 2015c).

In the matrix set out in Table 29.4, the diagonal from top left to bottom right represents
choices where translators have stayed within the same metafunction. This does not mean that
the original and translated versions are equivalent; they may be (to the extent that equivalence is
possible for the two or more languages being compared), but they need not be—the shifts may
be internal to the relevant metafunction. The cells located outside this diagonal all represent shifts
where translators make choices that involve changes in metafunction.

The matrix is used in the interpretation of translation shifts (see Matthiessen, 2014); but
many more corpus-based studies ranging over a significantly larger number of language pairs are
needed to show what shifts are common. Tentatively, shifts between the logical and the textual
ways of indicative rhetorical relations are fairly common, and similarly, shifts between the logical
and the experiential modes of construing experience are fairly common (predictably; see Grace,
1981; Halliday & Matthiessen, 1999, Ch. 7; Matthiessen, 2004). But what about shifts between
the interpersonal metafunction and the other metafunctions? They may be less likely, but they
do occur—at least in cases involving grammatical metaphor of the interpersonal kind, where the
ideational metafunction may be “co-opted” in one language but not in another (see Halliday &
Matthiessen, 2014, Ch. 10).

Even where there are translation shifts, they usually appear within one and the same
metafunction; and, as noted earlier, it would seem that translators are least aware of textual
systems, so it is quite possible that they make “uninformed” choices within textual systems (see

29.6 Translation choices

29.6.1 Translation choices to recreate meaning

Choices in the recreation of meanings turn out to be the central phenomenon (within the semi-
otic order of systems). Translators have to make choices as they interpret the source text as an
instance of the meaning potential of the source language “embedded” in its cultural potential,
and they have to make choices as they generate the “target” text as an instance of the meaning
potential of the “target” language embedded in its cultural potential.

So we can investigate these choices, identifying the shifts that translators make—keeping in
mind that the limiting case of shift is simply “equivalence” (and that equivalence is always rela-
tive to the multilingual meaning potential that translators have mastered—which, as translation
researchers, we must describe).

29.6.2 Translation choices leading to shifts

By adopting a multidimensional theory of the architecture of language along the lines of SFL,
we can systematically intersect the dimensions of the languages involved, to locate translation
choices and to characterize the patterns of shifts and equivalences that we find. I have used two
dimensions to illustrate this method of investigation: the hierarchy of rank (rank scale), set out
in Table 29.3; and the spectrum of metafunction, set out in Table 29.4. But we can extend this
approach to other semiotic dimensions. For example, we can investigate translation shifts in
reference to axis (paradigmatic—syntagmatic), and within the paradigmatic axis in reference to the cline of delicacy (cf. Matthiessen et al., forthcoming). In this way, our exploration of translation shifts is empowered by our linguistic theory descriptions.

By tracking translation shifts, we can identify those shifts that appear to involve explicitation (e.g. Teich, 2003). Such shifts are likely to include those involving upgrading in terms of rank, i.e. those where the translated unit is of a higher rank than that of the unit in the source text (e.g. group > phrase, phrase > clause in Table 29.3); but they are also likely to include certain metafunctional shifts, such as when “implicit” orientation within the interpersonal metafunction is translated as “explicit” orientation by means of clause complexes of projection (see Table 29.4). And when translators “unpack” grammatical metaphors in the source text as part of the recreation of meaning in the target language, they are likely to make choices that involve shifts in terms of both rank and metafunction.

29.6.3 Semantic choices: Problem solving

Translation choices are semantic choices in context in the first instance. Lexicogrammatical ones will, in principle, follow automatically, since choices in meaning are realized by choices in wording; and choices in wording are realized automatically by choices in sounding (phonology) or in writing (graphology). So we can say that as far as content is concerned, lexicogrammatical choices are automatized (see Halliday, 1982); and, by the same token, lexicogrammatical shifts follow automatically from semantic shifts.

However, while translation of texts within fairly restricted registers, or even within less restricted registers that translators have become very familiar with, can be quite straightforward, translation always involves problem solving (see Halliday, 2010: “the basic problem for the translator is the problem of choice”); it is just that when the relevant registers are familiar, translators are likely to have ready-made solutions. When such solutions are not readily available, translators may have to de-automatize lexicogrammatical choices, and more consciously consider the realizational dialectic between semantics and lexicogrammar (and possibly between these two strata and phonology, as in the translation of poetry).

29.6.4 Systemic orders of choices

To investigate the way that translators make choices under these different conditions, we can profitably study the translation process in terms of its biological manifestation, logging keystrokes and tracking eye movements. For example, if we have undertaken the huge tasks of developing descriptions of the multilingual meaning potentials and wording potentials of the two or more languages a given translator is working with, we can certainly identify areas where there is such a degree of incongruence between or among the languages that it is very likely that translators will have to go into serious problem-solving mode—for example, the task of translating English existential clauses into German (see Matthiessen, 2001) or the more challenging task of translating choices in the English system of tense as choices in the Chinese system of aspect (see Matthiessen, 2018).

The latter is an area where the fundamentally important work by Christiane von Stutterheim and her colleagues has shed light on the way that the different systems for construing our experience of the flow of events through time influence not only conceptualization but even perception (see Carroll & von Stutterheim, 2011); so it is surely an area that would be fascinating to study “from below”, from the vantage biological point of translators being tracked through keystroke logging, eye tracking or brain scanning.
29.7 Concluding remarks

Here I have explored translation as a *semiotic process*, taking place in the first instance within fourth-order systems in an ordered typology of systems operating in different phenomenal realms (see Figure 29.1). Translation is, fundamentally, the *recreation of meaning*; and our interpretation of it can be informed by systemic functional *theory*—the theory of language as a general human system common to all of us—and informed by systemic functional *descriptions* of particular languages. Outlining the architecture of language according to systemic functional theory, I have deconstructed the conception of translation as the “recreation of meaning in context” in terms of the semiotic dimensions that this architecture is based on. Thus, the process of recreating meaning can be illuminated in terms of all these *semiotic dimensions*:

- **locally:**
  - in terms of the *hierarchy of axis*, the recreation of meaning involves systemic choice (the paradigmatic axis), with structural realizations (the syntagmatic axis) as automatic realizations of the choices being made;
  - in terms of the *rank scale*, the recreation of meaning involves a downward move, from more extensive domains to less extensive ones (context: downwards from context of situation; semantics: downwards from text; lexicogrammar: downwards from clause);

- **globally:**
  - in terms of the *hierarchy of stratification*, the recreation of meaning involves a focus on the stratum of semantics in relation to context in the first instance, with patterns at the lower strata as automated realizations of higher-stratal patterns;
  - in terms of the *cline of instantiation*, the recreation of meaning involves reinstantiation of meaning, including the phases of analysis of the source text and the generation of the translated text;
  - in terms of the *spectrum of metafunction*, the recreation of meaning involves all the metafunctional modes of meaning, although translators will face the challenge not only of taking all of them into account but also of optimizing competing motivations.

By interpreting translation as a semiotic process in the first instance, we are locating this phenomenon in the *ordered typology of systems* operating in different phenomenal realms set out in Figure 29.1. Like other linguistic phenomena—including other *metalinguistic phenomena* concerned with operations on existing texts in context, such as revising (see Bowen, 2019), editing, summarizing and abbreviating, and adapting (say to different groups of readers)—translation is enacted socially (in groups), embodied biologically (in organisms) and ultimately manifested physically. This is, in fact, one of the reasons why there have been a number of “turns” in the approach to and study of translation (see Snell-Hornby, 2010). So we need to investigate it in its various phenomenal “guises”, adopting different vantage points and viewing it in different perspectives (through different “lenses”). This has been a reason for institutionalizing “Translation Studies” as a distinct discipline, one that must engage with a number of distinct disciplines; but this is equally true of all other linguistic phenomena (see Halliday, 1978). As the science of language, linguistics must be in constant interaction with other disciplines that engage with language in some way, as in the hyphenated branches of linguistics such as socio-linguistics, psycholinguistics and neurolinguistics—each of which comes with methods and methodologies also used in other disciplines. Thus, the investigation of translation is no different from the study of any other linguistic—or, indeed, semiotic—phenomena. And if we construe and enact
it as a distinct discipline, we may run the danger of losing connection, on the one hand, with other metalinguistic phenomena and, on the other, with other multilingual phenomena (see Matthiessen et al., 2008).

As areas of research become more mature and more specialized, they are likely to drift apart, their researcher communities becoming insulated from one another and gradually forming quite distinct communities with different programmes, venues of publication, associations and conferences. Observing this tendency, a natural one in the evolution of scientific knowledge, in physical sciences, Bohm (1979) warned against the “fragmentation of knowledge”. Such fragmentation is, in a very real sense, one consequence of Cartesian Analysis—a scientific approach that has been dominant as modern science gradually emerged during the last few centuries; but it will obscure the more holistic understanding that we need to develop (see Capra, 1996). My concern here has been with SFL as a resource for developing a well-rounded understanding of and engagement with translation. It is only by deploying a holistic theory of language such as SFL that we can show the complementarity of, say, eye tracking and brain scanning, social network analysis, text (discourse) analysis, and investigations of contexts of culture.

Notes

1 Acknowledgement: I am very grateful to the two editors, Fabio Alves and Arnt Lykke Jakobsen, not only for inviting me to contribute to this volume in the first place, but also for their patience and generous comments, helping me shorten an overlong manuscript—a task that my colleague and collaborator Wang Bo has also kindly helped me with.

2 The disciplinary trend has arguably been in the opposite direction—that is, the direction of institutionalizing “Translation Studies” as a distinct discipline, going back to James Holmes’ frequently referenced map from the 1970s (e.g. Holmes, 1988; Toury, 1995), and it is important to recognize what this has meant in terms of university programmes, degrees and even department, and also in terms of conferences and publication channels. At the same time, the notion of “Translation Studies” has tended to move away from other relevant linguistic areas of research (such as those mentioned) and even from the highly relevant work on machine translation and arguably also from studies of other metalinguistic phenomena such as editing and summarization. The contribution of linguistics is—or rather should be—to provide a holistic account of all the related phenomena.

3 One among innumerable examples is the stance Jackendoff (1997, pp. 2–3) makes explicit:

What about the abstract and social aspects of language? One can maintain a mentalist stance without simply dismissing them, as Chomsky sometimes seems to. […] The mentalist stance would say, though, that we eventually need to investigate how such properties are spelled out in the brains of language users, so that people can use language. It then becomes a matter of where you want to place your bets methodologically: life is short, you have to decide what to spend your time studying. The bet made by generative linguistics is that there are some important properties of human language that can be effectively studied without taking account of social factors.

4 This was to be addressed much later, one important contribution being Varela et al. (1991).

5 Thus, while the importance of culture has been illuminated in descriptive translation theory, e.g. Toury (1995) (and in polysystem theory), in SFL, language has been theorized as “embedded in” the context of culture from the start (an insight which, of course, goes back to the work by Malinowski, and which was developed within linguistics first by Firth and then by Halliday and other systemic functional linguists).

6 This characterization of translation needs to be interpreted in terms of the architecture of language in context developed within SFL and sketched here. Importantly, it does not involve the transfer metaphor commonly used in definitions and characterizations of translation; the fundamental problems with this metaphor were identified a long time ago by Reddy (1979) in his study of the common conduit metaphor in explorations of language. Compare House’s (2016) characterization of translation: “translation is a text-processing and text-reproducing activity which leads from a source text to a resulting text”.

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Obviously, the notion of the recreation of meaning in context also includes cultural meanings, since culture is interpreted as a (connotative) semiotic system, as outlined by Halliday (1978). The recreation of cultural meanings has, of course, been foregrounded as part of the “cultural turn” in Translation Studies; cf. e.g. Bassnett and Lefevere (1990), Snell-Hornby (2010), Marinetti (2011) and Katan (2009, 2014). Translation has been called “rewriting”; this term is intended to bring out the cultural aspects of translation (e.g. Lefevere, 1992). But the “recreation of meaning in context”, or “remeaning”, serves to locate the process stratally within semantics in context in the first instance, highlighting the semiotic nature of translation as one of meaning.

7 The most widely used being the “Leipzig Glossing Rules”: www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf

8 The situation may be significantly different for languages that are, in terms of certain systems, typologically quite different; for a discussion of English and Kalam, see Halliday & Matthiessen (1999, Ch. 7) and references therein to relevant work in language typology and Translation Studies (including Grace, 1981).

9 Chomsky’s focus on competence as opposed to performance is echoed in further elaborations of the notion of competence—“communicative competence” and also “translator competence”. But the distinction between competence and performance was never accepted in SFL, and it was explicitly rejected by Halliday (1973). See immediately below.

10 When researchers investigate translation as process, there is perhaps a tendency to view it biologically in the first instance—that is, in terms of bodily activities that can be tracked through keystroke logging, eye tracking and even brain scanning. But it is equally a semiotic process—translation as (making) meaning, and, of course, a social one as well—translation as behaviour. As far as translation as a semiotic process is concerned, one constraint has simply been that process models have tended to be developed within computational linguistics rather than linguistics, so they have often not been interpreted within linguistic theory (cf. Matthiessen & Bateman, 1991), although there have been interesting explorations, such as the work on “dynamic syntax”, e.g. Kempson et al. (2001).

11 In their discussion of product-based research in Translation Studies, Saldanha and O’Brien (2014, Ch. 3) focus on translated texts; but it is equally important to investigate the original products: translation can be illuminated by comparing carefully analysed original and translated texts, as e.g. Teich’s (2003) corpus-based study shows.

12 The SFL theory of register and register variation was developed originally in the 1960s, drawing on the notion of context from Malinowski and Firth and generalizing Firth’s notion of restricted languages (see e.g. Halliday, 1978; Halliday et al., 1964). Catford (1965) noted the significance of register in translation, writing e.g. (p. 90):

In translation, the selection of an appropriate register is often important. Here, if the TL has no equivalent register, untranslatability may result. One of the problems of translating scientific texts into certain languages which have recently become National Languages, such as Hindi, is that of finding, or creating, an equivalent scientific register.

Since then, quite a substantial body of work on the significance of register in translation has emerged in SFL; and scholars in other traditions have also emphasized the need to characterize registers in the context of work on translation, often under the heading of “text type”, e.g. Snell-Hornby (1995) and Nord (2005).

13 In SFL, stratification and metafunction are thus treated as separate semiotic dimensions that intersect; but in a number of other approaches they are, as it were, conflated.

14 I’ve written “in principle” because depending on the nature of the context in which registers operate, they may be oriented towards communicative goals that are associated with tenor in the first instance or with field. For example, in contexts where the field of activity is one of promoting goods-&-services, the goals can be characterized primarily in terms of tenor: in promotional registers such as advertisements, writers try to shift the positions of their readers towards greater readiness to purchase a commodity—one type of persuasion. But in contexts where the field of activity is one of expounding knowledge, the goals can be characterized in terms of field of experience in the first instance: for example, in explanations, writers try to produce texts that will enable readers to build new knowledge. Naturally, the translator’s role also varies, depending on the mixture of mediation and reproduction as goals for a given translation.

15 Here it is important to note that in her classic translation textbook, Baker (1992) highlights the textual metafunction (chs. 5 and 6).
Further reading


This chapter provides a brief overview of studies of translation informed by systemic functional linguistics and of the environments of translation, and offers examples from two texts of the study of translations between English and Chinese.


This book presents a language-based approach to “cognition” interpreted as meaning; it provides part of the semiotic foundation upon which the current chapter is based.


This chapter explores choice as a central phenomenon in translation in terms of the different metafunctional modes of meaning.


While published almost two decades ago, this book still contains contributions that are relevant to and have been influential in systemic functional work on translation.


This is a new introductory overview of systemic functional linguistics as a resource in Translation Studies.

References


In A. Baklouti, & L. Fontaine (Eds.), Perspectives from systemic functional linguistics. (Ch. 6, pp. 90–120). London: Routledge. Version with additional figures to be available at www.syflat.tn


