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PRONUNCIATION OF THE "EMPHATIC" CONSONANTS IN SEMITIC LANGUAGES

The term "emphatic" denoting a certain class of Semitic consonants comes into use in the latter half of the 19th century and is a creation of European Semitists.[1] As a term it is quite vague and does not tell anything about the specific articulation of the sounds that it is meant to describe. On the other hand, it is an ideal term for a specific purpose: a group of phonemes with quite variable realizations can be conveniently subsumed under it, and this may account for the fact that it never was replaced by any more precise or phonetically more exact term. There is nothing exactly corresponding to it in the terminology of medieval Hebrew grammarians. In Arabic, there are two terms: *tafḫīm* "intensification" (which denotes velarization in general, not restricted to the emphatic consonants proper), and *ʾiṭbāq* "covering"; this is also explained by Sībawaihi: [an emphatic consonant] "is more spread in the mouth because of its *ʾiṭbāq*".[2]

Since the last century the pronunciation of emphatics in Arabic (comprising the dentals *ṭ ḍ ḏ̣*, a sibilant *ṣ*, and, for most intents and purposes, also the post-velar occlusive *q*) has been observed and phonetically explained with improved methods, which has led to more exact phonetic terminology. They are now commonly described as being velarized and/or pharyngealized. Modern dialectology has also become increasingly aaware of the fact that this particular phonetic property is not, in modern Arabic, restricted to consonantal phonemes traditionally regarded as "emphatic" (or, in addition, to *ḷ* in the word *ʾaḷḷāh* and the frequent "emphatic" *ṛ*) but is rather a suprasegmental feature affecting also vowels and most consonants. The minimum unit covered by this phenomenon is a syllable, but it often affects entire words.[3]

Something somewhat similar has occurred in eastern Neo-Aramaic dialects

(particularly in Azerbaijan) that have remained outside of direct contact with Arabic. The distinction of emphatic and non-emphatic consonants has disappeared from their consonantal system (with the exception of *k*/*q*), but this loss has been compensated by a suprasegmental phenomenon called "flatting" by Irene Garbell in her book "The Jewish Neo-Aramaic Dialect of Persian Azerbaijan". One of the features that constitute the "flatting" is that "all oral consonants are strongly velarized", "all consonants (including *h*) are more or less pharyngealized according to individual speakers"; "all vowels are more or less pharyngealized according to individual speakers", and, in general, vowel phonemes have in the flattened words allophones different from those used in non-flattened words.[4] A more or less similar phenomenon occurring in the Christian Neo-Aramaic dialects of Urmia etc. is described by Soviet scholars as "synharmonism" (сингармонизм) or "vowel harmony": every vowel has at least two (or, according to some, three) allophones, called "soft" (= palatal), "medium" and "hard" (= velar). The "hard" vowels mostly occur in words which etymologically contain emphatic consonants or laryngeals, but there are also other factors affecting their distribution, and great individual and dialectal differences may occur.[5]

The parallel phenomena of "suprasegmental velarization" and "flattening" represent the situation observable today in Semitic languages of the Arabic/Aramaic area. — As to Neo-Aramaic preserved in an Arabic environment (Anti-Lebanon, Ṭūr ʿAbdīn), the pronunciation of the emphatics is similar to that prevalent in Arabic.[6] The traditional pronunciation of Hebrew and the modern Hebrew spoken in Israel shed no new light on the question. In general, the traditional pronunciation that has prevailed in the Arabic countries follows the Arabic realization of these sounds (*q*, *ṣ*, *ṭ*); traditional European pronunciation (both Sephardic and Ashkenazic) has discarded the "emphasis" so that *ṭ* equals *t* and *q* equals *k*, except for *ṣ*, which is realized as *ts*, discussed below.[7]

A different "solution" is found in the Semitic languages of Ethiopia (classical Geʿez in its traditional pronunciation, Tigrē, Tigrinya, Amharic etc.). In all these languages the emphatic consonants (*p̣*, *q*, *ṣ*, *ṭ*; in modern languages also *č̣*) are pronounced as "glottalized ejectives", i.e. with a concomitant glottal stop.[8]

This fundamental difference in regard to the realization of the emphatic consonants east and west of the Erythraean Sea has, of course, led schol-

ars to ask what may have been the original pronunciation of these sounds. Paul Haupt in his article "Ueber die semitischen Sprachlaute und ihre Bezeichnung" (1889)[9] was the first one who considered the Ethiopian-type pronunciation as the original one, although he really does not have a clear idea of the modern Arabic velarized pronunciation. He was followed by H. Grimme (1909) and the well-known Africanist C. Meinhof.[10] C. Brockelmann in his fundamental "Grundriss der vergleichenden Grammatik" avoids the question altogether and defines the emphatics as "Dorsal-alveolare" spoken "mit festem Absatz" in the case of *ṭ* and *q*.[11] The problem was reconsidered by G. Bergsträsser in his "Hebräische Grammatik" (1918) p. 41 (§ 6 n). There he does not yet believe that the Ethiopic pronunciation could have been the original one, because, in his opinion, it would involve composite sounds alien to the Semitic type of languages. But he does not consider the Arabic velarized articulation as being the original one either, because it necessarily affects the following vowel, too. "Vielleicht haben sich ṭ und ṣ von t und s ebenso durch weiter zurückliegende Artikulationsstelle unterschieden wie q von k." In his later book "Einführung in die semitische Sprachwissenschaft" (1928) p. 5 Bergsträsser has changed his opinion: "Die älteste Aussprache der emphatischen Laute ist wohl die mit nachfolgendem Kehlverschluss, wie sie heutzutage noch in Abessinien üblich ist; vielfach ist dafür eine abgeschwächte Aussprache mit Velarisierung – breiter Berührung zwischen Zunge und Gaumen, besonders Hintergaumen – eingetreten."

Since then, several scholars have treated the problem. Among those advocating the priority of the Ethiopic pronunciation are J. Cantineau, "Le consonantisme du sémitique" (1951/2)[12] and A. Martinet, "Remarques sur le consonantisme sémitique" (1953).[13] S. Moscati in "Il sistema consonantico delle lingue semitiche" (1954)[14] does not take a definite stand but mentions arguments pro and contra, repeating them later in his "Introduction" (1964)[15] with more detail. I. Garbell in 1954 (Quelques observations... p. 234 ff.)[16] opposes the "Ethiopic" theory, while Ullendorff in his "Semitic languages of Ethiopia" (1955), quite naturally, defends it.[17] The theses of Garbell seem particularly to have convinced Israeli scholars, cf. H. Blanc "The Fronting of Semitic G ..."[18] p. 2 and J. Blau "A Grammar of Biblical Hebrew" (1976) p. 5[2]: "Emphatic consonants are pronounced while the larynx and the lower part of the pharynx are constricted and the organs of articulation are generally tense."

In the following my purpose is to offer one piece of evidence concerning the Akkadian (or, more precisely, Assyrian) language and to reconsider some other facts that are – or ought to be – previously known and that might have a bearing on the matter.

Simo Parpola has recently published an article (Assur 1974) on "The Alleged Middle/Neo-Assyrian Irregular Verb *naṣṣ and the Assyrian Sound-Change š > s". There he quite convincingly demonstrates that the defective verb *naṣṣ* posited by W. von Soden in his Grammar (GAG § 107 s) and in his Dictionary (AHw 757) is really only an orthographic variant of the verb *našā'u(m)* "to lift, to carry" which it replaces in forms where the glottal stop ' comes immediately after š (in Assyrian pronounced as *s*). We find e.g. *ittaš'ū* "they took, lifted" > *ittaṣū*; *iš'ā* "lift ye!" > *iṣā/iṣṣā*; and in most forms of the stative *naš'āku* > *naṣāku* and of the ventive like *attaš'a* > *attaṣa*. For more details Parpola's article and the AHw are to be consulted. Parpola touches the question of the emphatics but does not mention the controversy about their original pronunciation. Now it seems, however, that we have positive evidence about the fact that A s s y r i a n ṣ b e f o r e a n d a f t e r 1 0 0 0 B. C. w a s p r o n o u n c e d m o r e o r l e s s l i k e *s* w i t h a f o l l o w i n g (o r c o n c o m i t a n t) g l o t t a l s t o p.

As promising as this seems, I have not been able to find more evidence of this kind in details of Akkadian orthography. Verba mediae aleph like *ša'ālu* "ask" and *ša'āmu*, which might conceivably have given rise to similar orthographic peculiarities, do not in fact present them, and verba 3. aleph are rather rare. Nor do the various contradictory orthographies of the verb *natû/naṭû* "to strike" lend themselves to a hypothesis of this kind.[19]

It might, however, be useful to review once more some other well-known facts. For example, ṣ in the traditional European (and present-day Israeli) pronunciation of Hebrew is realized as *ts*. On the other hand, Europeans often hear the Ethiopic (e.g. Amharic) ṣ as if it were *ts*, and in fact there seems to be a slight tendency to an affricate realization of this sound, though it is usually considered faulty.[20] Now, if the Hebrew ṣ was realized like the corresponding Ethiopian ṣ, the European substitution that arose some time in the Middle Ages would be readily understandable. As a matter of fact, a number of scholars have been of the opinion that Akkadian or Ancient NW Semitic ṣ was realized as an affricate, cf. e.g.

I. Diakonoff, Semito-Hamitic Languages, p. 20: "ṣ was an affricate /ṭṣ/. This is proved by the fact that in borrowings from Northern Semitic ṣ is represented by an affricate in all neighbouring languages which had affricates (in Egyptian, Hittite, Hurrian, Urartean, Elamite and Old Persian)."[21] As to this assertion, it has only to be borne in mind that the fact of a sound being substituted by affricates does not yet constitute full proof of its having been an affricate in the source language, too. I should rather assume that, like the Ethiopic ṣ, it had some tendency to be realized as an affricate or to be heard as such, without being in itself a full-fledged affricate. The numerous transcriptions from Hebrew, Aramaic etc. into Greek in the Hellenistic period seem rather to contradict the view that ṣ could have been a real affricate. It is almost always represented by σ (together with *s*, *ś* and *š*) and it is rare to find an attempt to separate it from other sibilants, except in the names of letters used as rubrics of alphabetic psalms in the Book of Lamentations in the LXX (τιαδη along with the normal σαδη).[22] On the other hand, we have certain evidence of the fact that ṣ had a very characteristic pronunciation of its own; St. Jerome (who, unfortunately, did not have modern phonetic terminology at his disposal) describes it as a sound »cuius proprietatem et sonum inter *z* et *s* latinus sermo non exprimit, ut enim stridulus et strictis dentibus vix linguae impressione profertur». Elsewhere he mentions »sade, quam aures nostrae penitus reformidant».[23] It is not possible to state with certainty what St. Jerome has in mind. His *z* probably refers to Greek ζ that in his day was pronounced as a voiced *s* and not as *ts* (or *zd* as in Ancient Greek), and which regularly corresponds to Semitic *z* in the transcriptions. The combination τσ, which is very frequent in Modern Greek, was not yet normal in Hellenistic Greek and is, accordingly, not to be expected as a transliteration of ṣ. When St. Jerome says »vix linguae impressione profertur», he could have in mind something like the present-day velarized Arabic ṣ where the back of the tongue is raised upwards and the "impression of the tongue" against the palate is consequently diminished. But this is by no means certain.

One thing that cannot be emphasized too strongly is that before the Islamic period and the first descriptions of Arabic, we do not find any positive evidence that would point to the specific v e l a r articulation that is so prominent in the Arabic dialects of today. It is true that already the grammarian Sībawaihi (d. 793) mentions assimilations

caused by the emphatics and the *q* (*ṣabaqtu* for *sabaqtu* "I preceded" etc.)[24] and, as mentioned above, this tendency has prevailed in the modern dialects to the degree that the whole phenomenon of emphatic consonants has assumed the nature of a suprasegmental feature. But if we compare the Classical Arabic orthography and certain laws of incompatibility that govern the formation of roots, we find that the tendency in older times has rather been to dissimilate the emphatics or to avoid an excessive conglomeration of them in one root. One of the common Semitic rules of incompatibility is that three emphatics cannot be combined to form a triliteral nominal or verbal root (with the exception of the type mediae geminatae, e.g. Arabic *qṣṣ*). Most Semitic languages tolerate two emphatics in one root, except Akkadian, which only tolerates one emphatic.[25] But even in languages that tolerate two emphatics, certain combinations are avoided or altogether impossible. We never have a sequence *ṭxṣ* or *ṭṣx* (*x* representing any non-emphatic consonant), nor do the Classical Arabic dictionaries list any variants involving these consonants. Likewise, the combination *ṣṭx* does not occur, while the combination *sṭx* is frequent. The combination *ṣxṭ* is rare but occurs in the Classical dictionaries: Freytag's Lexicon Arabico-Latinum lists according to the Qāmūs of al-Fīrūzābādī some recent variant forms for roots beginning with *s*: *ṣabṭ* »longum instrumentum ad aratrum pertinens» (probably a late dialect word); furthermore *ṣa^{c}aṭa* for *sa^{c}aṭa* "to put into the nose", *ṣanṭ* for *sanṭ* "Acacia nilotica", *ṣallaṭa* for *sallaṭa* "to give mastery over", and the frequent *maṣṭaba* "bench" for *masṭaba*. There are also some old words of the type *ṣxṭ(x)*: *ṣirāṭ* "way, road" (probably from Latin *strata*, Syriac *esrāṭ*) and *ṣalṭaḥa* "to be plump" (Wehr *muṣaltaḥ* = *musalṭaḥ* "shallow, shoal, flat"). The rarity of these combinations suggests that even they must represent an innovation. Similarly there are in Classical Arabic pairs of words with alternating emphatics, e.g. *sauṭ* "whip" and *ṣaut* "voice", which in modern pronunciation must coincide as *ṣauṭ*. This has, in fact, led to the disappearance of *sauṭ* "whip" in the modern dialects and to its substitution e.g. by *kurbāǧ*.

Conversely, we find in A. Barthélemy's Dictionnaire Arabe-Français, Dialectes de Syrie entries like *ṣaṭaḥ* for classical *saṭaḥ* "to spread out", *ṭabaṣ* "marcher dans une eau bourbeuse" etc., and, as stated above, such assimilations are indeed imperative in the modern dialects.

Similar rules apply to Classical Ge^{c}ez and Hebrew: *ṭṣx* and *ṭxṣ*, *ṣṭx* and

ṣxṭ are lacking. Subsequent phonetic changes cause at least one exception to the rule about *ṣxṭ*: *ḍabaṭa* (= Arabic *ḍabaṭa* "firmiter prehendit et tenuit", which quite early becomes *ṣabaṭa*, is possible, as it is in Hebrew *ṣbṭ*. Furthermore, Ethiopic does not seem to have any normal and frequently-occurring roots beginning with *k* and having emphatics as the second or third radical. This is possible but rare in Arabic where we find *kaẓẓa* (correctly *kd̲d̲*) "to fill, overfill" and *kaẓama* (correctly *kaḍ̲ma*) "to suppress the anger". In Biblical Hebrew, as far as it is known to us, there were no roots beginning with *k* and having an emphatic as the second or third radical and they are rare in Aramaic (jA *ʿakšeṭ* "schön handeln", Late Hebrew *takšīṭ* "ornament", Syriac *kallūṭā* "small bowl", *kəšaṭ* "to shoot with arrows"). Thus it seems that the ancient West Semitic languages did not allow the combination *kEx* or *kxE* (*E* = emphatic) in a root, in contrast with Akkadian, which prefers these combinations against West Semitic *qEx* and *qxE*. As far as Hebrew is concerned, it also seems to avoid *gEx* and *gxE*, which are possible in other Semitic languages. There are strong reasons to suppose that combinations of a velar occlusive + emphatic were originally avoided at least in the West Semitic area.

The gist of the matter is that emphatic sibilants and dentals are incompatible in WS languages, while *q* can combine freely with both. The sibilants and dentals are, however, not incompatible for purely phonetic reasons, because we have in Hebrew, Aramaic and Arabic an opposite phenomenon too: the assimilation of *t* to *s* preceding *ṣ* in the VIII stem of the Arabic verb and in the reflexive stems of Hebrew and Aramaic which have a simultaneous metathesis of dental + sibilant into sibilant + dental. A curious polarity has, however, developed between principles of root structure and the treatment of grammatical elements: a strict dissimilation has prevailed in the structure of the roots as against an equally strict assimilation affecting grammatical elements. It does not even seem that the reason for this was the desire to avoid confusion between roots and the reflexive forms, because, at least in Arabic, roots beginning with *ṣtx* are rare and do not form the VIII stem at all.

As to roots beginning with *q* and containing another emphatic consonant, they are especially frequent in Hebrew and Aramaic, even in comparison with Arabic, where we have *qatala* "to kill", Aramaic *qəṭal* (and Late Hebrew *qāṭal*), cf. Brockelmann GVG § 54 h. Instead, in Syriac, there seems to be a tendency to dissimilate an initial *ṣ* into *z*: *zəᶜaq* "to cry" (He-

brew *ṣā^{c}aq* and *zā^{c}aq*); *zədaq* "to be just" for *ṣdq* etc., cf. Brockelmann GVG § 88.

As mentioned above, Akkadian tolerates only one emphatic consonant in a root, as was observed by Geers in 1945,[26] cf. W. von Soden GAG § 51 e. The rule is that initial *q* before *ṣ* becomes *k* (*kāṣu* "to flay", *kaṣāru* "to bind" etc.) and *ṭ* before or after *q* or *ṣ* becomes *t* (*qaṭāpu* "to pick" instead of Semitic *qṭp*. Because the general trend in Arabic is from dissimilation to assimilation, we might ask whether the excessive dissimilation in Akkadian could not be the original state of affairs in Semitic. This, however, cannot be the case, because we have in Akkadian *siāqu* "to be narrow" for Arabic *ḍāqa*, and this can only be explained if we assume that *ḍīq* at first regularly becomes *ṣīq* and is subsequently dissimilated into *sīq*.

It is, however, curious to observe, that the dissimilatory trend in Akkadian was not restricted to that language alone: in old Aramaic inscriptions we find at least the dissimilation *q* > *k* in Barrekub I 19 *byt kyṣ'* (*bait kaiṣa* "summer house" as against Hebrew *bēt qayiṣ*), *krṣy* "calumny" (in Akkadian *karṣē akālu* "to eat the pinchings of somebody, to calumn", borrowed into Aramaic, but in later Syriac in the regular form *qarṣē*); *qtl* "to kill" (like in Arabic) in Yaudic and in the inscriptions of Sefire, but *ykṭlwk* (in the Akkadian way) in Nērab 1 II, and in the Wisdom-Book of Aḥīqār which may originate in Assyria: *kṣyr* and *hkṣr* (line 127) "to harvest" (Hebrew *qṣr*) and *kṣph* "wrath" (line 101). Later, in the Imperial Aramaic of the Persian period, these writings disappear and give way to the normal Aramaic orthography attested later e.g. in Jewish Aramaic and in Syriac. Geographically they extend to Northern Syria and chronologically to the last centuries of the Assyrian empire, i.e. late 7th century B.C., and they undoubtedly reflect the influence of Akkadian habits of speech. This influence was obliterated in later centuries.[27]

Somewhat different dissimilatory tendencies can be observed in Mandaic, relatively late form of Aramaic cultivated in Southern Iraq, a formerly Akkadian territory. Before *ṭ*, an initial *q* is usually dissimilated into *g*: *gaiṭā* instead of *qaiṭā* "summer" (but *kušṭā* "truth" for *qušṭā*), and before *ṣ* into *k*: *kaṣṣārā* "bleacher" for *qaṣṣārā* (Akkadian *kaṣṣāru*). The difference in regard to Akkadian is that *ṭ* is not changed after *q*, but even in that case *q* is changed to *g*.[28]

It is difficult to say what exactly has caused the dissimilatory trends in Akkadian and why they are realized as they are, often in a way exactly opposite to what is usual in the Canaanite or later Aramaic languages. There might have been some differences in the realization of *q*, which even in later Arabic is a quite unstable sound. It would be useless here to repeat or even summarize the penetrating study of H. Blanc on that sound. In this connection the following facts have to be borne in mind. In Ethiopic, it is not really pronounced *q'* but *k'*, i.e. it is only distinguished from *k* by the concomitant glottalization.[29] In Arabic, it is a post-velar unvoiced occlusive, or, in the Beduin-type dialects, a more or less "unemphatic" *g* (that can even be palatalized in connection with front vowels).[30] In Egyptian and Syrian sedentary dialects, *q* has largely been replaced by the glottal stop (ʾ), which indeed must go back to a variant of *q* with a glottal element.[31] In the Neo-Aramaic of Maᶜlūla *q* is hardly distinguishable from Arabic *k*, whereas *k* has been palatalized (*kʸ*), and the same is true of *q* in many parts of Palestine (e.g. the town of Nazareth).[32] As for Akkadian, one might be inclined to conclude that the emphatics were originally voiced or different with respect to the distinction voiced/voiceless, because they were written with the Sumerian signs ga, da, za etc. But the fact is that oppositions like *ga* - *ka* were, in Sumerian, more probably realized *ka* (or *k'a*) - *kʰa*, and this explains why Semitic emphatic and unvoiced stops were expressed with the same Sumerian signs.[33] So the Akkadian *q* most probably was voiceless (as it is usually replaced by *k* in the case of dissimilation, though dissimilations with *g* occur, too, cf. in AHw *k/garāṣu*, *kaṣāṣu/gaṣāṣu*, etc. The infix *t* was assimilated by this *q* unequivocally only in Assyrian (*iqṭirib* against probable *iqtirib* in Babylonian; with sibilants there is a total assimilation *iṣṣabat* for *iṣtabat*).[34] No definite assertions can be made on the basis of these facts.

Valuable evidence can be culled, furthermore, from the numerous transliterations of proper names etc. from Phoenician, Hebrew and Aramaic into Greek and from the orthography of the numerous Greek loanwords in Mishnaic Hebrew, Jewish Aramaic and Syriac in the Hellenistic period. There, as it seems, a very consistent and regular usage developed, extending over many centuries and in different languages, to which even the cuneiform transcriptions of Greek names and the transliterations of cuneiform into Greek in the Seleucide period can be added.[35] The general rule is, that Semitic *ṣ* (alongside with *s*, *ś* and *š*, cf. above) is rendered by Greek σ, which,

conversely, is expressed by *s* in Semitic writing. Semitic *ṭ* is Greek τ and vice versa, and Semitic *q* is rendered by Greek κ and vice versa. Semitic *k* and *t* are consistently rendered by Greek χ and θ respectively, without regard to their occlusive or fricative realizations according to the so-called begadkefat rules of Aramaic and Hebrew. A special case is the Greek combination ξ that is rendered in Semitic by *ks*, not *qs*.[36] There are some curious anomalies like Greek Σέλευκος , cuneiform Si-lu-ku and Syriac *Selūk*, but in the overwhelming majority of cases the rules given above are rigorously observed. They do not, in all cases at least, reflect a full phonetic similarity between the Greek and Semitic sounds in question, but rather essential phonemic oppositions that could be expressed with the respective alphabets. There was the basic opposition in Greek between the tenues (the non-aspirated voiceless stops) and the aspirates, and in Semitic between the emphatic and the non-emphatic stops. It is also true that precisely in the Hellenistic period, the latter in Aramaic (and concomitantly in Hebrew) became clearly aspirated and if occurring in a non-geminated state after vowels, developed the fricative realizations *b̲ḡd̲k̲f̲ṯ̲*. I wonder whether it is a pure coincidence that a similar change affecting the sounds βγδχφθ occurred in Greek in all positions during roughly the same period, beginning partly already in the 4th century B.C. and ending in the first centuries A.D.[37]

It is also a remarkable fact that the rules in question only apply to the Hellenistic period, not to preceding or subsequent times. They do not apply to early Semitic loanwords in Greek: the unit of cereal measure *kōr* (Akkadian *kurru*, Sumerian *g u r*) is taken over by Greek as κόρος ; the Semitic *kinnōr* "lyre" as κινύρα; *kammōn* "cumin" as κύμινον , and conversely, the Phoenician and Hebrew for the Cypriote town of Kition is *kittī*. Only *kuttōnet*, tunic, appears in Greek as χιτών . The same conditions are reflected in the way in which the Semitic Phoenician alphabet was adapted into Greek. The Semitic *k* gives κ; the Semitic *q* is adopted by early Greek as a back allophone of κ and subsequently discarded, and Semitic *t* is used for τ. The fact that Semitic *ṭ* is used for the aspirate θ , is hardly of any importance for determing the value of *ṭ*. As for later times, by and large Hellenistic rules are applied in the beginning of the Islamic era for Arabic, especially in erudite words adopted via Syriac, but even otherwise, cf. *Corduba*, Arabic *Qurṭuba*, Spanish *Cordova*. Later on, however, these rules lose their validity in transcriptions from European languages into Arabic, so that, for example, the name of the isle of

Crete (Greek Κρήτη), which once was transliterated *'iqrīṭis*, is nowadays transliterated *Kirīt*. It is true that this particular name may come via Turkish, which has two allophones of *k*, and this fact causes some confusion even in other names or loanwords (like *qunṣul* < consul), but otherwise nowadays transliterations like *kārdīnāl* = cardinal, *kōktēl* = cocktail, *kōmīdīyā* = comédie etc. are the rule. It would be interesting to study the origins of this shift in detail, but it cannot be done in this connection.

It would be rash to conclude on the basis of the facts enumerated above, that the Semitic emphatics were realized in Akkadian or ancient North-West Semitic exactly as they are realized in the Semitic languages of Ethiopia. The only new fact pointing in that direction is the phenomenon of Assyrian **naṣṣ-*. Otherwise, we must allow for great regional and periodical discrepancies in the pronunciation of these sounds. Nor are we able to tell, for example, how Arabic *ḍ* and *ḍ̲* were realized in most ancient times and whether the oldest emphatics were voiceless (as they are in Ethiopic and in the North-West Semitic languages) or if they could also be voiced as some of them are in Arabic. We have, however, also adduced weighty reasons for the view that the present-day Arabic pronunciation of the emphatics with velarization and/or pharyngealization affecting segments larger than one phoneme, is of later date and only began in the beginning of the Islamic era. Instead, in older times, the phenomenon of "emphatic" pronunciation is restricted only to certain consonants belonging to this category. Vowels are not affected, and neighbouring consonants only moderately. Assimilations predominantly affect only the grammatical elements, and, in older times, the tendency within roots is rather towards dissimilation and restriction of the number of emphatics in a given root.

N o t e s

[1] The term is unknown in older Hebrew grammars, and Kautzsch in the 27th edition of Gesenius' Hebräische Grammatik (Leipzig 1902) uses it only in the chart of letters and their equivalents, but does not mention it in § 6 m (*ṭ*, *ḳ* und wohl auch *ṣ* sind stark artikuliert mit Verschliessung des Kehlkopfs). As far as I am able to ascertain at present, it is used by Wahrmund, Praktische Grammatik der neu-Arabischen Sprache (Giessen 1861) and W. Lagus, Lärokurs i arabiska språket (Helsingfors 1869), but not in earlier editions of Caspari or Wright.

[2]Cf., e.g., H. Blanc, The Fronting of Semitic G and the QĀL-GĀL Dialect Split in Arabic (Proceedings of the International Conference on Semitic Studies held in Jerusalem, 19-23 July, 1965, Jerusalem 1969, pp. 7-32), p. 19.

[3]Cf. R. S. Harrell & H. Blanc, Contributions to Arabic Linguistics[2] (1964), p. 26. Harrell in his transcriptions abandons the traditional usage of marking the emphasis with dots under the consonants involved, and underlines whole syllables and words, instead. Abdelghany A. Khalafallah in his "Descriptive Grammar of Sa i:di Egyptian Colloquial Arabic" (Mouton, The Hague-Paris 1969) only underlines vowels affected by the emphasis, which can also be considered as an economical of indicating the suprasegmental feature in question.

[4]Cf. I. Garbell, The Jewish Neo-Aramaic Dialect of Persian Azerbaijan, Le Hague 1965, p. 33.

[5]Cf., for instance, K. G. Tsereteli, Sovremennyj assirijskij jazyk (Moscow 1964), p. 27 and H. J. Polotsky, Journal of Semitic Studies, 6 (1961), 8 f.

[6]This holds true particularly for the dialect of Ṭūr ᶜAbdīn as transcribed by H. Ritter and O. Jastrow; in Maᶜlūla there is a peculiarity in the realization of *q* for which see below in this article.

[7]These well-known facts are confirmed by J. Blau, A Grammar of Biblical Hebrew (Wiesbaden 1976), p. 5[2].

[8]See the thorough treatment by E. Ullendorff, The Semitic Languages of Ethiopia (London 1955), p. 151 ff. It is important to note that according to Ullendorff (who, in turn, cites A. Klingenheben) "the glottal closure is established either at the same time or possibly even slightly before the oral closure". This invalidates the view held by some scholars that a combination of consonant + a glottal stop is involved, a phenomenon considered an abnormal feature in Semitic languages.

[9]In Beiträge zur Assyriologie I,1 (1899), pp. 249-267, especially p. 261.

[10]Mentioned by Bergsträsser, Hebräische Grammatik, p. 41.

[11]Cf. C. Brockelmann, Grundriss I (1908) § 35 (p. 44) and § 45 (p. 121) (especially concerning the variants of *q*).

[12]Semitica 4 (1951/2), pp. 79-94.

[13]Bulletin de la Société Linguistique 54 (1953), pp. 67-78.

[14]S. Moscati, Il sistema consonantico..., Roma 1954, pp. 23-26.

[15]An Introduction to the Comparative Grammar of the Semitic Languages (Wiesbaden 1964), pp. 23-24.

[16]I. Garbell, Quelques observations sur les phonèmes de l'hébreu biblique et traditionnel, Bulletin de la Société Linguistique 50 (1954), pp. 231-241.

[17]E. Ullendorff, l.c., p. 155 ff.

[18]l.c., p. 8[4].

[19]Cf. W. von Soden, Assyrisches Handwörterbuch (AHw) under the respective entries.

[20]E. Ullendorff, l.c., pp. 117-118. "The ejective nature of this sound, coupled with the glottal closure immediately following it, seems liable

to create the acoustic illusion that it is an affricate."

[21] Quoted according to the English edition. Diakonoff repeats the same assertion in Jazyki drevnej perednej Azii (Moscow 1967), p. 190[40].

[22] Cf. Th. Nöldeke, Neue Beiträge zur semitischen Sprachwissenschaft (Leipzig 1904), p. 127[1].

[23] Quoted according to G. Dalman, Grammatik des jüdisch-palästinischen Aramäisch[2] (Leipzig 1905), p. 66.

[24] Cf. Blanc, l.c., p. 19[55] referring to Sībawaihi, Kitāb, 279:18; 286: 13-19; 477:8, 11-12.

[25] Cf. any dictionary of Classical Arabic, and J. H. Greenberg, The Patterning of Root Morphemes in Semitic, Word 6 (1950), pp. 162-181. As for Hebrew, see K. Koskinen, Kompatibilität in den dreikonsonantigen hebräischen Wurzeln, ZDMG 114 (1964), pp. 16-58.

[26] F. W. Geers, The Treatment of Emphatics in Akkadian, Journal of Near Eastern Studies 4 (1945), pp. 65-67. A special case is constituted by the words *qaqqadu* (< *qadqadu*) "head" and *qaqqaru* (< *qarqaru*) "earth" that can either preserve the identical *q*:s in the beginning or dissimilate them as *kaqqadu*, *kaqqaru*, cf. W. von Soden, Ergänzungen zu GAG, Roma 1969, § 26 b for this and other similar peculiarities. In Neo-Assyrian the incompatibility of emphatics is no more absolute, cf. *maqāṭu* AHw 607 b.

[27] Facts according to the dictionary of C. F. Jean & J. Hoftijzer, Dictionnaire des inscriptions sémitiques de l'ouest, Leiden 1965, cf. already Brockelmann, GVG § 88.

[28] See Th. Nöldeke, Mandäische Grammatik (Halle 1885), pp. 38-39.

[29] E. Ullendorff, l.c., p. 46.

[30] Cf., among others, Blanc, l.c., passim.

[31] Such pronunciation may also occur sporadically, though rarely, in Ethiopic languages, cf. E. Ullendorff, l.c., pp. 47-48, and in the Arabic area, among Maghribi Jews. In Arabic, it is an "ultra-sedentary" feature. It was explained already by Brockelmann — and by others — in the following manner: "... ist die Velarexplosiva ganz aufgegeben und nur noch der feste An- oder Absatz der Vokale übrig geblieben."

[32] Cf. A. Spitaler, Grammatik des neuaramäischen Dialekts von Maᶜlūla and, for Nazareth, H. Palva, Lower Galilean Arabic (Studia Orientalia XXXII, Helsinki 1965), pp. 23-24.

[33] Cf. I. J. Gelb, Old Akkadian Writing and Grammar[2] (Chicago 1961), 33 ff.

[34] Cf. W. von Soden, GAG § 26 c; about q/g *idem*, Das akkadische Syllabar[2] (Roma 1967), p. XX and Linguistica semitica: presente e futuro (Roma 1961), p. 37.

[35] Many of them can be studied in grammars and dictionaries of the respective languages, cf. e.g. J. Friedrich, Phönizisch-Punische Grammatik; Dalman's Aramäisch-neuhebräisches Handwörterbuch; Brockelmann's Lexicon Syriacum; E. Brønno, Studien über hebräische Morphologie und Vokalismus auf Grundlage der mercatischen Fragmente der zweiten Kolumne der Hexapla des Origenes (Leipzig 1943) etc. As for the transliterations into Akkadian, cf. W. Röllig, Griechische Eigennamen in Texten der babylonischen Spätzeit, Orientalia, Nova Series 29 (Roma 1960), pp. 376-391.

[36] The Greek ξ was actually pronounced *ks* according to W. Brandenstein, Griechische Sprachwissenschaft, Berlin 1954, p. 95.

[37] I should not venture to assert that this phenomenon began at a definite place either in the Greek area (where it is first attested in dialects presumably remote from any Semitic influence) or in the Semitic area, where e.g. W. von Soden purports to see indications of it quite early in Akkadian (cf. his article Die Spirantisierung von Verschlusslauten. Ein Vorbericht, JNES 27 (1968), p. 214 ff.), but I should rather think that the very close symbiosis of Greek and various Semitic languages, especially Aramaic, in several urban centres of the Near East in the Hellenistic period must have favored this trend, which is observable in both areas.