



TOWARDS A NEW THEORY OF ARABIC PROSODY

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PART II

THE PHENOMENON OF 'I'RÂB

IN STANDARD ARABIC

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CHAPTER I

INTRODUCTION:

THE ANCIENT GRAMMARIANS' THEORY

To account for 'irāb,¹ the ancient Arab grammarians developed an elaborate theory known as *al-ta'īl* 'motivation'; the theory in question is summarized below,² and the summary is followed by a brief evaluation.

Types of Motivation

The ancient Arab grammarians defined three types of motivation which they called "causes" of 'irāb:

(1) *al-'Ilal al-ta'īmiya* 'pedagogical causes': Also called 'awāmil 'governors',³ these "causes" are defined as structural elements which accompany 'irāb. Thus 'inna "causes" the occurrence of the subject in the accusative and the predicate in the nominative; in other words, 'inna "governs" the subject in the accusative and the predicate in the nominative.

(2) *al-'Ilal al-qiyāsiya* 'analogical causes': The ancient Arab grammarians appealed to analogy in order to explain certain aspects of 'irāb. They discerned, for example, a similarity between 'inna and its sisters, on the one hand, and transitive verbs on the other; to this alleged similarity they attributed the fact that 'inna and its sisters govern the accusative. Because they seek to explain a fact which is itself a cause, *al-'ilal al-qiyāsiya* are sometimes called 'ilal al-'ilal 'causes of causes'.

(3) *al-'Ilal al-jadāliya* 'argumentative or philosophical causes': These embrace "causes" which answer questions such as the following:

In what respect do 'inna and its sisters resemble verbs?

Do 'inna and its sisters resemble perfect verbs or imperfect ones?

If 'inna and its sisters resemble verbs, why must their subject resemble a *transposed* object?

Like those of the second type, *al-'ilal al-jadāliya* are sometimes called 'ilal al-'ilal 'causes of causes'.

In his book *al-'Awāmil al-Mi'a*, 'Abd al-Qāhir al-Jurjānī (c. 377 - 471 A.H.) states that the "governors" consist of ninety-one lexical items, seven open-list classes, and two "concepts":

(1) The lexical items fall into thirteen groups:

(a) Seventeen particles which govern the genitive: *min* 'from'; *ilā* 'to'; *fī* 'in, into'; *li-* 'to, for'; *rubba* 'many a'; *alā* 'over, on, above'; *an* 'about, away from'; *ka-* 'like, as'; *mudh* 'since'; *mundhu* 'since'; *hattā* 'till, up to'; the oath particles *wa-*, *ta-*, and *bi-* 'by'; the exceptive particles *hāshā*, *khālā*, *adā* 'except, besides'.

(b) Six particles which govern the subject in the accusative while governing the predicate in the nominative: 'inna 'that, indeed'; 'anna 'that'; *ka'anna* 'as though', *lākinna* 'but'; *layta* 'would that'; *la'alla* 'perhaps'.

(c) Two negative particles which govern the subject in the nominative while governing the predicate in the accusative: *lā*, *mā*.

(d) Seven particles which govern the accusative: *wa-* 'whilst'; 'illā 'except'; the vocative particles *yā*, 'ay, *hayā*, 'ayā, and 'a-

(e) Four particles which govern the subjunctive: 'an 'that', lan 'will not', kay 'in order to', 'idḥan 'in that case'.

(f) Five particles which govern the jussive: 'in 'if', lam 'did not', lammā 'has not yet', the imperative li- 'let', the prohibitive lā 'do not'.

(g) Nine nomens ('asmā')⁴ which govern the jussive in conditional sentences: man 'whoever'; 'ayy 'whichever'; mā 'what'; matā 'when'; mahmā 'whatever'; 'aynamā, 'annā, ḥaythumā 'wherever'; 'idḥmā 'whenever'.

(h) Four nomens which govern the accusative: the morpheme for the numeral 10 when combined with the morphemes for the numerals 2 - 9; kam 'how many?'; ka'ayyin 'many a, how many a'; kadḥā 'so and so much, so and so many'.

(i) Nine forms, known as 'asmā al-'af'āl, of which six govern the accusative and three govern the nominative. The first set consists of: ruwayda 'slowly, gently'; balha 'let alone'; ḥayyahala 'come quickly'; hā-, 'alay-, dūna- (with a second-person pronoun appended to each) 'take, seize'. The second set consists of hayhāti 'how far...!', shattāna 'how different...!', sur'āna 'how quickly...!'.

(j) Thirteen incomplete verbs which govern the subject in the nominative while governing the predicate in the accusative: kāna 'to be'; šāra 'to become'; 'aṣbaḥa 'to be or do in the morning'; 'amsā 'to be or do in the evening'; 'aḍḥā 'to be or do in the forenoon'; dḥalla 'to be or do during the whole day'; bāta 'to be or do during the whole night'; mā zāla, mā bariḥa, mā fati'a, ma nfakka 'still'; mā dāma 'as long as'; laysa 'not'.

(k) Four verbs which govern a single nomen in the nominative: 'asā 'may'; kāda, karaba, 'awshaka 'to be about to (do something)'.

(l) Four verbs—two of praise and two of blame—which govern a definite nomen in the nominative: ni'ma 'to be good', ḥabbadḥā 'to be pleasing', bi'sa 'to be bad', sā'a 'to be displeasing'.

(m) Seven verbs of the heart which govern two objects in the accusative: 'alima 'to know'; ra'ā 'to see, think, know'; wajada 'to find, perceive'; dḥanna 'to think, believe'; 'asiba 'to think, reckon, suppose'; khāla 'to think, imagine'; za'ama 'to think, deem, claim'.

(2) The seven open-list classes are: the verb, the active participle, the passive participle, the adjective resembling a participle (al-ṣifa al-mushabbaha), the verbal noun, the muḍāf, and the disambiguated noun (al-mumayyaz).

(3) The two "concepts" are:

(a) The Subject function; it governs the filler of the Subject slot and that of the Predicate slot.

(b) The absence of subjunctive and jussive governors; such absence governs the indicative.

The Principle of Implication

A governor may be explicit or implicit; this fact led the ancient Arab grammarians to lay down a principle which they called *al-ta'wīl* 'implication' and which bears striking resemblance to the modern grammarian's Deep Structure.

In this context, the following distinctions were drawn (the terms *actual* and *theoretical* are used in opposition to each other):

(1) *Deletion (al-ḥadḥf)* is the omission of a constituent from an actual string to produce another actual string. In the following examples, the governor is deleted from each response:

Question: man qābalta? 'Whom did you meet?'

Response: 'Alīyan. 'Ali.'

Question: 'ilā man katabta? 'Whom did you write to?'

Response: 'Alīyin. 'Ali.'

(2) *Postulation (al-istitār)* is the absence of an element from an actual string while present in a theoretical, underlying string. Postulation was restricted to: (a) the assumption that a pronominal agent is implied in sentences like 'Alīyun raja'a 'Ali returned' and nanāmu mubakkiran 'We sleep early'; (b) the assumption that, if not actually expressed, 'an is implied before subjunctive verbs.

(3) *Equivalence* is the interchangeability of two expressions in the context of an actual utterance. Thus a sequence consisting of 'an and the imperfect verb was deemed equivalent to the corresponding verbal noun; again, a sentence was deemed syntactically equivalent to a single word when it functions as a predicate, an object of *dhanna* 'to think or believe', a *hāl*, or an adjective. Thus the 'irāb required by certain slots may be associated with an implied form rather than the actual filler.

Evaluation

A grammatical analysis should be evaluated by three criteria:⁵

(1) *Generality:* The rules must be related to a general theory of human language. Conformity with this requirement promotes "explanatory power": the rules are deemed "natural", "logical", and "plausible"; the learner finds those rules easy to grasp and easy to remember.

(2) *Adequacy:* The rules must account for the data.

(3) *Simplicity:* Of two grammatical theories, the simpler one postulates less rules, imposes less diversity on those rules, and generates less exceptions.

As formulated by the ancient Arab grammarians, the theory of 'irāb leaves much to be desired:

(1) The ancient Arab grammarians achieved little, if any, success in regard to generality and explanatory power:

(a) They failed to postulate motivation which can apply to verbs and nomens alike, with the result that the same state of 'irāb is presumed to designate unrelated features; using the same marker to designate unrelated features is hardly a universal characteristic of human language. In addition, they failed to show why certain particles govern 'irāb while others do not, why a governing set of particles comprises certain forms but not others, and why different sets of particles govern different states of 'irāb; in such matters, human language is systematic rather than arbitrary.

(b) Some of the explanations they proposed are far-fetched, and others are circular; the following are examples:⁶

(i) The objects of verbs are typically marked by -a while the agents are typically marked by -u; this results from two premises: -a is easier to pronounce than -u, and nomens function as objects of verbs more often than they function as agents. The easier marker is assigned to the more common function.

(ii) Diptotes are less common than triptotes, and verbs are less common than nomens; it follows that diptotes are analogous to verbs and that, like verbs, they reject -i as well as nunation.

(iii) The third-person feminine plural suffix -na in a word like *katab-na* 'they (fem.) wrote' has a final vowel since the stem ends in a consonant and since a cluster of two consonants is barred in

non-pausal word-final position. The stem of *katab-na*, on the other hand, has no final vowel in order to avoid a non-lingual sequence of four open syllables. Thus the final vowel of *-na* is both cause and effect.

(2) The ancient Arab grammarians failed to satisfy the requirement of adequacy since they achieved only partial success in identifying the governors. They looked for lexical concomitants of *'irāb*. In some instances such concomitants were identified and considered the motivation when a closer investigation would have shown them to be (redundant) markers which designate the presence of certain features. In other instances, no lexical concomitants were found and the ancient grammarians therefore looked for parts of speech or grammatical functions; unfortunately, no effort was made to relate *'irāb* to features such as modality, tense, aspect, and adjunction.

(3) The ancient Arab grammarians failed to satisfy the requirement of simplicity:

(a) Only partial success was achieved in stating the domain of *raf'*. Given the fact that *'irāb* in Standard Arabic comprises four states (*jazm*, *jarr*, *naṣb*, and *raf'*), it behooves the linguist to explore the possibility that three of those states are motivated by certain grammatical features, and that the fourth state is motivated by the *absence* of those features. In studying verbs, the ancient Arab grammarians scored some success in exploring this possibility: they stipulated that a verb assumes the state of *raf'* if there is no motivation for *jazm* or *naṣb*; at the cost of reducing simplicity (and, for that matter, generality), the motivation they postulated consisted of lexical elements rather than grammatical features. In studying nomens, on the other hand, they achieved no success in exploring the possibility under discussion; consequently, the rules are excessively numerous.

(b) The rules are largely unrelated and frustratingly encumbered with exceptions.⁷

In his famous book *al-Radd 'alā al-Nuḥāh*, Ibn Maḍā' al-Qurtubī (513 - 592 A.H.) expressed frustration with his predecessors' motivation theory: in his view, the speaker's will is the only governor of *'irāb*, and none but explicit structural elements can play a role in such government (the role in question being merely to indicate the speaker's intention). As seen from the above discussion, this writer is even less satisfied with the theory.

The present study represents an attempt to remedy the defects. in the interest of reaching as many readers as possible, technical terms are deliberately minimized, and technical discussion (when inevitable) is deliberately simplified. All the same, it must be emphasized that the present study is not addressed to beginners: it is only practical to presuppose that the reader is thoroughly familiar with the structure of Standard Arabic as formulated by ancient and modern scholars. One would be unreasonable, for example, to insist that certain already well-established lists and definitions must be repeated before new insights can be presented (lists and definitions which pertain to the parts of speech and the various sentence types are a case in point).

Of the references cited, Wright's *Grammar* proved to be the most helpful not only in providing the raw grammatical information but also in supplying examples. Lyons' work was very helpful in the process of defining the relevant semantic concepts.

CHAPTER II

DEFINITIONS

(1) The term *nomen (ism)* denotes a form which can function as a noun (i.e., which can occupy a nominal slot). Nomens comprise two classes of content forms as well as certain classes of function forms: the content forms are nouns and adjectives; of the function forms, the most common are substitutes, numerals, and quantifiers.¹

(2) The term '*irāb*' denotes the use of suffixes to designate grammatical function. Orientalists associate the contrasts involved with case and mood.

(3) Arabic stems are divisible into two groups: those which are subject to '*irāb*', and those which are not; the former are known to Arab Grammarians as *al-mu'rab* 'the declinable', and the latter are known as *al-mabnī* 'the indeclinable'. The following constitute *al-mu'rab*:

(a) Certain adverbial functors, when used in construct with a following form; of these the most common are: '*amām*, *bayn*, *dūn*, *fawq*, *ḥawl*, *ḥiyāl*, '*izā*', *khalf*, *naḥw*, *qibal*, *quddām*, *taḥt*, *warā*', *wast*, '*athnā*', *ba'd*, *dhā* (e.g., *dhā ṣabāḥin* 'one morning'), *dhāt* (e.g., *dhāta yawmin* 'one day'), '*ind*, *qabl*, and *qubayl*.²

(b) Imperfect verbs, when attached neither to the energetic suffix nor to the third-person feminine plural suffix.

(c) All but a handful of nomens. The exceptions are almost restricted to mixed compounds (*al-murakkab al-mazjī*) and most of the pronominal forms.³ In mixed compounds, the first constituent is usually indeclinable; in some, both constituents are indeclinable.

(4) The term *mufrad* denotes (a) a nomen or (b) an attributive phrase with a nomen as head.

(5) The term *naṣb* denotes the occurrence of a form with an accusative or a subjunctive marker; the term *raf* denotes the occurrence of a form with a nominative or an indicative marker; the term *jarr* denotes the occurrence of a form with a genitive marker; and the term *jazm* denotes the occurrence of a form with a jussive marker.

(6) The suffixes of '*irāb*' are listed and illustrated below. Needless to say, the domain is restricted to *al-mu'rab*.

State	Domain	Suffix of ' <i>irāb</i> '	Examples
Jazm	Imperfect verbs	∅	yaktub, yaktubā, yaktubū, taktubī
Jarr	Dual nomens	-ay	kitāb-ay-ni
	Diptotes	-a	qawā'id-a
	Sound masculine plural nomens	-ī	mu'allim-ī-na, mudarris-ī-na, mufakkir-ī-na

State	Domain	Suffix of 'irāb	Examples
Jarr (cont.)	The five nomens	-ī	'ab-ī-ka
	Other nomens	-i	al-kitāb-i
	The adverbial functor <i>dhī</i> (rare ⁴)	-ī	dhī
	Other adverbial functors	-i	qabl-i, ba'd-i, taht-i
Naṣb	Dual nomens	-ay	kitāb-ay-ni
	Sound masculine plural nomens	-ī	mu'allim-ī-na, mufakkir-ī-na, mudarrib-ī-na
	Sound feminine plural nomens	-i	al-mu'allimāt-i, aṭ-ṭā'irāt-i, as-sayyārāt-i
	The five nomens	-ā	'ab-ā-ka
	Other nomens	-a	al-kitāb-a
	The adverbial functor <i>dhā</i>	-ā	dhā
	Other adverbial functors	-a	qabl-a, ba'd-a, warā'-a
	Imperfect verbs with -ā, ū, or ī	∅	yaktubā, yaktubū, taktubī
	Other imperfect verbs	-a	yadrus-a, yata'allam-a, yasta'mil-a

State	Domain	Suffix of 'i'rāb	Examples
Raf'	Dual nomens	-ā	kitāb-ā-ni
	Sound masculine plural nomens	-ū	mu'allim-ū-na, murāsīl-ū-na, musā'id-ū-na
	The 5 nomens	-ū	'ab-ū-ka
	Other nomens	-u	al-kitāb-u
	Imperfect verbs with -ā	-ni	yaktubā-ni, yata'allamā-ni
	Imperfect verbs with -ū or -ī	-na	yaktubū-na, yadrusū-na, taktubī-na
	Other imperfect verbs	-u	yaktub-u, yadrus-u, yatakallam-u

(7) Specification is a major set of functions marked by 'i'rāb; it is defined as the determination of a profile which pertains to a verb, a sentence, or a syntactic slot. The verb, sentence, or syntactic slot will be called the "head".

The profile consists of (a) a single grammatical feature, or (b) a combination of grammatical features. Such features are always nuclear; peripheral features have no place in the profile.

A nuclear feature is diagnostic: it is necessary and sufficient for identifying the head; thus tense is a nuclear feature since without it an entity cannot be classified as a verb or a sequence containing a verb, and since only a verb or a sequence containing a verb possesses tense. Features other than nuclear ones will be called "peripheral": thus negation is a peripheral feature since it can apply to various constituents of the sentence; for the same reason, interrogation is a peripheral feature.

With respect to verbs, the only feature involved is *transitivity*. With respect to sentences, the features involved are, *modality* (the contrasts being *factive, non-factive, contra-factive; colorless, exclamatory; remote, intermediate, proximate; categorical, qualified*), *tense, aspect*, and *adjunction*. With respect to slots, the only feature involved is *function* (specifically, the nominal).

As a rule, the determined features are embodied in a word or a longer expression which modifies the head and which we shall call the "specifier". Thus in the sentence 'inna l-qāḍiya mutahayyizun 'The judge is definitely partial', the specifier is 'inna (notice that the specifier denotes certainty and modifies the head). Again, in *raja'a Samīrun wa-huwa yabikī* 'Samir returned weeping', the specifier is *wa-huwa yabikī*.

In a handful of instances (which will be covered later), sentence structure plays the role of specifier. It is thus clear that:

(a) Specification is defined by two obligatory components: the profile, and the head.

(b) The profile is defined by the obligatory presence of a specifier which embodies at least one (nuclear) feature.

(c) The head is defined by obligatory restriction to three entities: the verb, the sentence, and the syntactic slot.

(d) Specification is a particular realization of the universal function known as the adverbial.

(e) *'I'rāb* is no more than a morphological device for marking specification.

Sometimes a feature, though embodied in the specifier, is not associated with *'i'rāb*. Such features will be excluded from the profile since *'i'rāb* is the subject of this study.

(8) At this point we need to define the following terms: "fact", "possibility", and "contra-fact".

A sentence expresses a *fact* if it commits the speaker to the truth of the proposition. The commitment is "primary" if it is attributable to the current speaker, and "secondary" if it is attributable to some other speaker. In the following examples, the italicized sentences are factive:

Group 1

sa-yarji'u Kamālun min Miṣra għadan

'Kamal will return from Egypt tomorrow.'

*'u'akkidu laka 'anna Kamālan sa-yarji'u
min Miṣra għadan.*

'I assure you that Kamal will return
from Egypt tomorrow.'

*'a'rifu 'anna Kamālan sa-yarji'u
min Miṣra għadan.*

'I know that Kamal will return
from Egypt tomorrow.'

*'a'taqidu 'anna Kamālan sa-yarji'u
min Miṣra għadan.*

'I think that Kamal will return
from Egypt tomorrow.'

Group 2

lan yarji'a Kamālun min Miṣra għadan.

'Kamal will not return from Egypt tomorrow.'

*'a'rifu 'anna Kamālan lan yarji'a
min Miṣra għadan.*

'I know that Kamal will not return
from Egypt tomorrow.'

*'a'taqidu 'anna Kamālan lan yarji'a
min Miṣra għadan.*

'I believe that Kamal will not return
from Egypt tomorrow.'

Group 3

(a) *lam 'akun 'a'rifu 'anna Kamālan
sa-yarji'u min Miṣra għadan*

'I did not know that Kamal
will return from Egypt tomorrow.'

(b) *lā 'uṣaddiqu 'anna Kamālan
sa-yarji'u min Miṣra għadan.*

'I do not believe that Kamal
will return from Egypt tomorrow.'

(c) *lā 'a'taqidu 'anna Kamālan
sa-yarji'u min Miṣra għadan.*

'I do not think that Kamal
will return from Egypt tomorrow.'

(d) *taḍhunnu Su'ādu 'anna Kamālan
sa-yarji'u min Miṣra għadan,
lākinnahā mukħḥi'atun.*

'Su'ad thinks that Kamal
will return from Egypt tomorrow,
but she is wrong.'

Notice that in Group 1 the italicized sentences are affirmative while in Group 2 the italicized sentences are negative; thus commitment may be to the truth of an affirmative proposition or to the truth of a negative proposition.

In Group 3, commitment to the truth of the embedded proposition is secondary. Sentence 3a states that, at some point in the past, the current speaker did not know that the embedded proposition is true and implies that, since then, he has been told that the proposition in question is true. Sentences 3b, 3c, and 3d negate primary commitment, but affirm secondary commitment, to the truth of the embedded proposition.

A sentence expresses a *possibility* if it is non-factive; i.e., if it commits the speaker neither to the truth nor to the falsity of the proposition. The embedded sentence in '*arjū 'an yarji'a Kamālun min Miṣra għadan*' 'I hope Kamal will return from Egypt tomorrow' expresses a possibility since it neither asserts nor denies that Kamal will return from Egypt tomorrow. Again, the deontic term is followed by a possibility (rather than a fact) in the following sentence since the speaker is stating an obligation, which may or may not be carried out, rather than expressing commitment to truth or falsity: *yajibullā-budda 'an yarji'a Kamālun min Miṣra għadan* 'Kamal must return from Egypt tomorrow'. The following paraphrase may further clarify the definition: a sentence expresses a possibility if it indicates primary or secondary commitment to a neutral position. In *yurīdu 'Alīyun 'an yazūra Miṣra* 'Ali wants to visit Egypt', the embedded sentence expresses a possibility; notice that the desire associated with that possibility constitutes secondary rather than primary commitment.

A sentence expresses a *contra-fact* if it commits the speaker exclusively to the falsity of the proposition; the exclusion in this context rules out secondary as well as primary commitment to the truth of the proposition. Thus *law darasa Kamālun la-najaḥa fī l-imiṭihāni* 'Had Kamal studied, he would have passed the test' is contra-factive since it states that Kamal did not study and did not pass the test.

A fact is designated as [+ Factive], a possibility is designated as [+ Non-factive], and a contra-fact is designated as [+ Contra-factive]. The terms *factivity*, *non-factivity*, and *contra-factivity* refer to the features [+ Factive], [+ Non-factive], and [+ Contra-factive] respectively.

(9) Lyons draws a distinction between a sentence and an utterance, associating the former with structure and the latter with use:

"..... in the first place the same sentence may be uttered to perform various speech-acts. Another reason is the related fact that the utterance or the context-of-utterance may contain non-linguistic information which contradicts the information that is linguistically encoded in the utterance-signal. For example, the meaning of a sentence like 'John is a brave man' is not affected by its being uttered ironically."⁵

This study draws no such distinction between sentences and utterances; instead, an utterance is used with its traditional definition as a stretch of speech which begins with silence or a pause and ends with silence or a pause.⁶

(10) In this study, the term "mood" denotes the speaker's perception of what he is saying; specifically, the

following four distinctions, controversial as they are, pertain to mood.⁷ Notice that we view the four distinctions as separate components although they are certainly connected.

(a) The illocutionary act; i.e., the act performed by the speaker in saying something. Making a statement, issuing a command, and asking a question are examples of illocutionary acts.

(b) The illocutionary force; i.e., the status of an utterance as a statement, a command, a question, etc.

(c) The communicative role; i.e., the use of utterances for *constative* or *performative* purposes. Purely constative utterances are statements; their role is descriptive, and they can be characterized as true or false. In contrast, purely performative utterances have no truth-value; their role is to *do* something rather than to say that something is or is not the case. Thus "I work eight hours a day" is constative, while "I pronounce you husband and wife" is performative. Sentences which follow 'an are performative since their role is to name an event (e.g., 'uḥibbu 'an 'aqra'a sh-shī'ra 'I like to read poetry' = 'uḥibbu qirā'ata sh-shī'ri 'I like reading poetry'); on the other hand, sentences which follow 'anna are constative since their role is to define the truth value of a proposition (e.g., 'arifu 'anna l-karama faḍīlatun 'I know that generosity is a virtue').

In some instances, the utterance has a *binary* communicative role: on the one hand, it performs an act which cannot be characterized as true or false; on the other hand, it states a proposition which can be characterized as true or false. The following sentence is a case in point:

layta 'Alīyan gḥanīyun. 'I wish Ali were rich.'

The specifier (*layta*) designates the head as a wish; thus a performative purpose is indicated for the head. Simultaneously, the specifier designates the head as contra-factive; thus a constative purpose is indicated for the head. The binary role is also evident in hypothetical conditionals (where both propositions are contra-factive):

law darasa la-najaḥa. 'Had he studied, he would have passed the test.'

The following sentence has a binary communicative role:

'alammā ta'lamū minna l-yaqīna? 'Are you as yet uncertain about us?'

As a question, the sentence is performative; but the implied fact ('You will be certain about us') is constative.

When both are assigned to the same Standard Arabic utterance, the performative purpose dominates the constative. Condition, for example, may be non-factive or contra-factive (compare 'idḥā with *law*); thus condition is a higher-level feature in comparison with non-factivity and contra-factivity. In Standard Arabic, therefore, communicative roles can be restricted to two, the constative and the performative, with the understanding that the binary role is a sub-type of the performative.

(d) The speaker's commitment (or subscription) to the illocutionary force, the communicative role, or some other feature of the proposition. Included here are: (i) the designation of propositions as fact, possibility, or contra-fact; (ii) the designation of propositions as colorless or exclamatory; (iii) the designation of distance (from actuality, the addressee, or the moment of speaking); and (iv) the expression of propositions in categorical or qualified terms.

We shall employ the term "modality" in referring to the speaker's commitment; thus, as used here,

modality is a sub-category of mood.

(11) The terms "factive", "non-factive", and "contra-factive" may indicate the *object* of commitment without indicating a gradation in the *degree* of commitment: truth, neutrality, and falsity can draw commitment in equal measure. If, on the other hand, actuality is viewed as a point of reference, factivity may be considered proximate while non-factivity and contra-factivity may be considered relatively remote. For example, the dependency inherent in conditional sentences establishes actuality as a point of reference: in effect, the protasis sets up actuality as a condition. Thus conditional sentences contrast with statements in regard to modality: while the latter are factive and therefore proximate to actuality, the former are either non-factive or contra-factive and therefore remote from actuality. Distance is one way of expressing the degree of commitment.

The degree of commitment may be expressed in terms of intensity rather than distance; such is the case in the following pairs:

[+ <i>Colorless</i>]:	al-ḥadīqatu jamīlatun.	'The garden is beautiful.'
[+ <i>Exclamatory</i>]:	mā 'ajmala l-ḥadīqata.	'How beautiful the garden is!'
[+ <i>Categorical</i>]:	al-jiddu faḍīlatun.	'Diligence is a virtue.'
[+ <i>Qualified</i>]:	'inna l-jidda faḍīlatun.	'Diligence is definitely a virtue.'

Modality often indicates the *type* of commitment; for example, the qualifier '*a'rif*' expresses epistemic commitment to truth in '*a'rifu 'anna Samīran marīḍun*' 'I know that Samir is sick', and the qualifier '*urīd*' expresses desiderative commitment to neutrality in '*urīdu 'an 'arjī'a*' 'I want to return.'

Modality, then, comprises three varieties: the first highlights the object of commitment, the second highlights the degree of commitment, and the third highlights the type of commitment; of these, the second comprises two sub-varieties: one expressed in terms of distance, and another expressed in terms of intensity.

(12) A "categorical" proposition does not include a qualifier; a "qualified" proposition does.⁸ In this context, qualification is defined as the explicit expression of the speaker's commitment to truth or neutrality.

The qualifier of a fact may express the intensity of commitment, the type of commitment, or both. Of the following examples, the first expresses categorical fact and the rest express qualified fact. In the second example, the qualifier expresses intensity (but not type) of commitment to truth; in the third, the qualifier expresses type (but not intensity) of commitment to truth. In each example, the qualifier is italicized.

al-maraḍu yuḍ'ifu jasadī.	'The disease is weakening my body.'
' <i>inna</i> l-maraḍa yuḍ'ifu jasadī.	'The disease is definitely weakening my body.'
' <i>ash'uru</i> 'anna l-maraḍa yuḍ'ifu jasadī.	'I feel that the disease is weakening my body.'

Of the following examples, the first expresses categorical fact and the rest express qualified fact. Notice that each qualifier expresses epistemic commitment to truth as well as the intensity of such commitment. In each example, the qualifier is italicized.

ṣaḍīqī 'abqarīyun.	'My friend is a genius.'
' <i>aḍḥunnu</i> 'anna ṣaḍīqī 'abqarīyun.	'I think my friend is a genius.'
' <i>a'taqīdu</i> 'anna ṣaḍīqī 'abqarīyun.	'I believe my friend is a genius.'

'*a'rifu* 'anna ṣadīqī 'abqarīyun.
'*ajzimu* 'anna ṣadīqī 'abqarīyun.

'I know my friend is a genius.'
'I am certain that my friend is a genius.'

The qualifier of possibility expresses the type of commitment. In the first example below, commitment to neutrality is desiderative; in the second, deontic; and in the third, permissive. In each example, the qualifier is italicized.

'*urīdu* 'an 'adḥḥaba.
'*yajibu* 'an 'adḥḥaba.
'*laka* 'an tadḥḥaba.

'I want to go.'
'I must go.'
'You may go.'

(13) When consisting of a function form, the specifier is viewed as a "lexical marker"; for example, '*inna* is a lexical marker which attributes certainty to the proposition. A "governing" lexical marker is one which requires '*irāb*.

(14) In diagram form, specification may be represented as follows (where brackets enclose the profile, X stands for the head, and Y stands for the specifier; the symbols + *a* and + *b* represent the determined features embodied in the specifier, assigned to the head, and associated with '*irāb*):

[Y]					[Y]
[+ a]	X	or	X		[+ a]
[+ b]					[+ b]

The following is an example:

[lam]	
	S
[+ Remote]	

The specification expressed by this example can be stated thus: The string contains a specifier (the particle *lam*) which stipulates that the sentence expresses relative remoteness (from the moment of speaking).

(15) Specification comprises three types:

(a) Type I employs certain particles, called *jawāzim*, as specifiers. The head is a sentence, and the specifier denotes distance (i.e., remoteness or proximity).

(b) Type II employs "noun determiners" as specifiers. The head is a syntactic slot which the specifier designates as nominal.

(c) Type III embraces all other instances of specification. The head is usually a sentence; the specifiers form a small, well-defined set which (if necessary) can be learned as items.

CHAPTER III

THE RULES OF 'I'RĀB PROPOSED BY THIS STUDY

The first type of specification is marked by *jazm*, the second type is marked by *jarr*, and the third type is marked by *naṣb*. Where no specification is involved, a *mu'rab* assumes the state of *raf'*. To simplify the discussion, we shall refer to specification as a "governing" set of functions; the remaining functions will be called "non-governing" to underscore our conviction that *raf'* is a matter of "default". We shall use the term "governmental 'i'rāb" to denote *jazm*, *jarr*, and *naṣb*; in contrast, we shall use the term "non-governmental 'i'rāb" to denote *raf'*.

As a marker, the state of *raf'* plays a unique role in Standard Arabic: it designates the presence of a function but not the identity of that function; the other three states, on the other hand, mark the presence as well as the identity of the function.

The rest of this study will further clarify and illustrate the statements of Chapter II and Chapter III.

from a point of reference.

The modal contrasts which define fact, possibility, and contra-fact may be viewed in terms of distance from actuality (fact would then be co-locational with actuality, while possibility and contra-fact would be relatively remote from actuality). In like manner, the contrast between *lammā* and *lam* is statable in terms of distance from the moment of speaking; thus the contrast in question may be assigned to mood.

B. Imperative Expressions

Imperative constructions impose, or propose, some course of action or pattern of behavior, and indicate that it should be carried out.³ In most instances, the obligation to carry out the course of action or pattern of behavior is imposed on the addressee; in some instances, however, the obligation is imposed on a first-person or a third-person agent. The following are examples:

(a)	udkḥul.	'Enter!'
	li-tadkḥul.	'Enter!'
	lā tadkḥul.	'Do not enter!'
(b)	li-nadkḥul.	'Let us enter!'
	li-yadkḥul.	'Let him enter!'
	lā yadkḥul 'aḥadun minhum.	'Let none of them enter!'

If the addressee is viewed as the point of reference, the first set may be designated as [+ Proximate] and the second may be designated as [+ Remote].

Imperative utterances like *udkḥul* 'Enter!' are derived by deleting *li+tV-* from the underlying second-person imperfect verb form. Such deletion differs from imperative particles in regard to distance: while deletion admits of only one feature (proximity), particles admit of two features (proximity and remoteness).

[li+tV+Stem → Stem]	S
[+ Proximate]	
[Imperative particle]	S (with a second-person agent)
[+ Proximate]	
[Imperative particle]	S (with a first-person or a third-person agent)
[+ Remote]	

The particle *li-* is rarely used to signal proximity; on the other hand, the particle *lā* is rarely used to

signal remoteness:

C. Conditional Sentences

Hypothetical conditionals express contra-factivity; simple conditionals, on the other hand, express non-factivity. Compare, for example, the following pair:

law dḥahaba 'ilā Miṣra la-dḥahabtu ma'ahu.	'Had he gone to Egypt, I would have gone with him.'
'In dḥahaba 'ilā Miṣra dḥahabtu ma'ahu.	'If he goes to Egypt, I will go with him.'

The first sentence implies that neither agent went to Egypt—that the condition and the result are both hypothetical suppositions; the second sentence, on the other hand, implies that both agents *may* go to Egypt.

The dependency inherent in conditional sentences establishes actuality as a point of reference: in effect, the protasis sets up actuality as a condition. Thus conditional sentences contrast with statements in regard to modality: while the latter are factive and therefore proximate to actuality, the former are either non-factive or contra-factive and therefore remote from actuality. In the following paragraphs, the markers of remoteness are listed and explained.

(1) Obligatory markers

(a) Remoteness is marked, in both correlative clauses of a conditional sentence, by the formative *Modal Perfect*. If the temporal constituent is realized as Ø, the formative in question combines with the verb to produce a perfect form; otherwise, that formative is realized as a perfect form of *kāna*. Most commonly, the temporal constituents involved are *Perfect*, *Future*, *Habitual*, and *Current*. In simple conditional sentences, the temporal constituent *Future* is optionally realized as Ø. In hypothetical conditional sentences, the temporal constituent *Perfect* is optionally realized as Ø.

(b) In the apodosis of a simple conditional sentence, *fa-* often occurs in place of *kāna*.⁴

(c) In both correlative clauses of a simple conditional sentence, *jazm* may occur in place of *Modal Perfect + Future*. The use of *jazm* with *'idḥā* is rare; otherwise, it is very common.

(2) Optional marker

In the apodosis of a hypothetical conditional sentence, *la-* may co-occur with *Modal Perfect*.

The use of *fa-* and *jazm* to designate non-factive but not contra-factive propositions indicates that remoteness comprises two distinct degrees: *intermediate* and *far* (the first being identified with the non-factive and the latter being identified with the contra-factive). The distinction between *intermediate* and *far* is also marked by the use of *la-* and by selection of conjunctions. Thus the specification which employs *jazm* in conditional contexts may be represented as follows (where *Particle*₁ stands for any conditional conjunction other than *law*, and where the degree of remoteness is intermediate):

[Particle₁]
S
[+ Remote]

Notes

(1) Sometimes 'anna occurs immediately after law; the protasis then is an elliptical string which lacks the expression *kāna ṣaḥīḥan*. The following is an example:

law 'anna l-'arḍa murabba'atun law kāna ṣaḥīḥan 'anna l-'arḍa
murabba'atun 'Were it true
that the earth is square'

Notice that, although the conditional sentence as a whole commits the current speaker to the falsity of two propositions, the sentence *al-'arḍu murabba'atun* commits a different speaker to the truth of its proposition. It would be perfectly acceptable to expand the protasis by adding *kamā za'ama* 'as he claimed'.

(2) If the temporal constituent is realized as Ø, a contra-factive clause denotes past time while a non-factive clause denotes future time. Thus *law najaha la-kāfa'tuhu* is translatable by 'Had he passed (the test), I would have rewarded him'; on the other hand, *'in najaha kāfa'tuhu* is translatable by 'If he passes (the test), I will reward him'.

(3) It was pointed out above that, in conditional sentences, the perfect form of the verb is used to mark non-factivity and contra-factivity. Such usage is not hard to understand since the marker and the marked feature are associated with the idea of remoteness: the perfect form usually expresses remoteness from the moment of speaking; non-factivity and contra-factivity express remoteness from actuality.⁵

(4) The following conditional conjunctions govern *jazm*: 'in 'if'; 'ayy, man 'who, whoever'; 'ayyuman 'whosoever'; mahman 'whosoever'; mā 'what'; 'ayyumā 'whatsoever'; mahmā 'whatever'; 'ayna 'where'; 'aynamā 'wherever'; hayṭu 'where'; hayṭumā 'wherever'; 'ayyāna, 'ayyānamā 'whenever'; idḥmā 'whenever'; kullamā 'as often as'; matā 'when'; matāmā 'whenever'; 'annā, kayfa, kayfamā 'however (in whatever way)'. Though rarely, the conjunction 'idhā 'if' also governs *jazm*.

(5) A sentence such as *'in tadrus tanjah* 'If you study, you will pass' can undergo an optional transformation which deletes the conjunction 'in and places the first verb in the imperative form; the output is thus *udrus tanjah* 'Study and you will pass'.

CHAPTER V

TYPE II SPECIFICATION (JARR)

The second type of specification employs a "noun determiner" to define a given syntactic slot. Noun determiners are forms which stipulate that a following slot must be nominal (such stipulation implies that the following expression is *typically* a noun).

[Noun Determiner]
[+ Nominal] Syntactic Slot

Noun determiners fall into three classes:

(1) Class I comprises the forms commonly known as "prepositions". To this class belong the forms 'alā, 'an, bi-, fī, ḥattā, 'ilā, ka-, ladā, ladun, li-, ma'a, min, mudḥ, mundḥu, tā' al-qasam, and wāw al-qasam; to the same class also belong the exceptive forms 'adā, ḥāshā, and khālā.¹ The most frequent of noun determiners, these forms make up a distinct group on account of two peculiarities: they are (invariable) particles, and they restrict the prepositional phrase which they introduce in regard to function. The comments below concentrate on the second peculiarity.

A preposition and its object constitute a sequence which, *by virtue of being a prepositional phrase*, is excluded from certain syntactic slots; this becomes clear when one observes that the object of a preposition is typically a noun and yet, by itself, a noun may occur where a prepositional phrase may not occur. On the other hand, certain slots (e.g., *Time* and *Place*) are more commonly associated with prepositional phrases than they are with nouns. Thus the preposition may be considered a "relater" which identifies the prepositional phrase with certain slots while tending to dissociate it from other slots.

(2) Class II comprises certain declinable functors which enter into construct with a following noun. To this class belong:

(a) The adverbial functors mentioned in Chapter II (item 3a).

(b) The quantifiers 'amma, jamī', kāffa, sā'ir 'all'; 'ahad 'one, a certain one'; ba'd 'some, a certain one'; kilā 'both'; kull 'all, each'; miqdār, qadr 'measuring, numbering, amounting to'; nahw, zuhā 'about'; and rubba 'many a'.

(c) The following forms which pertain to identity: 'ākhīr 'last'; ahl, dhū, sāhib, 'ulū 'of (such and such description); 'ayy 'any'; 'ayy 'which?'; dhāt, nafs 'same'; ghayr, siwā 'other than'; and mithl 'like'

(d) The elative form 'aF'aL.

(e) Cardinal and ordinal numerals which precede the counted noun.

Notice that the cardinal numerals in question employ a complicated system of contrasts to show that the following word is a noun rather than an adjective: while an adjective *agrees* with the modified noun in three categories (number, gender, and case), a counted noun *contrasts* with the numeral in at least two of these categories.² The ordinals of 1 - 10 (in expressions like 'awwalu baytin 'the first house', khāmisu shajaratin 'the fifth tree', etc.) contrast with the counted noun in gender and case.

Thus each of the numerals under discussion is followed by a fully defined tagmeme: the genitive marker designates the slot as nominal, while lack of agreement designates the filler as a noun. The duplicity involved is hardly superfluous since one-to-one correspondence does not always hold between form and function (for example, nouns are not the only forms with nominal function).

Some construct phrases imply a Class II determiner; e.g., rajulu sū'in 'a bad man' is equivalent to rajulun dhū sū'in.

(3) Class III comprises content forms which occur as the first term of inanimate explicative constructs. The constructs in question are those which satisfy three requirements:

- (a) The second term must be a proper noun with inanimate reference.
 (b) The first term must occur in Deep Structure as the head of an attributive construction where the modifier is an equational clause.
 (c) The Deep-Structure modifier must consist of the first term functioning as subject and the second term functioning as predicate.

An example of inanimate explicative constructs is the phrase *madīnatu l-Qāhirati* 'the city of Cairo' (= *al-madīnatu llai hiya l-Qāhiratu*). Other examples are given below (in each, the first word is the determiner):

<i>nahru n-Nīli</i>	'The River Nile'
<i>jabalu l-Muqattami</i>	'al-Muqattam Mountain'
<i>jumhūrīyatu Miṣra</i>	'the Republic of Egypt'
<i>'imāratu l-Kuwayti</i>	'the Emirate of Kuwait'
<i>shahru Ramaḍāna</i>	'the month of Ramadan'

Class III determiners are a distinct group not only because they are content forms but also because they require the following noun to be proper, non-human, and semantically appositional.

Note

Many construct phrases contain no determiner; such phrases are the Surface-Structure realization of Deep-Structure strings which contain a prepositional phrase (the second term of the Surface-Structure construct is the object of a preposition in the underlying string); for example, *kitābu Samīrin* 'Samir's book' is equivalent to *al-kitābu lladhī li-Samīrin* 'the book which belongs to Samir'.³

CHAPTER VI

TYPE III SPECIFICATION

(NASB)

The major contexts for Type III specification are listed and discussed below. In some of these contexts, the specifier denotes modality. It will be recalled that in Type I specification modality is synonymous with distance; in contrast, Type III specification never designates distance. Thus in conditional contexts, the features [+ Factive], [+ Non-factive], and [+ Contra-factive] belong to the distance category because the protasis sets up actuality as a point of reference; in Type III specification, on the other hand, actuality is not set up as a point of reference, and for that reason the same features highlight the object of commitment rather than distance. Again, the features [+ Exclamatory] and [+ Qualified], which mark some sentences for Type III specification, indicate intensity of commitment rather than distance.

A. *The Use of Objects*

As the following table shows, the number of objects and the type of each object determine the verbal subclass,¹ thus depicting the verb as one member of a distinct set.

Transitive verbs

Verb [D.O.]
[+ Transitive]

Ditransitive verbs

(1) Verb [Object₁ + Object₂]
[+ Ditransitive a]

where the string *Object₁ + Object₂* is not derived from a sentence, and where, in most instances, one of the two objects is derived from a prepositional phrase

To this subclass belong:

(a) All causitive verbs of Measures II and IV whose source (Measure I) forms are transitive.

(b) Verbs which signify 'to fill', 'to give', 'to deprive', 'to forbid', 'to ask', 'to entreat', and the like.

(c) Verbs which signify 'to make', 'to appoint', 'to call', 'to name', and the like.

[Object₁ + Object₂]

(2) Verb

[+ Ditransitive b]

where the string *Object₁ + Object₂* is derived from a sentence

To this subclass belong Measures other than IV of '*af'āl al-qulūb* 'verbs of the heart' (i.e., verbs which signify a mental event).

Tritransitive verbs

[I.O. + Object₁ + Object₂]

Verb

[+ Tritransitive]

where the string *Object₁ + Object₂* is derived from a sentence

To this subclass belong all Measure IV verbs of '*af'āl al-qulūb*.

Note

The construction known as *ikhṭiṣāṣ* 'particularization' results from deleting the verb '*a'nī* 'I mean' or '*akḥuṣṣ* 'I specify'; thus *naḥnu l-Miṣrīyīna* 'We the Egyptians' is equivalent to *naḥnu, 'akḥuṣṣu l-Miṣrīyīna,* 'We, specifically the Egyptians,'

B. The Use of Nominalizers

The particles '*an* and '*anna* are the only conjunctions which govern *naṣb*. Both particles are followed by a sentence which functions as a noun; in addition, both particles specify modality: '*an* designates the following sentence as a frequently-qualified possibility, and '*anna* designates the following sentence as a frequently-qualified statement of fact.

The particle '*an* is frequently preceded by a term (*wa'ad* 'to promise', *naṣaḥ* 'to advise', *samaḥ* 'to allow', *nawā* 'to intend', *arād* 'to want', *ḍarūrī* 'it is necessary', *wajab* 'to be obligatory', etc.) which expresses the type of commitment to neutrality (promise, advice, permission, intention, desire, necessity, obligation, etc.). Similarly, '*anna* is frequently preceded by a term (*'araf* 'to know', *jazam* 'to be certain', *ḍhann* 'to think', *qaddar* 'to guess', *ra'ā* 'to see', *shā'ar* 'to feel', etc.) which expresses the type of commitment to truth (epistemic, sensory, etc.) and which may also express the intensity of commitment to truth.

['an]

S

[+ Non-factive]

[anna]

S

[+ Factive]

Notes

(1) 'an is the only particle which governs the subjunctive: *lan* 'will not' = *lā* + 'an, and '*idḥan* 'in that case' = '*idḥ* + 'an; *lām al-ta'īl* (translatable by 'in order that'), *ḥattā*, *kay*, *likay* (all translatable by 'in order that'), *al-fā' al-sabā'īya* (translatable by 'so that'), *wāw al-mā'īya* (translatable by 'whilst'), '*aw* 'until', and *lām al-juḥūd* (which denotes denial) are Surface-Structure realizations of the underlying string *Prep* + 'an.

(a) Two facts support the assumption that *lām al-ta'īl* is derived from the string *li*+*'an* (where the first constituent is a preposition):

(i) The string '*an* + *Imperfect Verb* is usually replaceable by a verbal noun.

(ii) The string *li*+*Imperfect Verb* is interchangeable with the string *li*+*VN*.

We may therefore postulate the following transformation:

$$li+'an - Imperfect Verb \rightarrow \left\{ \begin{array}{l} li+Imperfect Verb \\ li+VN \end{array} \right\}$$

where the verb and the verbal noun share the same root

(b) Since synonymous constructions are identical in Deep Structure, we must assume that *ḥattā*, *kay*, and *likay* (all synonymous with *laam al-ta'īl*) are derived from the string *li*+*'an* (where the first constituent is a preposition).

(c) Since it is synonymous with the preposition *ḥattā*,² *al-fā' al-sabā'īya* must be derived from the string *li*+*'an* (where the first constituent is a preposition).

(d) Since it is synonymous with the preposition *ma'a*, *wāw al-mā'īya* must be derived from the string *ma'a* + '*an* (*lā tanḥa 'an khuluqin wa-ta'tiya mithḥlahu* 'Do not restrain others from any habit whilst you yourself practice one like it' = *ma'a 'an ta'tiya mithḥlahu*).

(e) Since it is synonymous with the preposition '*ilā*,³ '*aw* must be derived from the string '*ilā* + '*an* (*la-'astashilanna ṣ-ṣa'ba 'aw 'udrika l-munā* 'I will deem everything difficult easy until I attain my wishes' = '*ilā 'an 'udrika l-munā*).

(f) *lām al-juḥūd* must be derived from a string which contains the preposition *li*- and the particle '*an* since the equivalence is demonstrated by pairs of sentences such as the following: *mā kāna l-Lāhu li-yarudda 'ibādahu* 'God is not one to turn away his servants' = *mā kāna lil-Lāhi 'an yarudda 'ibādahu*. Thus we may assume that *lām al-juḥūd* results from the following transformation:

$$ma - kāna li+N - 'an - Imperfect Verb \rightarrow mā kāna - N - li+Imperfect Verb$$

The structural changes cited in the above paragraphs follow from a general transformation:

$$X - \text{Prep}_1 + 'an + \text{Imperfect Verb} - Y \rightarrow \left\{ \begin{array}{l} X - \text{Conj} + \text{Imperfect Verb} - Y \\ X - \text{Prep}_1 + \text{VN} - Y \end{array} \right\}$$

where

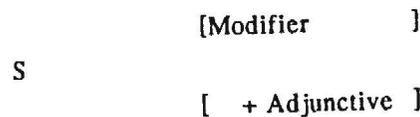
- (a) the preposition and the conjunction are synonymous, and
- (b) the verb and the verbal noun share the same root

(2) 'anna is the only conjunction which governs the accusative: *lākinna* 'but' = *lākin* + 'inna, *ka'anna* 'as if, as though' = *ka*+*'anna*, and *li'anna* 'because' = *li*+*'anna*.

(3) The potential mood indicates a performative role in which an embedded proposition is viewed as a possibility. The particle 'an designates the potential mood in sentences like '*ubḥibbu 'an 'azūra Miṣra* 'I would like to visit Egypt'.

C. The Use of Adjuncts

A sentence may be specified by an adjunct (compare *sa-yusāfiru 'Alīyun* 'Ali will go abroad' and *sa-yusāfiru 'Alīyun ṭalaban lil-'ilmi* 'Ali will go abroad for the purpose of obtaining an education'). When specified by an adjunct, a sentence is said to be "adjunctive".



Adjuncts include: expressions which specify manner (*al-maf'ūl al-muṭlaq* and *ism al-hay'a*); expressions which specify frequency (*ism al-marra*); expressions which specify association or concomitance (*wāw al-muṣāḥaba* plus *al-maf'ūl ma'ahu*, as in *sirtu wa-Samīran* 'I walked along with Samir'); expressions which answer the question *In what respect?* (*tamyīz al-tabyīn*, as in *al-Lāhu jalīlun qadran* 'God is great in stature' and *izdādat Su'ādu ḥusnan* 'Su'ad has become more beautiful'); expressions which specify time; expressions which specify place or local extension; expressions which specify state or circumstance (*al-ḥā'i*); expressions which specify quantity or measurement (*tamyīzu l-wazni wa-l-kayli wa-l-miqyāsi wa-l-misāḥati*, as in *riṭlun 'inaban* 'a pound of grapes', *kaylatun qamḥan* 'a kilah of wheat', *mitrun ḥarīran* 'a meter of silk', *ḥaddānun 'arḍan* 'a feddan of land'); expressions which specify motive (*al-maf'ūl li-'ajlihi*); expressions which specify exception (*al-istiḥnā*).

Only when they consist of a *muḥrad* or a phrase introduced by a declinable adverbial functor do adjuncts display the morphological markers which designate specification. This state of affairs ensues from two rules:

(a) If it receives a morphological marker to designate specification on a given level, a form cannot receive a different morphological marker to designate specification on a higher level. Consider, for example, the sentence *raja'a Farīdun fi l-masā'i* 'Farid returned in the evening': Type II specification operates in the prepositional phrase while Type III specification operates on a higher level (namely, the sentence level); since the last word is morphologically marked for Type II, it cannot be morphologically marked for Type III.

(b) Specification does not entail 'irāb if the specifier and the head are dominated by different S-nodes. Thus adjunction does not entail *naṣb* if the adjunct consists of a sentence.

It is pertinent at this point to make the following comments on the derivation of *tamyīz*:

(a) The string underlying *tamyīz al-tabyīn* contains a preposition. Consider, for example, the underlying string *al-Lāh + jalīl + fī + al-qadr* 'God is great in stature'. Because it is recoverable (i.e., because the context renders it redundant), the preposition may be deleted. If *fī + al-qadr* is viewed as modifier of *jalīl*, the deletion (together with 'irāb) yields *al-Lāhu jalīlu l-qadri*; if, on the other hand, *fī + al-qadr* is viewed as an adjunct modifying the preceding clause, deletion (together with 'irāb) yields *al-Lāhu jalīlun qadran*.

(b) The string underlying *tamyīzu l-wazni wa-l-kayli wa-l-miqyāsi wa-l-misāḥati* contains a preposition:

(i) Consider, for example, the underlying strings *riṭl + min + al-'inab* 'a pound of grapes', *kayla + min + al-qamḥ* 'a kilah of wheat', *mitr + min + al-ḥarīr* 'a meter of silk', and *faddān + min + al-'ard* 'a feddan of land'. Because it is recoverable (i.e., because the context renders it redundant), the preposition may be deleted to generate the following Surface-Structure expressions: *riṭlu 'inabin*, *kaylatu qamḥin*, *mitru ḥarīrin*, and *faddānu 'arḍin*.

(ii) Consider, on the other hand, the underlying strings *riṭl + wuzin + min + al-'inab* 'a pound in weight of grapes', *kayla + kilat + min + al-qamḥ* 'a kilah in measure of wheat', *mitr + qīs + min + al-ḥarīr* 'a meter in length of silk', and *faddān + musih + min + al-'ard* 'a feddan in area of land'. Here the prepositional phrase is an adjunct; thus, together with 'irāb, deletion of the redundant constituents yields *riṭlun 'inaban*, *kaylatun qamḥan*, *mitrun ḥarīran*, and *faddānun 'arḍan*:

riṭl + wuzin + min + al-'inab → *riṭlun wuzina 'inaban* → *riṭlun 'inaban*
etc.

D. Specification of Minor Sentences

A "major" sentence-type is defined as a pattern constituted by predication (*'isnād*); all other sentence-types are "minor". Within the framework of this general definition, various sub-types of minor sentences have distinct, well-defined structures.

Minor sentences comprise a relatively small set. In regard to communicative role, they are performative utterances which express command, wish, reproach, praise, salutation, vocation, lamentation, warning, urging, call for help, admiration, and the like.⁴ In such sentences, the common element associated with *naṣb* is the modal feature [+ Exclamatory].

Some minor sentences contain a characteristic function form; for example, sentences denoting vocation typically begin with a vocative particle. A close examination reveals that [+ Exclamatory] is denoted by the entire sentence structure rather than the function form alone; in other words, the structure of a minor sentence plays the role of specifier.

[Minor Sentence-type]
S
[+ Exclamatory]

The following are examples of exclamatory minor sentences; the accusative forms are italicized. Notice that the accusative form is frequently a verbal noun.

ṣabran.
ra'yan laka.
sam'an wa-ṭā'atan.
makānaka.
wayḥaka.
subhāna l-Lāhi.

'Have patience!
 'God keep you!
 'To hear is to obey!
 'Stay where you are!
 'Woe unto you!
 'Praise be to God!

hanī'an laka.
'ahlan wa-sahlan.
an-nāra n-nāra.
'iyyāka wa-'aṣḍiqā'a s-sū'l.
al-jidda l-jidda.
an-najdata n-najdata.
yā 'aṣḍiqā'anā.
wā 'Abda l-Muttalibāh.
mā 'ajmala l-warda.
ruwayda Farīdan.
hāka l-kitāba.

'Congratulations!
 'Hello!
 'Fire! Fire!
 'Beware of bad friends!
 'Diligence, diligence!
 'Help! Help!
 'Our friends!
 'Alas, Abd-al-Muttalib!
 'How beautiful the roses are!
 'Treat Farid gently!
 'Here's the book! Take it!

Notes:

(1) The structure which employs *nī'ma* 'to be good' and *bi'sa* 'to be bad' is a major sentence-type since it results from predication (e.g., *Muḥammadun nī'ma r-rajulu* 'Mohammad is an excellent man' = *Muḥammadun na'ima r-rajulu*); for this reason, it does not employ the *naṣb* required by the third type of specification.

(2) Some linguists consider exclamatory minor sentences the product of deleting certain elements from major sentence-types; accordingly, *'ahlan wa-sahlan* 'Welcome!' would be equivalent to *ji'ta 'ahlan wa-nazalta sahlān* 'You are come to a friendly people and a place of ease'. The present writer finds this analysis objectionable since the presumably elliptical sentence and the postulated source string are not synonymous: *ji'ta 'ahlan wa-nazalta sahlān*, for example, is constative; *'ahlan wa-sahlan*, on the other hand, is performative.

E. The Use of Function Forms to Introduce Nominal Sentences

Equation and modality are two features which pertain to sentences. The former pertains to "equational sentences" where the subject and the predicate express a relationship of equivalence or identity; the latter denotes the speaker's commitment to the proposition. The following are examples:

<i>Equation:</i>	'abī 'ustādḥun. 'My father is a professor.'
<i>Modality:</i>	
[+ Factive]	yarjī'u 'Alīyun hādḥa l-masā'a. 'Ali will return this evening.'
[+ Non-factive]	'arjū 'an yarjī'a 'Alīyun hādḥa l-masā'a. 'I hope Ali will return this evening.'
[+ Contra-factive]	law dḥahaba la-dḥahabtu ma'ahu. 'Had he gone, I would have gone with him.'
[+ Qualified]	'innahu mukḥliṣun. 'He is definitely sincere.'

The introducers being discussed comprise two groups: of these, one group specifies equation and the other specifies modality.

Specification of equation

We shall define an equational sentence as a construction whose nuclear constituents in Surface-Structure are two nomens of which one functions as subject and the other functions as predicate. Typically, such a sentence expresses "equation"; i.e., it identifies the referent of a given nomen with the referent of another nomen, or attributes to the referent of a given nomen the description denoted by another nomen. Thus equation is the counterpart of progressive aspect: the latter combines with a verbal denotation to signify an on-going event; the former relates two *nomens* to signify a state. Here are some examples of equational sentences:

'Alīyun tilmīdḥun.	'Ali is a student.'
'Alīyun ṭawīlun.	'Ali is tall.'
'Alīyun marīḍun.	'Ali is sick.'
'Alīyun nā'imun.	'Ali is asleep.'

Characterized by expressing current aspect, the above examples illustrate the "equational kernel". Current aspect is always associated with an on-going event or a state, but the reverse is not true: an on-going event or a state can be associated with the past or the future. The forms commonly known as "*kāna* and its sisters" denote deviation from the current aspect of the equational kernel (compare *ya'malu fi l-maṣna'i* 'He is working in the factory', *kāna ya'malu fi l-maṣna'i* 'He was working in the factory', and *sa-ya'malu fi l-maṣna'i* 'He will be working in the factory'; also compare *huwa ṭālibun* 'He is a student', *kāna ṭāliban* 'He was a student', and *sa-yakūnu ṭāliban* 'He will be a student'). In spite of such deviation, the sentence continues to express an on-going event or a state; consider the following contrasts:

- (a) yadrusu 'Umaru ṭ-ṭibba.
'Omar is studying medicine.'
- (i) darasa 'Umaru ṭ-ṭibba. 'Omar studied medicine.'
- (ii) kāna 'Umaru yadrusu ṭ-ṭibba. 'Omar was studying medicine.'
- (b) 'Umaru tilmīdḥun.
'Omar is a student.'
- (iii) kāna 'Umaru tilmīdḥan. 'Omar was a student.'

Sentences (i) and (ii) are similar in that both denote past time; they differ in that sentence (ii), unlike sentence (i), expresses the progressive sense of sentence (a). It is somewhat harder to determine whether (iii) resembles (i) or (ii). The answer becomes clear when we try to embed (i), (ii), and (iii) in the matrix 'indamā zurtu l-'usrata, 'When I visited the family,': (ii) and (iii) fit into the matrix, but (i) does not. We therefore conclude that (iii) resembles (ii) rather than (i).

The foregoing discussion leads to four conclusions: (a) that equation is an aspectual feature which signifies a state; (b) that equation is always associated with a "temporal context"; (c) that in the equational kernel, current aspect constitutes the temporal context; and (d) that *kāna* and its sisters specify equation by denoting deviation from the temporal context of the kernel.

Since it presupposes the two constituent nomens, equation is inseparable from the sentence as a whole; it is in this sense that we regard equation as a sentential feature.

The following diagrams illustrate the use of *kāna* in equational sentences. The first diagram states that a non-current temporal context is assigned to the equational sentence. In the second diagram, the feature [+Vacuous] indicates that the equational sentence is devoid of current aspect and that equation is associated with the temporal context of the matrix sentence.⁵

[kāna]
Equational Sentence

[+ Perfect]

[kawn]
Equational Sentence

[+ Vacuous]

The introducers of equational sentences are listed below, together with the pertinent profiles. The symbol *X* stands for *Habitual*, *Future*, *Perfect* or *Vacuous*; the specifier assumes a different form for each of these features: the imperfect form for [+Habitual], the imperfect form usually preceded by *sa-/sawfa* for [+Future], the perfect form for [+Perfect], and the verbal noun for [+Vacuous]; in addition, the specifier may assume the imperative form for [+Habitual] or [+Future]. The feature [+Durative] expresses continuation until a

point other than the present time, the feature [+ Retentive] expresses continuation until and during the present time, and the feature [+ Conversional] expresses a change to a given state.

kāna

[+ X]

baqiya, dħalla

[+ X]

[+ Durative]

The following forms combined, in the perfect or imperfect, with a negative particle: *bariħa, fati'a, infakka, and zāla*

[+ Vacuous]

[+ Retentive]

'āda, 'āda, 'aħhā, 'amsā, 'aħbaħa, 'asfara, bāta, ġhadā, rāħa, raja'a, and šāra

[+ X]

[+ Conversional]

'ays (in laysa)

[+ Vacuous]

Note

The form *laysa* is a verb derived from the string *lā + 'ays* (where the first constituent is a negative particle and the second is a variant of *kawn*). Thus the following derivation is proposed for *laysa 'Alīyun tilmīdħan* 'Ali is not a student'; notice that the verb *yantafī* 'to be false' is proposed as a Deep-Structure constituent.

yantafī + kawn + 'Alī + tilmīdħ → laysa
 + 'Alī + tilmīdħ → laysa 'Alīyun
 tilmīdħan

Specification of modality

Compare the following sentences:

jayshunā qawīyun.	'Our army is strong.'
'inna jayshānā qawīyun.	'Our army is definitely strong.'
'alla/la'alla jayshānā qawīyun.	'Perhaps our army is strong.'
layta jayshānā qawīyun.	'I wish our army were strong.'

The first sentence denotes a fact, the second affirms that fact, the third denotes a possibility, and the fourth

denotes a contra-fact. Thus *'inna* and its sisters specify modality.

The following diagrams represent the profiles for *'inna*, the particle of absolute negation (*lā*), *'allalla'alla*, and *layta*:

[*'inna*]
 [+ Factive] S
 [+ Qualified]

[*lā*]
 [+ Factive] S
 [+ Qualified]

[*'alla/la'alla*]

 [+ Non-factive] S

[*layta*]

 [+ Contra-factive] S

Notes

(1) The forms *'anna* 'that', *lākinna* 'but', and *ka'anna* 'as if, as though' are not sisters of *'inna*: the first is a nominalizer, the second consists of *lākin* plus *'inna*, and the third consists of *ka-* plus *'anna*.

(2) The expectative mood denotes a performative role in which the speaker hopes for or fears the occurrence of an event. The particle *'allalla'alla* designates the expectative mood in sentences like the following:

'alla/la'alla l-marīḍa yuṣḥfā. 'Perhaps the patient will recover (= I hope the patient recovers).'

'alla/la'alla l-marīḍa yamūtu. 'Perhaps the patient will die (= I am afraid the patient might die).'

CHAPTER VII

DISSOCIATING SPECIFICATION FROM 'IRĀB

The relationship between head and specifier serves as the primary marker of specification; other formal devices which the head employs to designate specification will be called "secondary markers". Occurrence of a secondary marker together with the primary marker constitutes redundancy; thus associating 'irāb with specification constitutes redundancy.

To avoid excessive redundancy, specification is marked by *jazm*, *jarr*, or *naṣb* only in the absence of other secondary markers; in other words, 'irāb is dissociated from specification to avoid excessive redundancy. The following examples illustrate this principle:

(1) As a specifier of modality, *qad* may denote certainty or doubt: certainty is denoted when the following verb is a perfect form, and doubt is denoted when the following verb is an imperfect form. Thus modality is determined as much by the head of specification as by the specifier. In this sense, the verbal form marks the head; furthermore, the head is marked for doubt by the inadmissibility of *sa-* and *sawfa*. Consequently, the sentence does not employ *naṣb* to mark modality.

(2) When *rubbama* 'may, might' is used to specify modality, the string which underlies the sentence frequently contains the formative *Modal Perfect* (e.g., *rubbama dhāhabtu yawman mā* 'I may go some day'). Potential occurrence of that formative marks the head for modality; in addition, the head is marked for modality by the inadmissibility of *sa-* and *sawfa*. Consequently, the sentence does not employ *naṣb* to mark modality.

Note

It is relevant at this point to compare two contexts where *sa-* and *sawfa* are excluded: the first follows *qad/rubbamā* 'may, might' and the second follows 'an 'that'. In the first context, the verb expresses aspect; the exclusion of *sa-* and *sawfa* marks modality. In the second context, the verb can be equated with the corresponding verbal noun, not merely in structural usage but also in meaning. In other words, the clause which follows 'an is readily interpretable as expressing a proposition or simply naming an event; what must be emphasized here is that temporal reference is irrelevant to the second interpretation. Thus after 'an aspect is not an obligatory feature of the verb; the exclusion of *sa-* and *sawfa* is a result of such neutralization rather than a marker of modality. The following are examples:

qad/rubbama 'akūnu muṣāban
bi-hādḥa l-maraḍi (l'āna).

'I may be infected
with this disease (now).'

qad/rubbama 'uṣābu bi-hādḥa
l-maraḍi (fi l-mustaqballi).

'I may contract this
disease (in the future).'

'uḥibbu 'an 'aqra'a ṣḥ-ṣḥi'ra
(= 'uḥibbu qirā'ata ṣḥ-ṣḥi'ri).

'I like to read poetry
(= I like reading poetry).'

'an tuḥibba kḥayrun min
'an tubdghīḍa (= al-ḥubbu kḥayrun
mina l-bughḍi).

'To love is better than
to hate (= Love is better
than hatred).'

(3) Nominalizers are associated with three phenomena:

(a) Determination of a syntactic structure: The expression which follows 'an is a verbal sentence; that which follows 'anna is a nominal sentence.

(b) Determination of a syntactic slot: The string consisting of a nominalizer and the following sentence occupies a nominal slot.

(c) Determination of modality: With 'an the sentence expresses a frequently-qualified possibility; with 'anna it expresses a frequently-qualified fact.

Word order is employed to mark the first two phenomena; consequently, only the last is marked by *naṣb*.

(4) Word order satisfies and marks the stipulation that 'inna and its sisters must introduce a nominal (rather than a verbal) sentence; for this reason, *naṣb* does not mark the stipulation in question.

(5) Specification is dissociated from 'i'rāb when the specifier is an auxiliary verb. Compare the following sentences:

kāna Samīrun marīḍan.
kāna Samīrun yadrusu.

'Samir was sick.'
'Samir was studying.'

In both sentences, *kāna* provides a temporal context for an aspectual feature; such specification is marked by *naṣb* in the first sentence but not in the second. Significantly, *kāna* is an auxiliary in the second sentence but not in the first.

An auxiliary verb always specifies aspect. In a sequence of two verbs, the first may be an auxiliary or a catenative. Auxiliaries are identifiable by certain structural criteria; for example, they differ from modals (or verbal "qualifiers") in at least two respects: an auxiliary and the main verb must have the same subject, and the two verbs are never separated by a nominalizer; on the other hand, a modal and the following verb may have different subjects, and the two verbs are always separated by a nominalizer. Designated in this manner, the use of auxiliaries as specifiers is not marked by *naṣb*.

In the remainder of this chapter, we shall explicate a rule which was implied in item 7 of Chapter II: utterances employ *jazm*, *jarr*, and *naṣb* only when the definition of specification is fully satisfied. Lack of a specifier and lack of nuclear features will be used as examples to illustrate this rule.

In the absence of a specifier, utterances never employ *jazm*, *jarr*, or *naṣb*; for this reason we find pairs of sentences where only one term of a given contrast is associated with governmental 'i'rāb—the term embodied in a specifier. Examples of such pairs are given below.

(1) 'in yadḥḥab Samīrun tadḥḥab Su'ādu.
sa-yadḥḥabu Samīrun was-sa-tadḥḥabu Su'ādu.

'If Samir goes, so will Su'ad.'
'Samir will go, and so will Su'ad.'

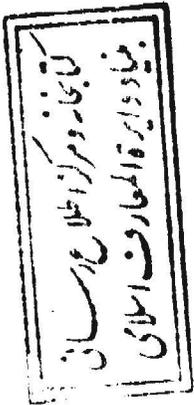
- | | |
|---|---|
| (2) 'inna jayshānā qawīyun.
jayshūnā qawīyun. | 'Our army is definitely strong.'
'Our army is strong.' |
| (3) 'adhunnu 'anna 'Alīyan ghāḍibun.
'Alīyun ghāḍibun. | 'I think that Ali is angry.'
'Ali is angry.' |
| (4) layta jayshānā qawīyun.
jayshūnā qawīyun. | 'I wish our army were strong.'
'Our army is strong.' |

In example 1, both sentences express distance from actuality (the first sentence expresses remoteness, and the second expresses proximity). In example 2, both sentences express degree of commitment to truth (the first sentence expresses a qualified fact, and the second expresses a categorical fact); the same is true in example 3. In example 4, both sentences highlight the object of commitment (the first expresses commitment to falsity, and the second expresses commitment to truth).

In any given example, both sentences contribute to the contrast, but only the first sentence associates *'irāb* with specification; significantly, only the first sentence in each example contains a specifier.

Although a discrete form, the affirmative *la-* (*lām al-ibidā'*) does not govern *'irāb* since it embodies no nuclear features. Unlike *'inna*, the affirmative *la-* is not diagnostic of one particular head: it can qualify the subject, the predicate, or the entire sentence.¹

Lack of a specifier and lack of nuclear features cannot be properly viewed as dissociative factors: by definition, no specification exists in the absence of a specifier which embodies at least one nuclear feature. Thus avoiding excessive redundancy emerges as the only motivation for dissociating *'irāb* from specification.



CHAPTER VIII

THE MEANING OF "SPECIFICATION"

In this study, "specified" is opposed to "general"; it may be equated with "restricted", "limited", "determined", or "specialized". Consider the following:

- (1) raja'a Samīrun. 'Samir returned.'
raja'a Samīrun ghāḍiban. 'Samir returned angry.'

In the first sentence, the predicative construction is general in the sense that *Manner* is not specified; in the second sentence, however, a specific manner is stipulated, thus restricting the predicative construction.

- (2) Muḥammadun 'ustādḥun. 'Mohammad is a professor.'
kāna Muḥammadun 'ustādḥan. 'Mohammad was a professor.'
ṣāra Muḥammadun 'ustādḥan. 'Mohammad became a professor.'

The first sentence states an equational proposition which holds true for the present; there is no indication, however, that the proposition was untrue in the past, nor is there any indication that the proposition will be untrue in the future. In other words, the first sentence affirms the present as temporal domain, but it denies neither the past nor the future. In contrast, the second sentence denies the present (and perhaps the future), and the third sentence denies the past.

Again, compare the following sentences:

- al-marīḍu ḥayyun. 'The patient is alive.'
lā-zāla l-marīḍu ḥayyan. 'The patient is still alive.'

The first sentence neither affirms nor denies the future as temporal domain; the second sentence, on the other hand, represents the future as a doubtful domain (to say the least).

Contrasts such as the above show that *kāna* and its sisters restrict equation.

- (3) sa-yatazawwaju 'ajnabīyatan. 'He will marry a foreign woman.'
sa-yafqidu waḥḥīfatahu fi s-sifāratī. 'He will lose his job at the embassy.'
'in yatazawwaj 'ajnabīyatan, yafqid waḥḥīfatahu fi-s-sifāratī. 'If he marries a foreign woman, he will lose his job at the embassy.'

The first sentence expresses a fact; the same is true of the second sentence. The third sentence, however, expresses a dependency which restricts the probability of occurrence.

(4)	raja'a Sāmī.	'Sami returned.'
	'akala Sāmī.	'Sami ate.'
	'akala Sāmī laḥman.	'Sami ate meat.'

In each of the above sentences, the first form is a verb. Subclassification is facilitated by noting the obligatory absence, potential occurrence, or actual presence of a direct object.

An interesting contrast emerges from comparing the second and the third sentences: the former implies that something was eaten by Sami, but it does not exclude any type of food; the latter, on the other hand, excludes all but one type of food. Thus the occurrence of an object in the third sentence restricts the verb.

Furthermore, it has been shown that the number and the types of objects frequently determine the general meaning of verbs.

CHAPTER IX

THE DOMAIN OF 'IRĀB

In Chapter II, it was stated that specification is defined by two components: the specifier, and the head. In Chapter III, it was stated that specification is a governing set of functions requiring 'irāb. The word which displays the required 'irāb is viewed as the "governed" item.

The following rules identify the governed item.

Rule 1: Function of Each Component

Throughout the present study, we have used diagrams to represent specification; in those diagrams, the first component *usually* functions as the specifier and the second *usually* functions as the head.

Rule 2: Component Where the Governed Form Is Located

The governed form belongs to the second component.

Rule 3: Determining The Governed Form

Given an expression which fills the role of second component, the governed form is a *mu'rab* which (a) constitutes the entire expression or (b) functions as the first nuclear, non-deletable constituent of the expression.

Notes

(1) Strictly speaking, a *transitive* verb has only one specifier; a *ditransitive* verb has two specifiers, and a *tritransitive* verb has three. Thus Rule 3 applies to each of the objects. Again, a conditional sentence has two heads, and for this reason Rule 3 applies to the protasis as well as the apodosis.

(2) Repetition of a governed form in *istighāṭha*, *tahdhīr*, and '*ighrā*' ('call for help', 'warning', and 'urging' respectively) constitutes a second domain of the required 'irāb; e.g., *an-najdata n-najdata* 'Help! Help!', *al-kalba l-kalba* 'Beware of the dog!', *aṣ-ṣabra ṣ-ṣabra* 'Patience! Patience!'

(3) A *mu'rab* conjoined to the governed form constitutes a second domain of the required 'irāb; the same is true of a nomen which stands in apposition to the governed form and of a nomen which modifies the governed form. It must be remembered that, typically, such conjoining, apposition, and modification result from combining two sentences. For example, *qābaltu ṭāliban wa-'ustādḥan* 'I met a student and a teacher' is derived from two sentences whose objects denote different referents: *qābaltu ṭāliban* 'I met a student', and *qābaltu 'ustādḥan* 'I met a teacher'; '*aḥtarimu 'akḥī Nabīlan* 'I respect my brother Nabil' is derived from two sentences with a reversible order and co-referential objects: '*aḥtarimu 'akḥī* 'I respect my brother' and '*aḥtarimu Nabīlan* 'I respect Nabil'; '*a'rifu r-rajula ṭ-ṭawīla* 'I know the tall man' can be derived from two sentences with a fixed order and co-referential objects: '*a'rifu r-rajula* 'I know the man', and '*a'rifu ṭ-ṭawīla* 'I know the tall one'.

Coordinating, appositive, and attributive constructions constitute the "endocentric" constructions of Standard Arabic; thus the foregoing statements can be reduced to a simple rule: Provided they are declinable (*mu'rab*), the immediate constituents of an endocentric construction are typically identical in regard to the state of 'irāb.

(4) The following examples illustrate the effect of Rule 3 on minor sentences which employ certain indeclinable forms (the so-called '*asmā' al-'af'āl*'); notice that the italicized expressions are deletable.

- | | |
|---|---|
| <p>(a) 'āminā.
 'īlayya.
 shattāna ṣani'ukum wa-ṣani'ī.
 hayhāti maṭlabuka.</p> | <p>'Amen!'
 'Come to me!'
 'How different your deed and mine are!'
 'How impossible your quest is!'</p> |
| <p>(b) hāka mathālan.
 'alayka farīdan.</p> | <p>'Here's an example!'
 'Seize Farid!'</p> |

In set (a), the conditions for the application of Rule 3 are not met; consequently, *naṣb* is not employed. In set (b), *naṣb* is displayed by the second word in accordance with the stipulations of Rule 3.

The *indeclinable* form *ruwayda* belongs to the second set;¹ thus in the following example, Rule 3 places the second word in the accusative:

ruwayda zaydan.	'Treat Zaid gently!'
-----------------	----------------------

The governed form can be pinpointed further in regard to position within the second component; this task, however, has been accomplished with satisfactory precision by traditional grammar, and refinement (though desirable) is beyond the scope of this study.

CHAPTER X

EXCEPTIONS

The rules presented in this study are not without exception; for example:

- (a) *mā jā'a 'illā Samīrun* 'None came except for Samir' is used rather than **mā jā'a 'illā Samīran*
- (b) *kḥamsata 'aṣḥara kitāban* 'fifteen books' is used rather than **kḥamsata 'aṣḥara kitābin*.
'iṣḥrūna rajulan 'twenty men' is used rather than **'iṣḥrūna rajulin*.
- (c) *kam rajulan?* 'how many men?' is used rather than **kam rajulin?*

However, the following points must be noted:

(1) The exceptions generated by the present study are fewer than those generated by other studies. The genitive is a case in point. Ancient Arab grammarians state that the second member of a construct phrase is governed by an implied preposition in some instances and by the first member of the phrase in other instances. If the first kind of government is considered the rule, the second must be considered anomalous, and a sizable set of forms must therefore be relegated to the heap of arbitrary exceptions; the present study, on the other hand, classifies those forms (together with prepositions) as noun determiners.

(2) The exceptions are insignificant compared to the overwhelming regularity which characterizes the system.

(3) The present study utilizes the principles of modern linguistics. In the light of those principles, it is usually easy to account for the anomalous nature of the exceptions; for example:

(a) The state of *naṣḥ* is rejected in *mā jā'a 'illā Samīrun* because the noun occupies a slot which is normally occupied by the agent.

(b) After the cardinals of 11 - 19 and those of the tens above 19, counted nouns reject *jarr* to facilitate differentiation.

Numerals other than 1 and 2 are divisible into two sets: those which frequently occur as the first term of a construct phrase, and those which rarely enter into construct with a following form. The first set comprises the numerals 3 - 10, hundred, thousand, million, billion, and trillion; the second set comprises the numerals 11 - 19 and the tens above 19. The dichotomy stems from two rules which transcend the numeral system and pervade Standard Arabic as a whole: the first term of a construct is typically a simple word (as opposed to a compound word or a phrase), and a nunated form does not function as the first term of a construct.

Of the following examples, group (i) and group (ii) are common while group (iii) is relatively rare; group (iii) is usually avoided in favor of group (iv).

- | | |
|----------------------------------|-----------------------------|
| (i) <i>kḥamsatu kutubin</i> | 'five books' |
| <i>'alfu rajulin</i> | 'a thousand men' |
| <i>milyūnu dīnārin</i> | 'a million dinars' |
| <i>bilyūnu junayhin miṣrīyin</i> | 'a billion Egyptian pounds' |
| <i>tirilyūnu dūlārin</i> | 'a trillion dollars' |

(ii) k̄āna k̄h̄āmisahum. k̄āna sābi'a ramadāna. huwa k̄h̄āmisu k̄h̄amsatin.	'He was the fifth of them.' 'It was the seventh of Ramadan.' 'He is the fifth of five.'
(iii) k̄h̄amsata 'aṣḥara Samīrin k̄āna k̄h̄āmisa 'aṣḥarahum. huwa k̄h̄āmisa 'aṣḥara k̄h̄amsata 'aṣḥara.	'Samir's fifteen' 'He was the fifteenth of them.' 'He is the fifteenth of fifteen.'
(iv) al-k̄h̄amsata 'aṣḥara llatī li-Samīrin k̄āna l-k̄h̄āmisa 'aṣḥara minhūm. huwa l-k̄h̄āmisa 'aṣḥara min k̄h̄amsata 'aṣḥara.	'The fifteen which belong to Samir' 'He was the fifteenth of them.' 'He is the fifteenth of fifteen.'

In regard to form, the tens above 19 are similar to the sound masculine plural. Resembling nunation, the final *-na* of those numerals does not occur in the middle of a construct phrase; yet, viewed as part of the stem, the same termination resists deletion (construct phrases such as *k̄h̄amsūhum* 'their fifty' are rare).

In this light, it is hardly surprising that with some cardinals the counted noun rejects *jarr*: what appears at first glance to constitute arbitrary inconsistency proves to be a means of differentiating two sets of numerals. Since *jarr* is disfavored in this context, *naṣb* is the only form of '*rāb*' available to counted nouns which follow the cardinals 11 - 99 and the cardinal tens above 19.¹

(c) The state of *jarr* is rejected after the interrogative numerical pronoun *kam* to differentiate pairs like the following:

kam nabīyan qatalū?	'How many prophets did they kill?'
kam nabīyin qatalū.	'Many a prophet they killed!'

It is hardly surprising to find *jarr* in the second sentence since the underlying string (*kam + min + nabī + qatalū*) contains a preposition.

(4) The general rules are not without force even in the context of exceptions: for example, the first noun rejects *naṣb* but the second does not in *mā jā'a 'illā Ḥasanun 'illā Samīran* 'None came except for Hasan and Samir'.

In the context of exceptions, vocation warrants a few comments. In sentences such as *yā muḥammadu* 'O Mohammad!', *yā hādḥa r-rajulu* 'You over there! (addressing a man)', '*ayyuha r-rajulu* 'O man!', and *yā rajulu* 'O man!', *naṣb* is rejected to differentiate two types of *al-munādā*: the simple, and the exclamatory; only the latter is marked by *naṣb*.

Most commonly, the vocative particle is followed by a name, a demonstrative pronoun, or a title. These three structures are viewed as the "natural" way to identify the person or thing addressed and, therefore, the framework for simple vocation; in contrast, other structures are viewed as the framework for exclamatory vocation. To be sure, the first set of structures may occur with exclamatory denotation, but such occurrence represents the exception rather than the rule.

The names and the demonstrative pronouns are defined by selection, while the titles are defined by elevation.² The demonstrative pronouns involved are *hādḥā* (with various forms to denote number and gender) and *-hā*: the former may be preceded by *yā* (in which case it is optionally followed by an appositive) or '*ayyū-*

(in which case it is obligatorily followed by an appositive); the latter is preceded by 'ayyu- (and obligatorily followed by an appositive). Here are some examples: *yā Muḥammadu* 'O Mohammad!', *yā hādḥā* 'You over there! (addressing a male)', *yā hādḥa r-rajulu* 'You over there! (addressing a man)', *'ayyuhādḥa r-rajulu* 'You over there! (addressing a man)', *'ayyuha r-rajulu* 'O man!', *yā rajulu* 'O man!'.

The structures denoting exclamatory vocation are *al-nakira gḥayr al-maqṣūda* (e.g., *yā gḥāfilan wa-l-mawtu yaṭlubuhu* 'O thou that art heedless, whilst Death is seeking thee!' said by a preacher), *al-muḍāf* (e.g., *yā 'aṣḍiqā'anā* 'Our friends!'), and *al-sḥabīh bi-al-muḍāf* (e.g., *yā muḥibban li-l-'ilmi* 'You who love knowledge!').

When it occurs as part of a name, *al-munādā al-muḍāf* is nevertheless marked by *naṣb*; this probably results from analogy with construct structures not used as names.

To summarize, certain vocative structures appear, at first glance, to violate the rules of 'i'rāb; a closer examination reveals conformity rather than anomaly: typically lacking the feature [+ Exclamatory], they are not subject to *naṣb*.

Note

Elevation concerns the so-called *al-nakira al-maqṣūda*: in *ma smuka yā 'ustādḥu?* 'What is your name, professor?', *ijlis yā gḥulāmu* 'Sit down, lad!', *idḥhab yā rajulu* 'Go, man!', etc., the forms after *yā* assume the status of titles; they are "elevated" from the role of common nouns to the role of proper nouns.

CHAPTER XI

CONCLUSION

The theory of *'irāb* being taught to students of Standard Arabic all over the Middle East is that which was formulated by the ancient Arab grammarians.¹ Contemporary Arabs find the study of *'irāb* a nightmarish endeavor: even the specialists among them violate the rules of *'irāb* with dismayingly frequency whenever they speak, read, or write Standard Arabic. Grammatical rules are no more than a statement of the native's linguistic competence. A theory of *'irāb* which even the determined contemporary Arab fails to master cannot be a valid representation of the ancient Arab's intuition; this study proposes the rules of Chapter III as a substitute.

In the twentieth century, a number of Arabists have advanced the claim that no inflectional markers were used to designate grammatical function in pre-Islamic times. Perhaps the most eloquent proponent of this claim is 'Ibrāhīm 'Anīs.

In his book *Min 'Asrār al-Lughā*,² 'Anīs shows that, during Islamic times, *'irāb* became the most important characteristic of Standard Arabic. Mastering the rules of *'irāb* was considered a supreme skill worthy of the utmost veneration, and deviation from those rules characterized speech as "vulgar"; indeed, educated Arabs viewed *'irāb* as a sacred feature of the language, and equated the violation of its rules with sin. Little wonder, then, that the grammarians of the time enjoyed a high degree of respect and wielded a great deal of influence within the literary community.

In the same book,³ 'Anīs states his conviction that *'irāb* represents a misinterpretation committed by the Arab grammarians during the first two centuries of Islam and passed on to subsequent generations. Five arguments are offered in support of his position:

- (1) Certain reciters of early Islamic times rendered many utterances of the Quran without *'irāb*.
- (2) The contemporary colloquial dialects of Arabic are devoid of *'irāb*; the same is true of contemporary Semitic languages other than Arabic.
- (3) Even the educated Arabs of early Islamic times violated the rules of *'irāb*. A native speaker's intuition tends to preclude such violation.
- (4) Omitting *'irāb* from an utterance causes no ambiguity.
- (5) As formulated by the ancient Arab grammarians, the rules of *'irāb* display no small measure of contradiction and confusion.

According to 'Anīs, anaptyxis was employed by Standard Arabic in pre-Islamic times to avoid the occurrence of non-lingual clusters (i.e., clusters consisting of more than two consonants) across word boundaries. In this context, anaptyxis is defined as appending a short vowel to the first of two words whose juxtaposition would otherwise produce a non-lingual cluster. The anaptyctic vowel, 'Anīs asserts, was determined by articulatory convenience:

(1) To facilitate vowel harmony, the sequence *qālat + kḥruj* yielded *qālatu kḥruj* while the sequence *qālat + ḍrib* yielded *qālati ḍrib*.

(2) Pharyngeal and pharyngealized (emphatic) consonants tended to select the vowel /a/; other consonants tended to select the "homorganic" short vowel (*hum + l-mu'allimūna* → *humu l-mu'allimūna*).

With this in mind, 'Anīs assumes that the ancient Arab grammarians mistook anaptyxis for *'irāb*, and that once the rules of *'irāb* were formulated all exceptions to those rules were regularized.

How does 'Anīs explain contrasts which oppose /ū/ to /ī/ and /ā/ to /ay/ (e.g., *mudarrisūna* : *mudarrisīna* and *rajulāni* : *rajulayni*)? He claims that one member of the pair was used by certain tribes while the other member was used by the rest of the tribes; he further claims that, failing to discern this "fact" or anxious to uphold at all costs the rules which they formulated for *'irāb*, the ancient Arab grammarians assigned one member to the nominative case and the other member to the oblique case.

One need only reflect on the linguistic situation in pre-Islamic Arabia to realize that 'Anīs is far from convincing when he argues that *'irāb* originated with the ancient Arab grammarians. Prior to Islam, the Arabian Peninsula witnessed a diglossic situation where Standard Arabic was used mainly for poetry while the colloquial

dialects were used for common, everyday purposes.⁴ Arabic meters favor free word order; it is possible, therefore, that *'irāb* developed as a necessary device to provide non-syntactic markers for grammatical functions. Standard Arabic has never been the native language of all Moslems, nor was it the native language of all Arabs immediately before the advent of Islam; in this light, it is hardly surprising that transfer from the colloquial dialects produced certain mistakes in the rendition of some Quranic utterances,⁵ that even the educated Arabs of early Islam violated the rules of *'irāb*, and that the present-day Arabic dialects (which probably descended from the colloquial dialects of pre-Islamic Arabia⁶) are devoid of *'irāb*.

In Semitic languages which were used for common, everyday purposes as well as poetry, the need for free word order was overpowered by the tendency to simplify the system; thus no morphological device like *'irāb* developed in those languages to mark grammatical function.

The statement that omitting *'irāb* causes no ambiguity is more true of prose than it is of poetry; such a statement is irrelevant to the present discussion if it is poetry that gave rise to *'irāb*.

Finally, the statement that certain mistakes were committed in describing *'irāb* may be viewed as a reflection on the ancient Arab grammarians, on the linguistic science of their time, or on both; it cannot prove, however, that the linguistic corpus was devoid of *'irāb*.

To suggest that anaptyxis was mistaken for *'irāb* raises some rather serious problems:

(1) As proposed by 'Anīs, the theory of anaptyxis would render unmetrical many lines of pre-Islamic poetry which are perfectly metrical in the context of *'irāb*. To escape this dilemma, 'Anīs faults the rules which al-Kḥalīl b. 'Aḥmad al-Farāhīdī formulated for Arabic prosody: in violation of those rules, 'Anīs considers the string U — — — U — U — U — a variant of U — — U — — — U — — U — — —,⁷ thus claiming that a hemistich-medial foot can undergo a deletion transformation. The rules formulated by al-Kḥalīl depict a system which painstakingly safeguards the distinct identity of each meter;⁸ on the other hand, the hemistich-medial deletion 'Anīs wishes to admit can change one meter to another (for example, U — — U — — — U — — U — — — → U — — U — — U — — U — —). Modern Linguistics science has emphasized the role of contrast to the extent that no elaborate discussion of that role is necessary at this point; but to state this fact is to assert that al-Kḥalīl is probably right, 'Anīs is probably wrong, and *'irāb* is probably an authentic phenomenon.

(2) As proposed by 'Anīs, the theory of anaptyxis provides no explanation for nunation.

(3) As 'Anīs himself admits,⁹ the ancient Arab grammarians identified certain positions where anaptyctic vowels occur; in addition, they provided accurate rules which determine the anaptyctic vowel for each environment. One must therefore conclude that they drew a distinction between anaptyxis and *'irāb* on the basis of obvious linguistic facts.

(4) According to 'Anīs, pairs such as *mudarrisūna : mudarrisīna* did not co-occur in the same dialect; he makes the same claim for pairs like *rajulāni : rajulayni*. The ancient Arab grammarians, on the other hand, claimed that such pairs *did* co-occur in the same dialect, and the Quran confirms their claim. Did the ancient Arab grammarians dare to change even the Quran?

What could have driven 'Anīs, a linguist of impeccable credentials, to a theory beset with so many pitfalls? Perhaps a clue is provided by the following passages:

"The second century after the Hegira had hardly ended when *'irāb* became a mighty fortress, too strong even for the prowess of masterful writers, public speakers, and poets of the Arabic language."¹⁰

"[The rules of *'irāb*] eventually became extremely complicated—to the extent that a life span is not sufficient to learn and completely master those rules."¹¹

"Today, many among us are frustrated by this matter of *'irāb*: having encountered great difficulty in grasping its cause and motivation, they rebel against *'irāb* and advocate its overthrow."¹²

Difficulty such as 'Anīs describes in the above statements is not typical of human languages. While 'Anīs concludes that *'irāb* is a fabrication, this writer concludes that the ancient Arab grammarians produced a defective analysis of an authentic linguistic phenomenon. This study is offered as an attempt to remedy the defects.

APPENDIX I

CONTRASTS BETWEEN CARDINAL NUMERAL AND COUNTED NOUN

In the following tables, an asterisk designates a contrast which is displayed by the unit (of a compound numeral) and the counted noun. The abbreviation *Ref. Num.* stands for "referential number" and pertains to meaning rather than form. The abbreviation *N.A.* stands for "not applicable".

The Cardinal Numerals 3 - 10

	Numeral	Counted Noun
Ref. Num.	Plural	Plural
Gender	M	F
	F	M
Case	Variable	Fixed

The Cardinal Numeral 11

	Numeral	Counted Noun
Ref. Num.	Plural	Singular
Gender	M	M
	F	F
Case	N.A.	Applicable

The Cardinal Numeral 12

	Numeral	Counted Noun
Ref. Num.	Plural	Singular
Gender	M	M
	F	F
Case*	Variable	Fixed

The Cardinal Numerals 13 - 19

	Numeral	Counted Noun
Ref. Num.	Plural	Singular
Gender*	M	F
	F	M
Case	N.A.	Applicable

*The Cardinal Tens above 19, Hundreds
Thousands, Millions, Billions
and Trillions*

	Numeral	Counted Noun
Ref. Num.	Plural	Singular
Gender	Fixed	Variable
Case	Variable	Fixed

APPENDIX II

A TEACHER'S VIEW OF 'I'RĀB

The following poem was composed by 'Ibrāhīm Ṭūqān (1904 - 1941 A.D.). At the time he wrote the poem in 1933, Ṭūqān was teaching the Arabic language at al-Rashīdiyya School in Jerusalem. Reference is made in the first and the third lines to the famous Egyptian poet 'Aḥmad Ṣḥawqī (1868 - 1932 A.D.) who was known throughout the Arab World as the "Prince of Poets". In the eleventh line, reference is made to Sībawayhi (c. 140 - 180 A.H.), the father of Arabic grammar.

Says Ṣḥawqī (and little did he know what cross I bear):
"Rise to your feet to pay respect to teachers!"

Sit down for heaven's sake! Can anyone be revered
As the bosom friend of the young generation?

The Prince drives me to the brink of madness when he says:
"A teacher almost ranks with the prophets!"

Had Ṣḥawqī experienced teaching [even] for one hour,
He would have spent [the rest of] his life as an idle vagabond.

A teacher reaps his full share of misery and depression
From the mere sight of notebooks early in the morning and
late in the afternoon—

Hundreds of them! Were they all to be corrected,
Blindness would gain access to the [teacher's] eyes!

And were correcting them to serve any useful purpose,
I swear I scarce would spare my eyes!

But [the fact is that] I correct a grammatical mistake,
For example, citing the Quran as the authority,

Quoting as proof the gems of its verses,
Or [quoting] the Hadith in minute detail;

I delve into ancient poetry, selecting
Whatever is not ambiguous and not vulgar;

I almost resurrect from the dead Sībawayhi
And his colleagues who lived in the early centuries [of Islam];

Yet lo! despite it all, a jackass
Places the second member of the construct phrase, as
well as the object of the verb, in the nominative case.

Be not surprised should I, one day, let out a cry
And fall dead between the desks.

O thou who wish to commit suicide, [behold] I have found the means:
Decidedly, a teacher cannot live long!

APPENDIX III

ACCOUNTING FOR 'I'RĀB IN THE BASE COMPONENT OF MAJOR SENTENCE TYPES

This appendix *illustrates* the manner in which the features of Part II can be incorporated into a generative transformational grammar for the purpose of determining 'i'rāb. The scheme may be described as follows: The Base Component generates designations which the T-rules utilize in assigning suffixes to mark grammatical function. Although reasonably detailed, the treatment does not claim to be exhaustive (nor, indeed, does it need to be).

The rules stated below pertain to *syntactic* structures. Not included are sub-categorization rules which define parts of speech in terms of categories such as Tense, Number, Gender, and Animateness: the categories in question are marked entirely by morphological devices or by selection.¹ Also excluded are rules which list vocabulary items to exemplify parts of speech: such lists belong to the lexicon.

The following symbols are used: *Act Part* for *Active Participle*, *Adv* for *Adverb*, *Aux* for *Auxiliary*, *Compl* for *Complement*, *Coord Conj* for *Coordinating Conjunction*, *Det* for *Determiner*, *Eq* for *Equational*, *i* for *Intransitive*, *Mod* for *Modifier*, *N* for *Noun*, *NNuc* for *Nominal Nucleus*, *NP* for *Noun Phrase*, *Nuc* for *Nucleus*, *Nom* for *Nominal*, *Obj* for *Object*, *p* or *P* for *prepositional*, *PAN* for the *Particle of Absolute Negation (lā)*, *Pass Part* for *Passive Participle*, *Prep* for *Preposition*, *Pron* for *Pronominal*, *S* for *Sentence*, *t* for *Transitive*, *V* for *Verb*, *VN* for *Verbal Noun*, and *VNuc* for *Verbal Nucleus*.

A comma stands for *or*, a semicolon separates two distinct sets of alternative items, braces enclose substitutable strings, parentheses enclose optional constituents, and brackets enclose the features of Part II.

- (1) S → Compound, Non-Compound
- (2) Compound → S + Coord Conj + S
- (3) Non-Compound → Type + Nuc + (Mod_[Adjunctive])
Where the subscript symbol indicates that the modifier is an adjunct
- (4) Type → Voice + Mood + Status
- (5) Nuc → NNuc, VNuc
- (6) Mod_[Adjunctive] → NP, Adv; Shihh Jumla; S
- (7) Voice → Active, Passive

- (8) Mood → Communicative Role + Commitment
- (9) Status → Affirmative, Negative
- (10) NNuc³ → Topicalization + VNuc
- (11) VNuc → (Aux) + V + Agent + (Verb Classifier)
- (12) NP → Primal Expression, Nominalized Expression
- (13) *Shibh Jumla* → Det_{P[Nom]} + NP
 Where the subscript symbols indicate that the Determiner is a prepositional functor which must be followed by a nominal slot
- (14) Communicative Role → [Constative], [Performative]
- (15) Commitment → Object of Commitment, Degree/Type of Commitment
- (16) Aux⁴ → (Temporal A_[Non-current]) + (Modal_[Non-factive]) + (Temporal B_[Non-current])
 Where *Modal* marks the main verb for Non-factivity, and where the other helping verbs *add* Non-current temporal elements to the main verb

$$(17) V \rightarrow \left\{ \begin{array}{l} \text{Copula / + Compl} \\ V_{[t]} / \text{ + Obj} \\ V_p / \text{ + Prep} \\ V_i \end{array} \right\}$$

Where the subscript symbols classify verbs as *Transitive*, *Prepositional*, and *Intransitive* respectively

- (18) Agent → NP
- (19) Verb Classifier⁵ → Compl, Obj, Prep
- (20) Primal Expression → Head, Head_[Nom] + S₁, Head + S₂
 Where the second alternative (but not the third) meets the requirements for conversion to a construct phrase,⁶ and where the designation *[Nom]* stipulates that the second term of the construct phrase must be nominal. In this formulation, *Head* is a *potentially* modified element.
- (21) Nominalized Expression → Nominalizer + S

- (22) Det_p[Nom] → Preposition, Prepositional Adverb
- (23) Performative → Question, Command, Prohibition, Proposal, Exhortation, Wish, Hope, Invocation, Condition, Praise, Blame
- (24) Object of Commitment → $\left\{ \begin{array}{l} \text{[Factive]} / 'anna, 'inna, PAN \dots\dots\dots \\ \text{[Contra-factive]} / law, layta \dots\dots\dots \\ \text{[Non-factive]} / 'an \dots\dots\dots \end{array} \right\}$
- (25) Degree/Type of Commitment → $\left\{ \begin{array}{l} \text{[Distance]} / Jāzim^7 \dots\dots\dots \\ \text{[Qualification]} / 'inna, PAN \dots\dots\dots \end{array} \right\}$
- (26) Temporal A⁸ → *kān*
- (27) Modal → *fi'l shūrū'*, *fi'l muqāraba*⁹
- (28) Temporal B → *fi'l nāqiṣ*
Where (for the purposes of this study) *fi'l nāqiṣ* is a member of the class commonly known as "kān and its sisters"¹⁰
- (29) Copula¹¹ → \emptyset , *kān*
Where (as a rule) \emptyset expresses Factivity while *kān* expresses Non-factivity or Contra-factivity. If the sentence is introduced by *'alla/la'alla* or *layta*, the Copula may be either \emptyset or *kān*.
- (30) Compl → NP_[Eq], Adv, *Shībh Jumla*
Where the subscript symbol indicates that selection of the constituent yields an equational sentence
- (31) Obj → NP
- (32) Head → N, Pronoun, VN, Act Part, Pass Part, Numeral, Quantifier
- (33) [Qualification] → [Epistemic], [Desiderative],
- (34) Nominalizer → $\left\{ \begin{array}{l} 'anna / \dots\dots\dots \text{[Factive]} \\ 'an / \dots\dots\dots \text{[Non-factive]} \end{array} \right\}$

FOOTNOTES

Chapter I

1. For the definition of *'irāb*, see item 2 of Chapter II.
2. See B28, pp. 131 - 262.
3. See B30, p. 161.
4. As stated in item 1 of Chapter II, a *nomen* is a form which can function as a noun (i.e., which can occupy a nominal slot).
5. See B6, pp. 49 - 60.
6. See B28, pp. 152, 153, 156.
7. See B60.

Chapter II

1. See B26, Vol. I, pp. 104, 105; also see B57, pp. 70 - 110.
2. See B26, Vol. II, pp. 111, 112, 178 - 192.
3. See B66, Vol. I, pp. 76 - 79, 300 - 302, 313 - 315; B57, pp. 64 - 66; and B26, Vol. I, pp. 54 - 57, 100, 101, 252, 253, 264 - 278.
4. See B66, Vol. II, p. 272; also see B24.
5. See B19, Vol. II, p. 643.
6. See B23.
7. See B19, Vol. II, pp. 725 - 731, 749, 750.
8. See B19, Vol. II, pp. 808, 809.

Chapter IV

1. See B26, Vol. II, pp. 4, 23; also see the definition of *qad* in B31.
2. See B19, Vol. II, pp. 690, 719, 809 - 823.
3. See B19, Vol. II, pp. 745, 746.
4. See B26, Vol. II, pp. 345 -347.
5. See B19, Vol. II, pp. 816 - 819.

Chapter V

1. See B26, Vol. II, pp. 129 - 178.
2. See Appendix I.
3. See B26, Vol. II, pp. 198 - 200.

Chapter VI

1. See B26, Vol. II, pp. 45 - 53.
2. See B26, Vol. II, pp. 30, 31.
3. See B26, Vol. II, p. 33.
4. See B26, Vol. II, pp. 72 - 76.
5. Nominal expressions with identical function may differ in regard to temporal denotation; this is true of the italicized expressions in the following sentences:

'akḥḥbarani ṭ-ṭabību bi-*kawnihā marīḍatan*.

'The doctor told me that she was sick.'

'akḥḥbarani ṭ-ṭabību bi-*marāḍihā*.

'The doctor told me of her sickness.'

'akḥḥbarani ṭ-ṭabību bi-*'annahā marīḍatun*.

'The doctor told me she is sick.'

In the first sentence, the italicized expression denotes state but not current aspect; in the second sentence, the italicized expression denotes neither state nor current aspect; in the third sentence, the italicized expression denotes state as well as current aspect (thus transferring the listener to the moment when the doctor made his statement, or attributing to a past event the speaker's knowledge of a present fact).

Chapter VII

1. See B52.

Chapter IX

1. The expressions *ruwaydan* 'Take it easy!' and *ruwayda Zaydin* 'Treat Zaid gently!' are structurally comparable to *wuqūfan* 'Stand up!' and *ra'yan li-Zaydin* 'May God protect Zaid!': here *ruwayda* is a *declinable* verbal noun, and for this reason it cannot be included in the class of *indeclinable* forms which Arab grammarians call '*asmā' al-'af'āl*'. See B26, Vol. II, p. 78; also see B66, Vol. I, pp. 49, 78.

Chapter X

1. See item 15 in Chapter II; also see Chapter III.
2. See the note at the end of Chapter X.

Chapter XI

1. See, for example, B65 and B66.
2. See pp. 198 - 211.
3. See B61, pp. 212 - 274.
4. See B39, pp. 6 - 17; also see B1, pp. 240, 241.
5. See Robert Lado's *Linguistics Across Cultures: Applied Linguistics for Language Teachers* (Ann Arbor: The University of Michigan Press, 1961).
6. See B11; also see B39, pp. 7 - 12.
7. See B61, p. 267.
8. See B26, Vol. II, pp. 358 - 368.

9. See B61, pp. 251, 252.

10. See B61, p. 198.

11. See B61, p. 199.

12. See B61, p. 210.

Appendix III

1. In the base component, it seems necessary to specify certain features (belonging to grammatical categories) only for the Head of a given NP; T-rules can then assign the same features to other parts of speech to mark agreement.
2. In traditional terms, the first set of constituents is classified as *mufrad*. The Adjunct expresses Time, Place, Manner, Cause, Instrument, Reason, Hāl, Condition, etc.
3. The following T-rule effects Topicalization:

Topicalization - V + Agent → Subj + V + Pron Suffix

Where *Subj* and *Pron Suffix* agree in Number, Gender, and Person.

Subj is the transposed *Agent*.

Topicalizing *katabna l-kitāba* 'We wrote the book' involves transposition of the pronominal Agent, which now assumes the variant allomorph *nahnu*; a pronominal suffix is then added to the verb.

4. A metathesis T-rule changes the string *L + X + Agent* to *L + Subj + X* (where *L* represents the first in a sequence of verbal forms, and where *X* represents at least one other verbal form); on the other hand, the nominal structure *Sub + L + X* does not undergo metathesis.
5. An expression of the structure *V + Prep* is here called a "Prepositional Verb Phrase". Examples are *ragħiba fī* 'to desire (something)', *ragħiba 'an* 'to turn away from (something)', and *qaṣada 'ilā* 'to go to'. Members of this class satisfy two stipulations: (a) the verb selects the preposition, and (b) the verb plus the preposition can often be replaced by a verb alone (e.g., *ragħiba 'ani l-'amri* 'He turned away from the issue' = *taraka l-'amra*).
6. Some of those requirements are discussed briefly in Chapter V. Also see B69, Vol. III, pp. 1 - 180.
7. Imperative utterances like *uktub* 'Write!' are derived by deleting *li+tV-* from the underlying second-person imperfect verb form. The imperative particle *li-* is a *jāzim*.

8. As used here, *kān* is the "citation form" for which Tense and Aspect are determined by sub-categorization rules. A case can be made for classifying the root *kwn* as an "empty morpheme" (devoid of semantic meaning) supplied to carry a bound formative which would otherwise lack a carrier. In this context, a bound formative is defined as one which requires a carrier. The arguments for and against this analysis are beyond the scope of the present study.
9. See B26, Vol. II, pp. 106 - 109.
10. See B26, Vol. II, pp. 99 - 106.
11. In regard to temporal reference, the Copula *always* expresses Current Aspect.

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