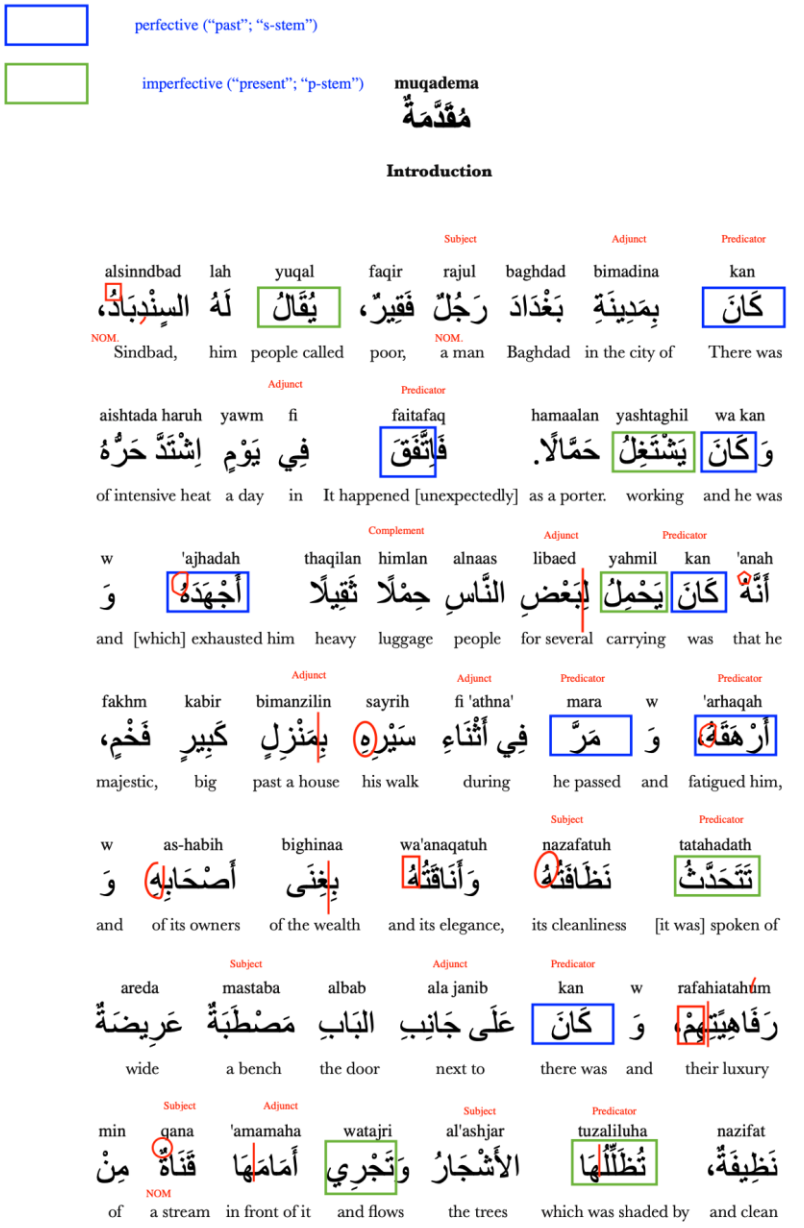
Christian M.I.M. Matthiessen (Part-IV)

Figure 15: Excerpt from a traditional story in Arabic



(Source: *Sindbad the Sailor, three adventures)*

Obviously, in order to provide more substantial evidence, we would need to have a representative corpus with a significant sample of stories, but also of texts from other registers where time plays a central role, as discussed in Section 3.1.2. above. I have added sequential explanations and recipes to stories in Table 8, indicating the default (unmarked) selection of 'perfective' vs. 'imperfective'. In stories, the main event line is construed by 'perfective' clauses, and events expanding on the main event line by 'imperfective' clauses. In sequential explanations and recipes, the default selection is 'imperfective': the steps (operations) in such texts are construed by 'imperfective' clauses.

Table 8: Examples of uses of 'perfective' and 'imperfective' in a few registers in MSA (mode: written & monologic)

Field of activity		**Register**	**Perfective**	**Imperfective**	**Other features**
creating	narrating	Story	**default:** perfective (main event line)	imperfective (expansions, e.g., elaborations)	"anteriorizing" use of كان *ka:na*
expounding	explaining	sequential explanation		**default:** imperfective (successive steps in explanation)	
enabling	instructing	procedure: recipe		**default:** imperfective (successive steps in procedure)	VOICE: passive (non-agentive)

The kind of approach illustrated by the sketch in Table 8 thus identifies **uses** of the temporal forms characteristic of different registers. This is a good ***heuristic*** method — i.e. identifying such uses systematically in different registers, while also noting their grammatical systemic environment (the view from "roundabout", e.g. 'free' clauses vs. 'bound' clauses that expand on such clauses, as in the case of temporal and conditional hypotactically dependent clauses).

The identification of **ranges of uses for different descriptive categories** is in fact the method deployed by Bybee, Perkins & Pagliuca (1994, 44) in their study of the evolution of tense, aspect and modality in different languages. Having set aside the approach

of identifying a single abstract meaning for a given grammatical category[41], they write:

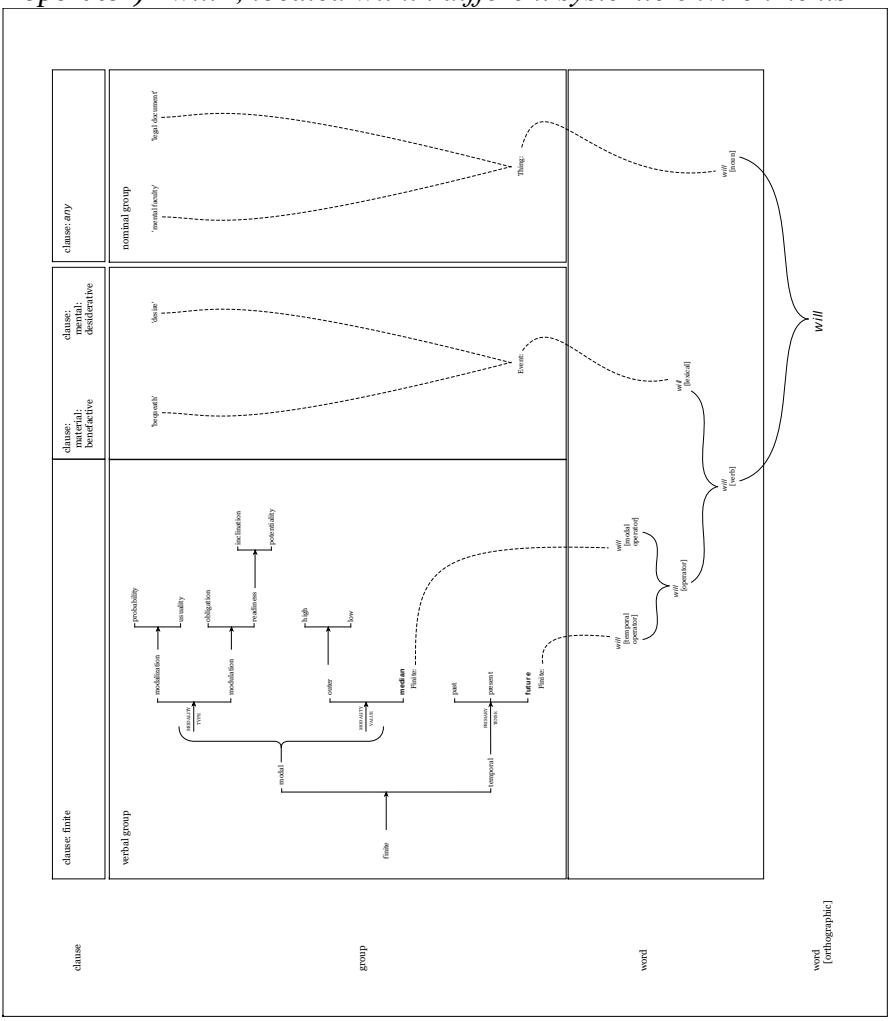
> Rather, it is more practical for our purposes to follow Anderson 1982, who treats grammatical morphemes as covering one or more "uses" or functions. This approach is practical because apparently both linguists and native speakers find the different uses of a morpheme to be fairly accessible. Opening almost any reference grammar, one finds the author enumerating the "uses" of particular morphemes. Columbo and Flores D'Arcais 1984 have shown that native speakers can distinguish different uses of Dutch prepositions and rank them for degree of relatedness. (Bybee, Perkins & Pagliuca 1994, 44)

This represents the approach "from below" that is characteristic of traditional grammars: having identified different variants of morphemes / words, grammarians ask what their uses are, thus pushing upwards in the grammar (in terms of rank). In a systemic functional description, different uses may of course be located in different systemic environments according to their agnation patterns. For example, moving in from below, we can identify temporal and modal uses of the grammatical verb (auxiliary) *will*, and when we describe these uses, they will be located within different systems at higher ranks — the systems of primary TENSE and of MODALITY, respectively. For example, temporal *will* is agnate with *is going to* but modal *will* is agnate with *probably*, *is willing to* and so on: see Figure 16. Similarly, in MSA, there is a temporal use but also a modal use of the particle دقـ *qad*: with the 'perfective' it has a

[41] This can again be interpreted in terms of Halliday's trinocular vision: when linguists view an item or a category "from below", typically from the vantage point of word rank, they may try to identify a basic or core meaning. However, if we view it at a higher rank (or stratum), we can observe the systemic environments in which it is "used" in realization statements associated with terms in systems (the view from "roundabout"), or the different significations of these uses (the view "from above"). Here Hasan's (1985) discussion of the complementarity of *signifiant* and *valeur* is relevant.

temporal use, but with the 'imperfective' it has a modal use[42], as is specified in Table 9.

Figure 16: Different "uses" of the grammatical verb (auxiliary, operator) "will", located within different systemic environments



[42] One possibility is that the 'temporal' sense is experiential but the 'modal' sense is interpersonal. Alternatively, we could explore the possibility that the 'temporal' sense relates to interpersonal expectation as to time, glossed in English as 'finally', 'already' and similar adverbs that in English serve as mood Adjuncts (Halliday & Matthiessen 2014, 187-189).

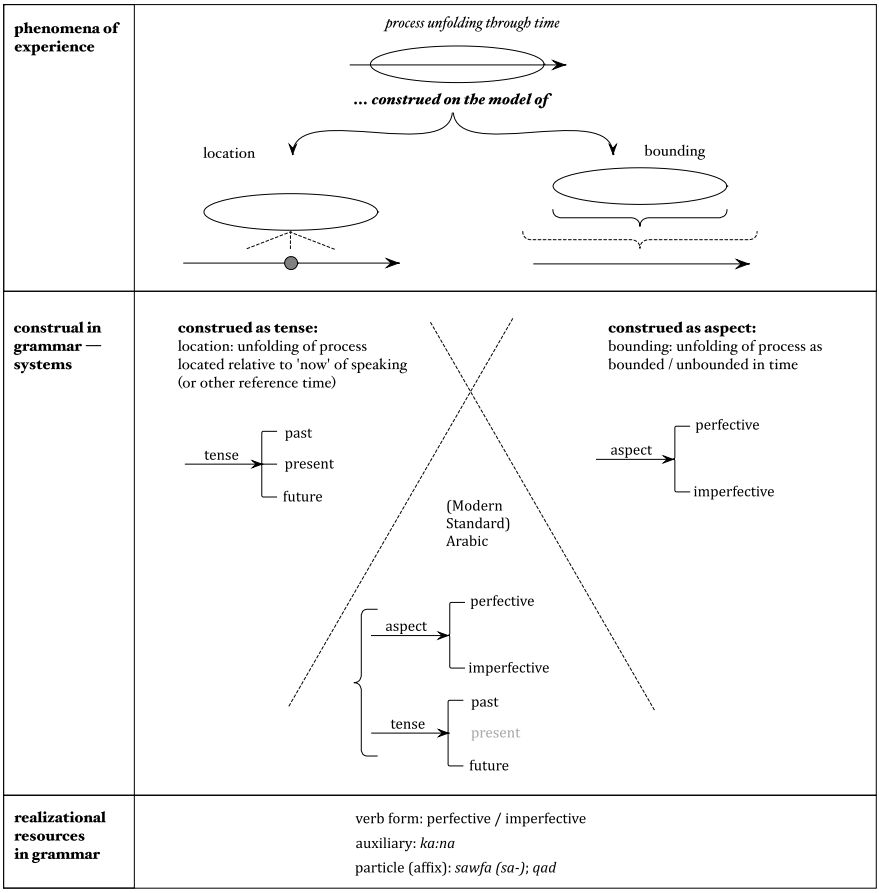
Table 9: Aspect and tense in Modern Standard Arabic, based on Holes (1995) & Ryding (2005)

Aspect	**Use**	**Tense markers**		
	Holes (1995, 177-178)	**verb**	**particle**	
		كَانَ *ka:na* [negative: *lam yakun*]	قد *qad*	سـ *sa-*, سوف *sawfa*
perfective	• in all conditional clauses • with 'mental' processes: "the [perfective] of verbs of emotion and cognition is often used with little or no implication of pastness" • with 'verbal' processes: "performative verbs like *wa:faqa* 'to agree' and *qabila* 'to accept' are also commonly used in the [perfective]" • in optatives	temporal: anteriority (relative past)	temporal: (proximate) past ['indeed', 'already', 'really'; Ryding 2005, 450]	——
imperfective	• "to describe general, timeless truths" • to describe "habits and other iterative, non-punctual processes, past or present" • "duratives" • "circumstantial clauses" • "statements about the future (with the optional future particle *sa-* or *sawfa*)" • "subordinate noun clauses ([subjunctive]) in which the action expressed by the dependent verb is in the realm of the notional, possible, or desirable, not the factual"	temporal: anteriority (relative past) ["past progressive", Ryding 2005, 446]	modal: possibility ['may', 'might', 'perhaps'; Ryding 2005, 450]	temporal: future

In Table 9, I have summarized observations by Holes (1995) and Ryding (2005) about the uses of the 'perfective' / 'imperfective' verb forms, and also of tense markers. As we develop a comprehensive systemic functional description of MSA, we should endeavour to net in such uses in systems in the system network of tense and aspect, taking note of secondary sources such as these but at the same time attempting to ground the systemic functional description in primary sources, texts sampled from a rich range of registers. Here I will only go on to offer a brief sketch as an illustration.

As a basis for the description of MSA that I will sketch here, I have set out a schematic representation of the complementary tense and aspect models for construing processes unfolding through time in MSA in Figure 17. As in other languages that combine the complementary tense and aspect models in the construal of processes unfolding through time ("phenomena of experience" in the figure), MSA operates with a combination of the two temporal systems ("construal in grammar — systems"), and they are realized by different grammatical items ("realizational resources in grammar"). The nature of such "mixed" systems clearly varies considerably across languages, a central issue being how tense and aspect are "spliced together" into one temporal system. In Figure 17, I have indicated that the two systems are simultaneous; but I will now take one step further and give a tentative incomplete systemic description of them.

Figure 17: The construal of process time in Modern Standard Arabic — the complementary of the tense and aspect models in a mixed tense-aspect system



Let me begin by making a few observations:

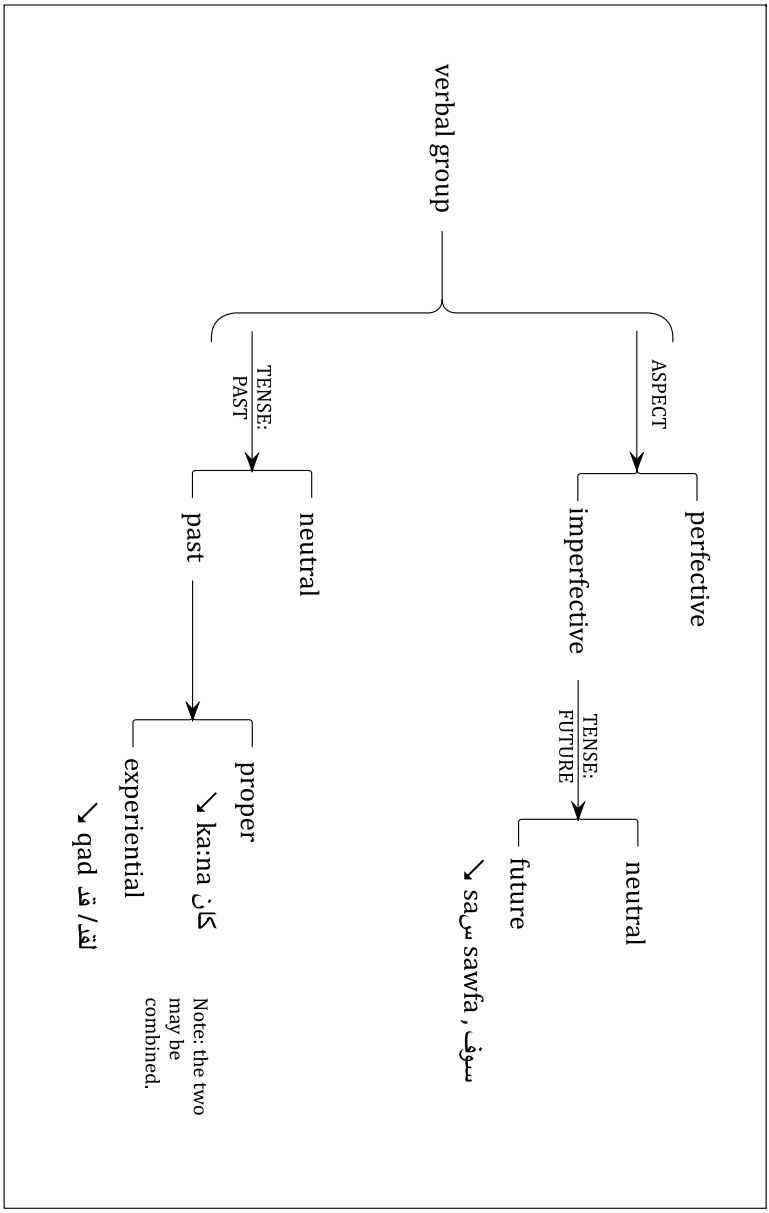
- while aspect is marked obligatorily at word rank by morphological distinctions in the verb as either ‘perfective’ or ‘imperfective’ (unless the clause is a participial one), tense is not: the specification of tense may be either ‘neutral’ or ‘marked’; ‘neutral’ simply means that it is not specified (cf. Halliday & McDonald 2004, on ‘neutral’ in the aspectual system of Mandarin), and if it is ‘marked’, it may be realized

by a temporal auxiliary (كَانَ *ka:na*) and/or temporal particles (قد /لقد *qad / laqad*; سوف *sa / sawfa*).

- there are markers of 'past' and 'future' tenses, but no dedicated marker of 'present' tense.
- the 'perfective' and 'imperfective' aspectual forms of the verb are restricted in their combination with tense markers; some (*sa-*, *sawfa*) may only occur with one rather than the other, and one (*qad*) is either modal or temporal depending on the aspect of the verb.

These observations need to be incorporated in the systemic description of the temporal system of MSA. One possible descriptive version is set out in Figure 18. This captures the fact that the 'past' and 'future' options are different for 'perfective' and 'imperfective' aspect: 'future' is only an option in 'imperfective' verbal groups, as is clear from Table 9. If the verbal group is 'imperfective', the tense may be 'neutral' or 'future'; but if it is either 'perfective' or 'imperfective', it may be specified for 'past' tense by means of the auxiliary كَانَ *ka:na*. The system network represents the system of TENSE: PAST as simultaneous with the system of ASPECT. This is accurate; however, it allows for the option of the 'experiential' past with 'imperfective' aspect, but this is inaccurate since in this aspectual environment, the marker of the 'experiential' past, the particle قد /لقد *qad* / *laqad*, has a modal rather than temporal interpretation.

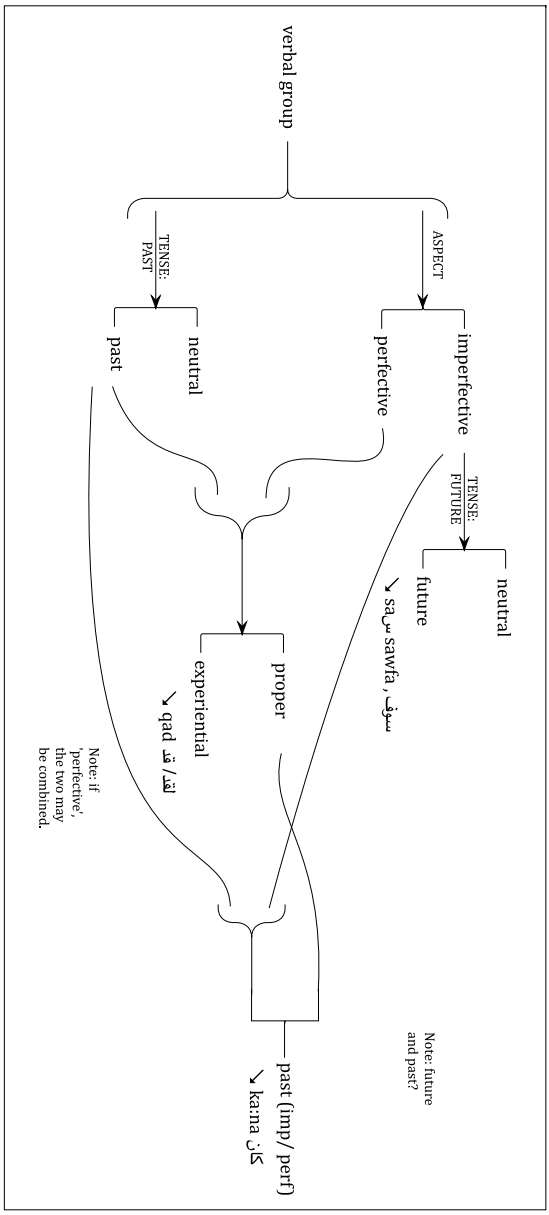
Figure 18: The temporal grammar of Arabic (MSA) [a] — the system of TENSE and ASPECT (simplified); the realizations of 'perfective' and 'imperfective' depend on POLARITY



To correct this overgeneralization of the 'experiential' past across both 'perfective' and 'imperfective' aspect, we need to restrict it to

'perfective' aspect. This revised version is presented in Figure 19. Here the "proper" past is a systemic option open to both 'perfective' and 'imperfective' aspect; it is realized by the temporal auxiliary كَانَ *ka:na*. This realization is represented in the systemic gate 'past (perf/imperf)', which has a disjunctive entry condition: either 'past' & 'imperfective' or 'proper' (past). If the aspect is 'perfective', the 'proper' past contrasts with the 'experiential' past, which is realized by the temporal particle لَقَد/ قَد *qad / laqad*.

Figure 19: The temporal grammar of Arabic (MSA) [b] — the system of TENSE and ASPECT (simplified); the realizations of 'perfective' and 'imperfective' depend on POLARITY



While the version of the temporal grammar of the verbal group in Figure 19 now correctly represents that the so-called "experiential" past is only an option when the aspect is 'perfective', it embodies three issues:

1. the system network predicts that 'imperfective' aspect can be combined with 'past'. While this is not impossible (cf. English past-in-future *(he) will have studied (for a long time by this time tomorrow)* and future-in-past *(he) was going to study (yesterday)*, we need to check if the two tense selections can actually co-occur, and if so, how they relate to one another — how they are ordered relative to one another (e.g. past-in-future or future-in-past).
2. the system network does not allow for the possibility of the 'proper' past and the 'experiential' past can occur together, but in fact they can.
3. the temporal auxiliary كَانَ *ka:na* can itself be either 'perfective' (كَانَ *ka:na*) or 'imperfective' (يَكُونُ *yaku:nu*)[43]: see Table 10.

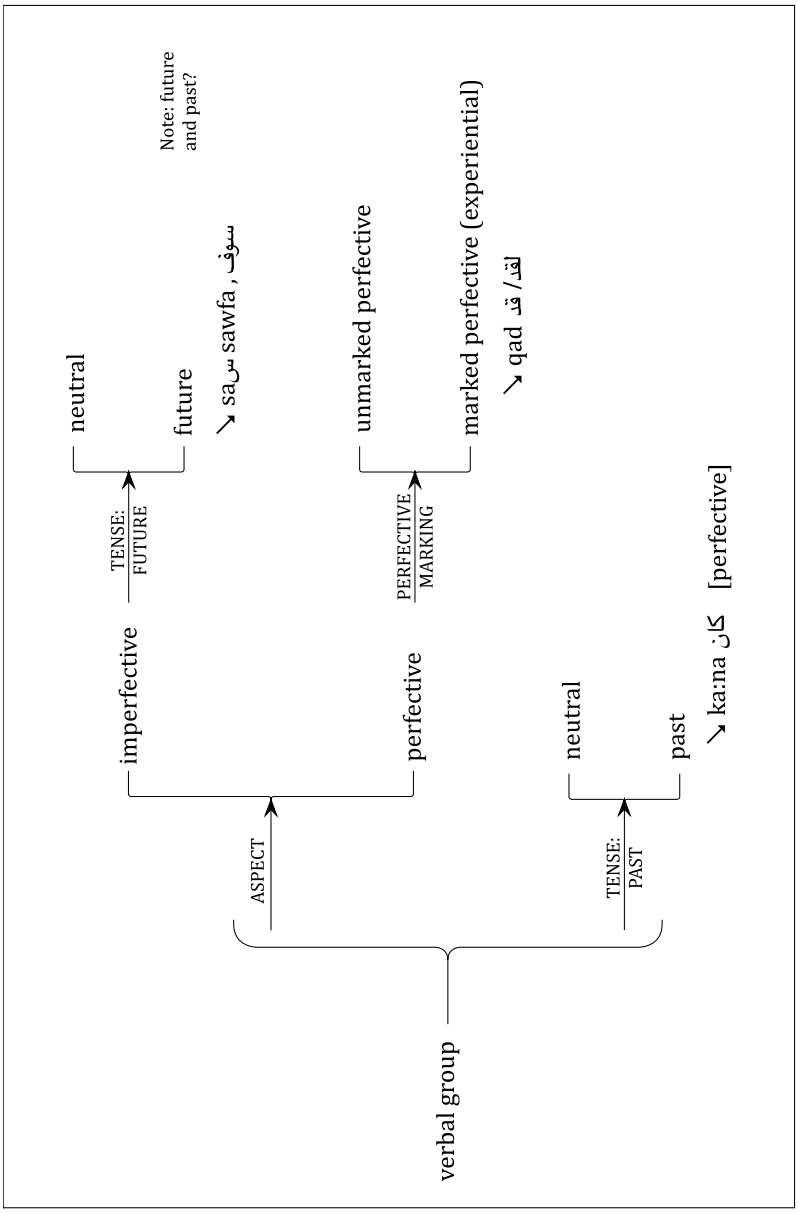
Table 10: Glosses of combination of temporal auxiliary ka:na, perfective and imperfective, with aspect of the lexical verb, based on Badawi et al.'s (2004, 367) list of "compound tenses"

Aspect of *ka:na*	**Aspect of lexical verb**	
	Perfective	**Imperfective**
Perfective (كَانَ *ka:na***)**	"pluperfect"	"past continuous"
Imperfective (يَكُونُ *yaku:nu*)	"future perfect" "[the imperfective يَكُونُ *yaku:nu*] indicates that the action is not finished (usually implying future) and the [perfective of the lexical verb] denotes that it is complete"	"future continuous" "[the imperfective يَكُونُ *yaku:nu*] indicates that the action is not finished (usually implying future) and the [imperfective of the lexical verb] denotes that it is still not complete"

[43] The realization in the systemic environment of 'negative' polarity is conditioned: 'positive' *ka:na* / 'negative' *lam yakun*. Here I am concerned with the systemic aspectual contrast, *ka:na / yaku:nu* in the systemic environment of 'positive' polarity.

The second issue can be handled by treating the variant marked by the temporal particle *qad* as the realization of a separate system with 'perfective' aspect as the entry condition rather than as an alternative past to that realized by the temporal auxiliary *ka:na*. This new version of systemic description of the temporal grammar of tense and aspect in MSA is set out in Figure 20. As is evident from the system network, this version is actually simpler in terms of systemic "wiring": the realization of 'past' can now be stated unconditionally in the system of TENSE: PAST that is simultaneous with ASPECT. In this version, the systems with terms realized by temporal particles, *sa- / sawfa* and *qad / laqad*, are now interpreted systemically in parallel ways as more delicate options for 'imperfective' and 'perfective', respectively.

Figure 20: The temporal grammar of Arabic (MSA) [c] — the system of TENSE and ASPECT (simplified); the realizations of 'perfective' and 'imperfective' depend on POLARITY



Even though the last version of the system network of the temporal grammar of MSA does not yet address all the issues I have raised[44], I will leave my sketchy illustration at this point. As noted above, the description is only ***illustrative*** — an example of consideration we will encounter as we develop a description of a lexicogrammatical region of any language, and an indication of how we usually need to develop description through successive systemic steps, gradually increasing the coverage of key issues and phenomena (cf. Figure 7 above).

If we have access to secondary data of the kind I have referred to, we will probably find that we need to "renew" the connection with primary data to interpret such accounts further, interpreting them systemically. As my sketches above illustrate, when we interpret the lexicogrammar of a language — in this case MSA — as a resource, as a potential for creating meanings as wordings, and begin to represent it systemically, various questions arise having to do with systemic possibilities. While they may have been mentioned in secondary sources, these sources almost certainly will not have attempted to develop and present a comprehensive description — in this case, a comprehensive description of the temporal grammar of MSA. This is not on the descriptive agenda of non-SFL descriptivists; in fact, they may not realize that it is an essential descriptive goal. (This has to do with how much of the phenomenal territory of lexicogrammatical one's choice of theory or elective selection of aspects of theories will enable one to observe and study: cf. Figure 9 above.)

5.3. The clause systems of freedom, mood and polarity

As we have seen, the form of the verb (lexical verb) or verbs (auxiliary plus lexical verb) of the verbal group realizing the Process/ Predicator in MSA depends on systemic terms ("features") in systems of the clause (and by another step down the rank scale, the verbal group). To account for the patterns, we need to clearly distinguish systems of different ranks. At word rank, verbs are either

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[44] And it does not, of course, cover other resources relevant to the engagement with time in MSA like phased verbal group complexes and logico-semantic type, nor does it deal with participial versions.

'perfective' (the form Holes, 2004, calls the "s-stem") or 'imperfective' (Holes' 2004, "p-stem"); and the 'imperfective' is the entry condition to a system of verbal MODE[45]: see Table 11.

Table 11: Word rank — verb (example: كَانَka:na): aspect and mode (3rd person singular, masculine)

ASPECT				
perfective ("s-stem")		**imperfective ("p-stem")**		
	كَانَ	**MODE**	Indicative	يَكُونُ
			subjunctive	يَكُونَ
			Jussive	يَكُنْ
			imperative [2nd person, masculine][46]	كُنْ

The aspectual contrast at group and clause rank between 'perfective' and 'imperfective' is realized at word rank by the contrast between 'perfective' and 'imperfective: indicative'. The other modes of the imperfective form of the verb, the 'subjunctive' and 'jussive' (and the 'imperative', which is formally agnate in 2nd person with the 'jussive'), operate in other environments, which I will now sketch.

The forms of the verb specified in Table 11 are used in the verbal group realizing the Process/ Predicator in the clause according to the systemic environment of the clausal systems of FREEDOM, MOOD, ASPECT and POLARITY, as shown in table 12. The clausal systems of FREEDOM, MOOD and ASPECT are set out in the three leftmost columns under the heading "clause" and the forms of the verb in the five columns to the right under the heading "verb".

[45] In descriptions of Arabic in English, this is usually referred to as "mood", as are comparable distinctions in other languages. However, since the term "mood" is used in SFL as the name of the interpersonal grammatical system realizing the semantic system of SPEECH FUNCTION, it is helpful to make a terminological distinction to ensure that the two are kept distinct and not confused with one another (see e.g. Matthiessen 2004, 612; Halliday & Matthiessen 2014, 142, footnote 7). In my view, distinguishing terminologically between "clausal mood" and "verbal mood" is not helpful because the two systems actually represent related but actually quite distinct variables; they embody different interpersonal generalizations.

[46] The 'imperative' form of the verb is formally agnate with the 'jussive' form.

The terms of the system of POLARITY are specified in the cells of the table, together with the different negative polarity particles[47]. As the table shows:

- 'free' clauses:
    - 'indicative'
        - in 'indicative' clauses that are 'positive', the aspectual distinction between 'perfective' and 'imperfective' is realized by the verb forms perfective ("s-stem") vs. imperfective ("p-stem"): indicative.
        - in 'indicative clauses that are 'negative', the aspectual distinction between 'perfective' and 'imperfective' is realized by the verb forms imperfective ("p-stem"): jussive vs. imperfective ("p-stem"): indicative.
    - 'imperative'
        - in 'imperative' clauses that are 'positive', the form of the verb is 'imperative' (which is agnate with the 'jussive' form in the paradigm of the imperfective form of the verb).
        - in 'imperative' clauses that are 'negative', the form of the verb is 'jussive'.
- 'bound' clauses: some 'bound' clauses are included here to illustrate 'bound' clauses as the domain of forms of the verb; the 'subjunctive' occurs in 'bound' clauses that are "irrealis", 'purposive' clauses and projected proposals, and the 'jussive' is used in 'conditional' clauses.

There are, naturally, a number of significant details to discuss further. However, I will just note two points.

(1) One has to do with the interaction between ASPECT and POLARITY: while the 'imperfective' form of the verb ("p-stem") can occur in both 'positive' and 'negative' clauses, the 'perfective' form ("s-stem") cannot; the combination of 'negative' polarity and

[47] For the realization of 'negative' by the negative verb ليس *laysa* in clauses of 'relational' and 'existential' process type, see **Erreur ! Source du renvoi introuvable.** 7 above.

'perfective'(clausal) aspect is realized not by the 'perfective' form of the verb ("s-stem") but rather by the 'jussive' form of the verb. This makes good sense if we assume that the basic distinction in the verb is aspectual: negative polarity implies that the event represented by the verb is not bounded or completed. In contrast, it makes less or no sense if we assume that the contrast in verb form is one of tense.

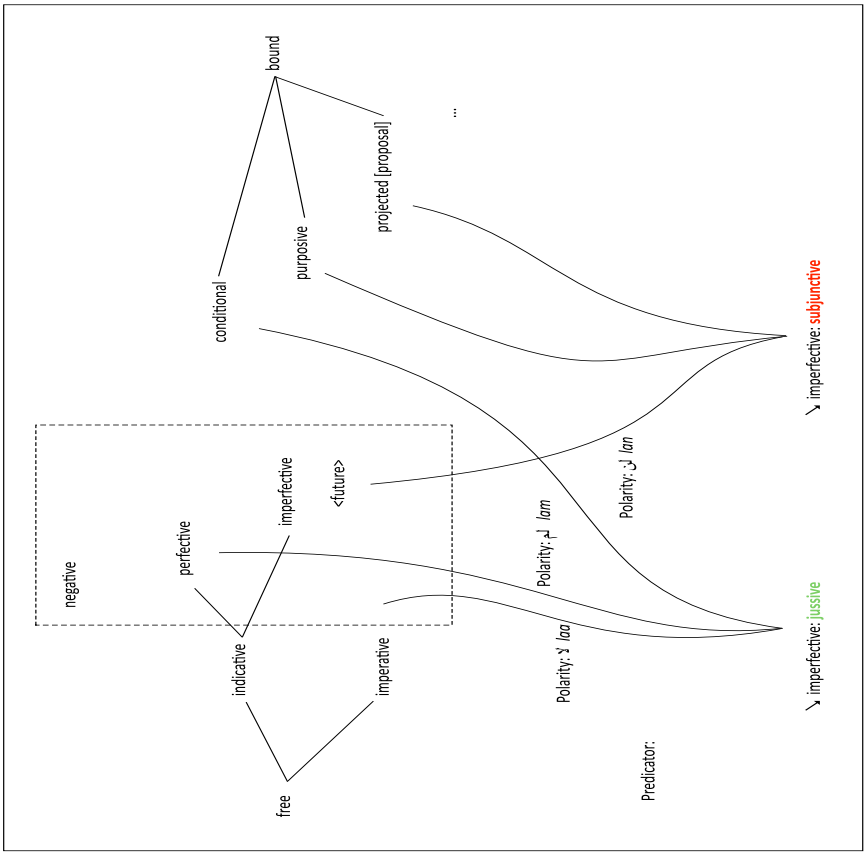
Table 12: Clause rank and word rank — The realization of the Process/ Predicator by different verb forms (in the verbal group) in different systemic environments of the clause in MSA

Clause			**Verb [ASPECT]**				
FREEDOM	**MOOD**	**ASPECT**	**perfective ("s-stem")**	**imperfective ("p-stem") [MODE]**			
				indicative	**subjunctive**	**jussive**	**imperative**
free	indicative	perfective	& positive			& negative: لم *lam*	
		imperfective		& positive / & negative: لا *laa*[48]	<future> & negative: لن *lan*		
	imperative					& negative: لا *laa*	& positive
bound					purposive; projected proposal	conditional	

[48] In 'relational' and 'existential' clauses, 'negative' polarity is realized by a negative verb, ليس *laysa*.

(2) The other point that I want to make here is related to the first point; it has to do with the distribution of forms of the verbs at word rank (set out in Table 11) and the higher-ranking systemic environments of the clause. I have illustrated this point just for the 'jussive' and 'subjunctive' forms of the verb in Figure 21. As the figure shows, while the 'jussive' form of the verb serves largely within the systemic domain of 'free' clauses, the 'subjunctive' form serves largely within the systemic domain of 'bound' clauses. This is of course one of the reasons why it is so important to distinguish mood with a clause as its domain and mode with the verb (and verbal group) as its domain both conceptually and terminologically.

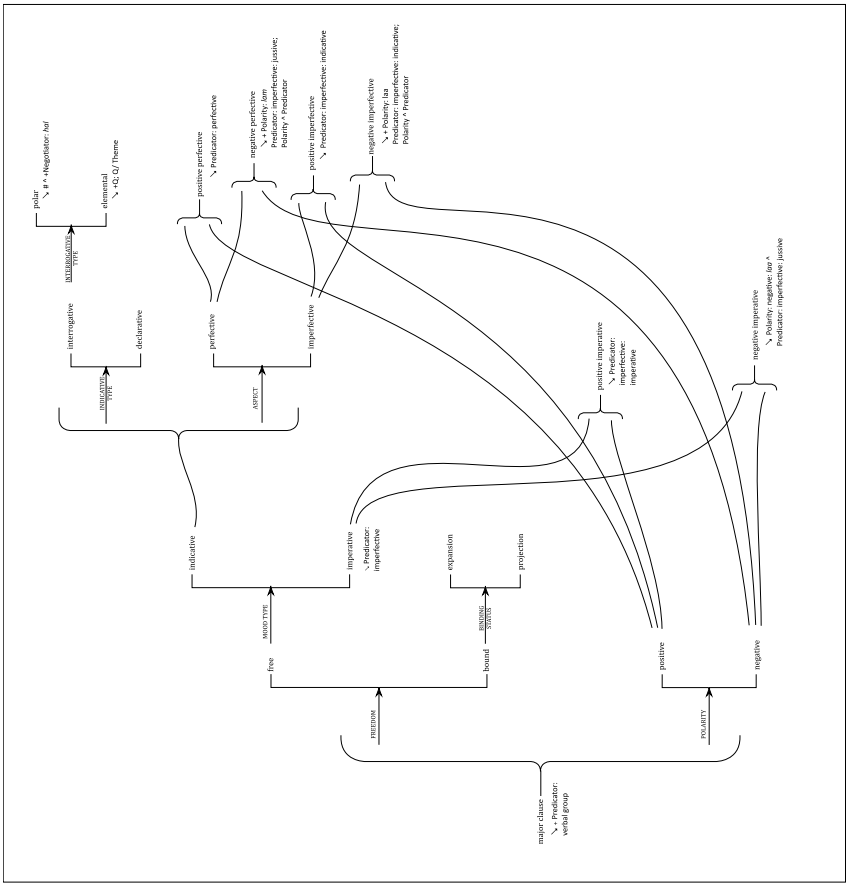
Figure 21: The uses of the 'jussive' and 'subjunctive' forms of the 'imperfective' form of the verb ("p-stem") in different higher-ranking systemic environments



The display in Figure 21 is pre-systemic; that is, it is not a system network but rather a combination of two taxonomic trees at clause rank, one for 'free' clauses and one for 'bound' ones — together with the two forms of the 'imperfective' verb form ("p-stem"), the 'jussive' and the 'subjunctive'. Such pre-systemic representations can be quite helpful when we prepare to develop systemic descriptions (see e.g. Matthiessen & Teruya 2024, Section 3.3).

To illustrate the next descriptive step, the representation of the description by means of a system network, I have sketched the fragment of the clause in MSA in Figure 22. In this system network, the systems of FREEDOM and POLARITY are simultaneous; and the system of MOOD TYPE has 'free' in the system of FREEDOM as its entry condition, so it's also simultaneous with POLARITY. The form of the verb in the verbal group realizing the Process/ Predicator is specified in realization statements attached to gated features — terms in systems with complex entry conditions (here all of them are conjunctions of two systemic terms). For example, the systemic gate 'negative imperative' has 'imperative' and 'negative' as its entry condition, and the realization statements attached specifies that the form of the verb is 'jussive' and the negative polarity item is لا *laa*.

Figure 22: The systems of freedom, mood type and polarity — systemic intersections realized by different forms of the verb and negative polarity items



The points of the description in this last subsection include the following:

- categories that have traditionally been described in a "flat" way within one rank, typically word rank, often need to be given added dimensionality by describing them also at higher ranks so as to cover different patterns of agnation — **inter-**

rank multiple agnation (cf. also the discussion above of "uses" of lower-ranking categories at higher ranks)[49];

- thus categories at word rank may enter into **different patterns of agnation** at higher ranks; for example, in 'imperative' clauses that are 'positive' in polarity, the verb is in the 'imperative' form, but in 'imperative' clauses that are 'negative' in polarity, it is in the 'jussive' form;
- categories are always **systemic**: they are not things in themselves, but rather nodes in the system network they are part of — terms in a system, and thus related to other systems and terms in the system network.

5.4. Summary

In this section, I have proposed systemic sketches of aspects of the lexicogrammar of MSA. Taken together with my systemic-functional index into the overage of written MSA by Badawi et al. (2016) set out in Table 6 above, these sketches can hopefully serve as an incomplete rough guide to the description of the lexicogrammar of MSA. But what I have presented is only intended as an ***illustration*** — one relevant to the development of any language we set out to describe for the first time empowered by SFL. In this respect, I could have chosen any other particular language, certainly one that I have worked on in one way or another, e.g. Akan and Marathi, or one that I have been fortunate enough to get involved in as a PhD supervisor. In the case of MSA, we already have a pioneering systemic functional description, viz. Bardi (2008): his work is the foundation for the continued development of systemic functional descriptions of MSA and of other varieties of Arabic.

Referring to the description of MSA as an illustration, I hope to have shown the significance of trying to describe a particular language systemically, as a resource (rather than as an inventory of

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[49] Cf. Matthiessen (2023a, 37-43) on patterns of **double agnation** set up at different ranks or different strata. The systems at different ranks or strata capture different systemic relationships, complementing one another. For example, the clausal system of MOOD captures the dialogic aspect of the clause as a move (proposition or proposal), whereas the verbal group system of MODE captures the enactment of this proposition or proposal as realis or irrealis and is thus related to polarity and modality.

structures and items). Pursuing this further for MSA, we would arrive at new insights not foregrounded in the standard reference grammars in English; and for any language given a great deal of descriptive attention in frameworks other than SFL, I would not expect any less: a description empowered by SFL should transcend previous descriptions by quite a margin; and in this way, it should be able to serve as an appliable description.

What would we find out about MSA? Well, here are some examples (but for a more complete picture, see Bardi 2008):

- As in other languages, the clause constitutes a unification of the metafunctional contributions; for example, structurally, the beginning of the clause is textually significant as a site for metafunctional unification — as the Theme combining logical contributions (structural conjunctions, including the famous إنّ *ʔinna* and its sisters), purely textual contributions (cohesive conjunctions), interpersonal contributions (e.g. markers of polar interrogatives and Q-elements in elemental interrogatives), and in the default case either the Predicator or the Subject, depending on the "method of development" of the register instantiated by the text being analysed.
- In the systemic description of MSA, we need to sort out the division labour across ranks carefully. This applies to systems I have noted above, the clausal system of MOOD and the verbal group system of MODE; and it also applies to other systems, e.g. the clausal system of TRANSITIVITY, and the verbal word rank system of verbal "measures".
- "Traditional" descriptions of Arabic (from Classical to Modern Standard Arabic) have foregrounded the view "from below", giving us a very partial picture of clauses ("nominal" vs. "verbal") and "word order" ("VSO"). When we adopt a trinocular view of the language in terms of different semiotic dimensions, these views move into the background because they're contextualized by the views "from above" and "from roundabout".
- As in other languages, the relationship between lexicogrammar and the articulatory domain of phonology is largely conventional; but there is an interesting tendency characteristic of MSA and also of other semitic languages:

along the cline of delicacy from grammar to lexis, lexical contrasts ***tend*** to be realized by consonantal patterns — the radicals of lexical clusters whereas grammatical contrasts also involve vocalic patterns (as well as consonants) — the patterns that are overlayed on the consonantal patterns. And this is reflected in the Arabic script, where vowel qualities are normally not indicated since they are grammatically predictable in context (with the exception of the Qur'an and books for children and learners of Arabic as an L2). For example, the lexical root *drs* (درس) has a lexical spread, including (verb [perfective, 3rd person masculine singular]:) darasa (دَرَسَ) "he studied"; darrasa (دَرَّسَ) "teach, educate"; (noun:) dars (دَرْس) "lesson"; mudaris (مُدَرِّسٌ) "teacher"; madrasat (مَدْرَسَة) "school".

In Matthiessen (2004b), I try to show how the clause grammar of MSA and other languages vary in their ranges of experiential, interpersonal and textual within the grammar of the clause but they also have alternative ways of mapping the different metafunctional guises of the clause onto one another: the clause as figure (experiential), the clause as move (interpersonal) and the clause as message (textual).

Conclusion

In this chapter, I have been concerned with language description — set against the background of the overarching theme of ISFC48 of empowerment: if done effectively, language description can empower the communities of the speakers of the language under description. This is **appliable language description** — description that is meaning-oriented, based on text in context and comprehensive in scope (which is why Halliday 1972 estimates that a "good description" will take five to ten years to develop — considerably longer than Dixon's 1997, estimate of three years). Such descriptions can serve as resources for communities in a wide range of the institutions that make up their cultures, institutions of educations obviously being very central to any community: in this way, communities are empowered by the development of appliable descriptions of their languages.

Summary of chapter

To develop such descriptions of particular languages, we also need to ***empower linguists*** to carry out their descriptive task. To this end, I have located language description among different activities undertaken by linguists (Figure 1, Section 1) so as to clarify how it relates to other linguistic activities and can be guided and supported by them. For language description, I outlined methodological choices having to do with the complementarity of analysis and synthesis and also with the order of data (primary or secondary). I also considered the amount of work involved in different linguistic activities, suggesting timeframes for each type of activity. I explored descriptive timeframes in some more detail, trying to provide a sense of the time involved in producing a first systemic functional sketch of the lexicogrammar of a particular language. This led to the consideration of strategies that we can adopt in order to manage descriptive projects; I suggested that the strategies can be derived from the systemic functional multi-dimensional architecture of language — they are not an ad hoc list of externally imposed tactical considerations.

In Section 2, after an initial sketch of Whorf's still useful "plan and arrangement", I showed how the theoretical architecture of language can support the (staged, potentially selective) description of particular languages, focussing on the function-rank matrix in particular as a cartographic tool, a grid for observing, analysing and describing a language. This enables us to draw on holistic theory as we strive towards increasingly comprehensive descriptions of particular languages, using the function-rank matrix together with a move from low to greater delicacy, from smaller to larger text samples and so on.

Next, in Section 3, I dealt with sources of data to support the development of a systemic functional description of a particular language — the complementarity of primary data (texts in context) and secondary data (existing descriptions of the language under description). In sampling, selecting and compiling primary data into a corpus of texts (Section 3.1), I noted that the registerial composition of the corpus is of fundamental importance, and I gave examples of registers where particular regions of the resources of the language under descriptions are likely to be at risk (Table 4 and

Figure 6). Turning to secondary sources, i.e. existing descriptions of the language under description (Section 3.2), I discussed how to interpret non-SFL descriptions, including the issue of how to follow the common presentation of the description of a particular language (Figure 8) and how to map such descriptions by means of a function-rank matrix. In this way, I provided a function-rank matrix for MSA, with references to the areas covered in one of the current reference grammars of the language (Badawi et al. 2016) — thus giving their different chapters and section semiotic addresses in the function-rank matrix. Having presented this function-rank index into the description in the grammar, I noted issues that arise in the course of this kind of mapping of a secondary source — points that can be helpful when one "harvests" non-SFL descriptions. Rounding off the exploration of how to use secondary sources, I considered typological databases briefly, also raising the inevitable problem of the distance between primary data (texts in context) and categories coded in such databases.

As we begin to develop a systemic functional description of any particular language, we are likely to reach points in the description where we can envisage and need to entertain alternative descriptions. In Section 4, I suggested that it can be helpful to allow for alternative descriptions — partly because of varying descriptive goals (cf. Halliday 1964), partly because of the weighting of evidence, partly because of the insights that can be obtained from complementary systemic views. (Alternative descriptions may, of course, also capture phases of the system of a particular language in transition, for example involving gradual re-analysis, as seems to be happening with the temporal grammar of different varieties of Arabic.) As an illustration, I discussed two alternative descriptions of the interpersonal clause grammar of Korean.

In the final section, Section 5, I tried to illustrate descriptive decisions we need to make as we develop a systemic functional description of a particular language. I used Arabic, more specifically MSA, as the source of illustration — relying mostly on secondary data (Section 3.2), but also noting how the renewal of connection with primary data, text, can help us choose among alternative descriptions. The descriptive sketches I introduced in this section are merely intended as illustrations of issues that emerge in the course of developing a description. The most comprehensive systemic

functional description of MSA is Bardi's (2008) study — a contribution that has served as a reference for a growing number of studies of detailed aspects of MSA.

Other related publications

While I have focussed on the empowerment of systemic functional linguists developing (comprehensive) descriptions of particular languages — ones designed to be appliable — and I have tried to locate the activity of language description "contextually" within and in relation to other potentially supportive linguistic activities, I have necessarily had to be selective; and I have not had the space to expand on and update the typological generalizations presented in Matthiessen (2004b). This chapter can be read together with other attempts that I have made to provide material relevant to systemic functional linguists setting out to develop a new description, including those set out in Table 13[50].

[50] I have only included publications that I have been involved with simply because they constitute a body of work that is consistent in terms of theory, descriptive generalizations, terminology, descriptive interpretations. However, there is an ever-growing number of contributions in the area of systemic functional description — descriptions of particular languages and methodological insights, comparison and typology; and also more generally in the field of multilingual studies, where two growth areas are translation studies and studies of second/ foreign language education.

Table 13: Publications by Matthiessen relevant as supplements to the current chapter

Area		**References**
Systemic Functional language description, comparison and typology	Characteristics of the SFL framework	Matthiessen, Christian M.I.M. 2024. "Systemic Functional Linguistics — language description, comparison and typology: Key characteristics." In Wang Bo & Ma Yuanyi (eds.), *Theorizing and Applying Systemic Functional Linguistics: Developments by Christian M.I.M. Matthiessen.* London: Routledge. 101-229.
	Typological generalizations	Matthiessen (1995): the "typological outlooks" accompanying my map of the system of English lexicogrammar;
		Matthiessen (2004b): my attempt to identify descriptive motifs and generalizations as a way of rounding off the pioneering systemic functional descriptions of eight different languages;
		Teruya et al. (2007): typology of systems of MOOD;
		Matthiessen et al. (2022, Chapter 7): features of systemic functional language typology;
		Mwinlaaru, Matthiessen & Akerejola (2018): typology of systems of mood in languages spoken in Africa;
	Overviews of SFL descriptions of different languages	Teruya & Matthiessen (2015): an overview of language typology informed and empowered by SFL;
		Matthiessen & Teruya (2024, 445-449): a tabular overview of systemic functional language descriptions over the decades;
	Systemic functional description:	Matthiessen & Teruya (2024, Section 3.3, 96-222); Matthiessen (2023b): afterword; Matthiessen et al.

Area		References
	approach and methods	(forthcoming: Chapter 9); Matthiessen et al. (submitted)
		The present chapter: choices in the development of language descriptions;
	Systemic functional description: the system network as a cartographic tool	Matthiessen (2023a, 145-149): systemic cartography; the system network as a tool in organization of and navigation around systemic functional descriptions;
Theory (of domains given less overall attention in SFL)	morphology	Matthiessen (2015, 2023c): the approach to morphology as the grammar of units at the rank of words, interpreted as a region identifiable in the description of many languages but as part of the total resources of lexicogrammar, not as a separate "module" distinct from "syntax";
	phonology	Matthiessen (2021): the "architecture" of phonology conceptualized as a sounding potential in SFL;
Multilingual Studies	Map of multilingual studies	Matthiessen, Teruya & Wu (2008): our attempt to bring together different strands of activity where multiple languages are involved, conceptualizing this as a new area of research and application, "multilingual studies";
	multilingual system meaning potential	Matthiessen (2018, 2023a, 242-251): a presentation of the theory of a multilingual meaning potential, represented by means of multilingual system networks.

Appendices

A. Lexicogrammatical properties of MSA in typological databases

In this appendix, I have compiled information about MSA available in two typological databases, WALS, and the more recent more extensive successor, Grambank (which is part of Glottobank). I have characterized the properties (called "features" in the two databases) in terms of grammatical domains, and within domains, in terms of systems, as far as I have been able to.

A.1. WALS

Table 14: Lexicogrammatical parameter ("features") specified for MSA in WALS

domain			**parameter ("feature")**	**number**	**value**
lexicogrammar	morphology		Fusion	20A	
			exponence of selected inflectional formatives	21A	
			exponence of TAM	21B	
			inflectional synthesis of the verb	26A	strongly suffixing
			reduplication	27A	
			traditional morphological type[51] (analytic / synthetic: fusional / agglutinative / polysynthetic)		fusional
	syntax	sequence	adposition	85A	prepositions
			V • O	83A	VO

[51] See: https://en.wikipedia.org/wiki/Morphological_typology

A.2. Information about "Standard Arabic" in Grambank

Table 15: "Standard Arabic" in Grambank, information based on Ryding (2005)[52]

This table is available at:
https://grambank.clld.org/languages/stan1318

B. The accessibility of examples of languages under description

Presenting examples in languages not necessarily known to one's readers requires awareness of the need to be reader-friendly. In descriptive and typological accounts, this means that any example presented ideally needs to be:

- represented in a graphology known to readers, which typically means some version of the Roman alphabet — if necessary expanded by means of IPA[53], and if it is represented in another script (e.g. Chinese, Thai, Arabic), it must be transliterated;
- the examples need to be translated twice:
    - a fairly "free" translation at clause rank, giving readers a sense of what the example means (with additional clarifications if necessary);
    - a more "literal" translation at word rank, so-called interlinear glossing (where using the Leipzig rules for glossing[54] will ensure that the glosses are easy to follow for a wide range of readers);
- ideally, the examples should be given additional annotation other than interlinear glossing: interlinear glossing is located at work rank, providing morpheme by morpheme glosses;

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[52] https://grambank.clld.org/languages/stan1318

[53] See: https://www.internationalphoneticassociation.org; https://www.internationalphoneticassociation.org/IPAcharts/inter_chart_2018/IPA_2018.html

[54] See: https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf See also https://systemiclanguagemodelling.wordpress.com —
The annotated text in Figure 15 comes from a website that sells texts with "interlinear glossing"; but at is evident from the text, it has in fact not been annotated according to the conventions of professional linguistic interlinear glossing. And the transliteration is similarly not completely accurate.

> but it often leaves higher-ranking organization opaque for readers not familiar with the language, so presenting examples in box diagrams with additional information is very helpful (as in chapters in Caffarel, Martin & Matthiessen 2004) — assuming that this is possible given the stage of the development of the description.

In translation studies, examples are often not presented with transliteration (if the script is a non-Roman one), nor with interlinear glossing; but that's because the assumption is that readers will know the languages under discussion. However, this cannot and should not be assumed in presentations of descriptions of particular languages.