Arabic Inline Characters

for Qur'ānic and Classic orthography in Unicode and computer typography

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Arabic Inline Characters

Unicode Arabic lacks the concept of contextually neutral, "inline" characters

Unicode's Arabic functionality is limited as the result of an constraint in the contextual definition of character behaviour introduced for typewriters. It was subsequenly ported to phototypesetters and inherited by computer typography, because it is derived from these systems. Software and fonts based on the present standard cannot handle inline letters, i.e., letters that are written not over but between letters, irrespective of their joining behaviour. As a result, classic Arabic orthography and Contemporary Qur'ān Orthography¹ cannot be rendered with the present Unicode specifications for typographic behaviour.





existing superscript/subscript placement (functional)



proposed joining inline placement (missing)



present non-joining inline placement (dysfunctional)



The characters concerned are (with Qur'anic examples whenever available):

This treatise focuses on the 1924 spelling of the Qur'ān Codex, also known as the *King Fu'ad Qur'ān*. Its spelling prevails all over the Arabic world; it is referred to here as *Contemporary Qur'ānic Orthography*.

1. INLINE HAMZA

U+0621 Arabic Letter Hamza

(wrong: U+0654 Hamza Above placed over U+0640 Tatweel)

			1		,	
	final		middle		initial	
	joined	non-joined	joined	non-joined	joined	non-joined
	ظِمًا	و جرن ءًا	ٱسۡتُجۡرۡتَ	إِسْرَ ٓ عِيلَ	ٱ ل اً يَتِّ	ءَ ايْتِ
_	TMA	GR A Q 043:015	A SBGR B Q 006:139	A SR BL Q 002:211	A LA BB Q 007:032	A BB Q 002:099

2. INLINE ALIF

U+0670 Arabic Letter Superscript Alef

(provided it is preceded by U+064E Arabic Fatha)

final		middle		initial	
joined	non-joined	joined	non-joined	joined	non-joined
حُقَّىٰ GTY Q 011:005	اً عَتَدَى A EBD Y Q 002:178	اَلظَّالِمِينَ A LTLMBN Q 002:193	سُوْءَانِکُم SW BKM Q 007:026		

3. INLINE YEH

U+06E6 Arabic Small Yeh

(identical with: U+06E7 Arabic Small High Yeh)

`			<u> </u>			
	final		middle		initial	
	joined	non-joined	joined	non-joined	joined	non-joined
	اً سُمُآءَهِ بِ A SMBH Q 007:180	ھٰذہ ہے HD H Q 004:078	A BR HM Q 002:124	A LFHM Q 106:002		

4. INLINE WAW

U+06E5 Arabic Small Waw

(redundant: U+083F Arabic Small High Waw)

final		middle		initial	
joined	non-joined	joined	non-joined	joined	non-joined
ءَ اينتُهُ وَ	أُ وَلِيآءَهُ وَ	لِيُسْتُواْ	ۇورى		
A BBH Q 041:044	A W LBA H Q 008:034	LBSW A Q 017:007	W R Y Q 007:020		

5. INLINE NOON

U+06E8 Arabic Small High Noon

final	middle	initial
joined non-joined	joined non-joined	joined non-joined



All these letters can be represented as single, inline grapheme each. The additional encoded characters associated with some of them are redundant, at best positional variants. But they are misdefined when they are described as "superscript": they should never be placed above the preceding character, but off-set to the left of it. U+0654 Hamza Above is not part of this system: it is a regular superscript character to be used as diacritic in combination with a base letter. The practice of using U+0654 Hamza Above placed over U+0640 Tatweel is untenable: with the improved accuracy of Arabic typesetting, the rules of elongation prevent the placing of elongation at random as carriers for off-set superscript characters.

A close -up of Hamza

la āyä [LA вн]

For instance, Unicode defines the contextual behaviour of 0621 ARABIC LETTER HAMZA as "non-joining".2 This unintentionally describes the behaviour of inline *Hamza* correctly - only when it is positioned between two non-joining letters:

However, totally analogous words where the letters surround the "inline Hamza" break up as a result of this definition:

Inline *Hamza* in intial position appears to be unproblematic:

This spelling with initial inline *Hamza* is a feature of modern Qur'ān orthography. Normal spelling never uses inline *Hamza* in initial position. Instead the *alif-maddä* combination is used :

This spelling is not known in the industry, and presently there is no solution for it. The popularly expected spelling is with *lam alif-maddä*:³

This defect can not be corrected by generically changing the contextual behaviour

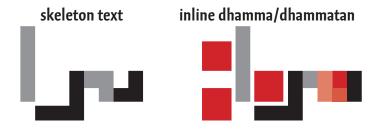
The Unicode Standard 4.0, The Unicode Consortium 2003, 8.3, page 199. Even that spelling can cause problems with fonts that have limited support for lam alif

of the Unicode 0621 ARABIC LETTER HAMZA, because the Arabic Block in Unicode is shared by all Arabic-scripted langauges, some of which depend on non-joining *Hamza*. For instance in Persian there is a a secondary, non-Arabic character that is indeed non-joining. Therefore it might even be necessary to introduce a new character ARABIC LETTER INLINE HAMZA in order to safeguard Classical Arabic Orthography and Contemporary Qur'ān Orthography in Unicode. An elegant alternative would be a language-dependent switch to change non-joining *Hamza* into inline *Hamza* in an Arabic context. This switch would not need to distinguish between Qur'ānic and modern Arabic: within Arabic there is no conflict.

Background

In the evolution of Arabic orthography, the *Hamza* was absent from the original Qur'ān text. It was a later addition, which is still reflected in the fact that it is absent in conventional presentations of the alphabet: schoolbooks, grammars and encyclopedias list only 28 letters.

Treatment of *Hamza*, *originally* a miniature head of 'ayn, is analogous to and very likely based on that of the first generation vowel markers.⁴ The first generation vowel markers consist of a round shape, usually red, positioned above, below or inline the main script, i.e., between letters irrespective of their joining behaviour. The round shape is a single, generic vowel marker whose value is expressed by its position: \bar{a} above the line (Fatha), \bar{i} below the line (Kasra) and \bar{u} (Dhamma) inline or on top of the line. In short: one shape, three positions.





Q016:106: مُعْلَمَينُ [MTMBN] muṭmaʾinnu-n. This is a fine illustration of the inline red dot for Dhamma (ū) following first Meem (somewhat vague on top of the black main text), the superscript red dot above the second Meem for Fatha (ā), the subscript red dot below dotless Beh (or unmarked Yeh) for Kasra (ī) and the inline double dots for Dhammatan (u-n). The red dot above Tah is a subscript Kasra from the previous line; the Hamza is absent in the old manuscript. From: DAM 15.15.2, Dar Al Makhtutaat, Sanaa.

⁴ Second generation, modern vowel markers Fatha, kasrä (with identical shape) and dammä (with distinct shape) are positioned above and below the main script or rasm (two shapes, two positions).

Though instances where Hamza is positioned inline were covered correctly by metal typesetting, typewriters and phototypesetting failed to handle them at all, which in turn lead to defective computer support for Arabic. As a result, Classical Arabic and Contemporary Qur'ānic Orthography cannot be handled on any computing platform.

Examples taken from authoritative Arabic grammars and manuals:

(c) If the hamzah is preceded by a long vowel and bears —, it has no chair (e.g. اَخَطِئَةُ مُرُوءَةُ سَاءَلَ). If, however, the hamzah is preceded by a long vowel and bears — or —, the chair usually corresponds to the vowel the hamzah bears (e.g. سَائِلُ تَسَاؤُلُ.).

The straightforward consistency of the spelling rule with the same inline Hamza irrespective of joining and non-joining, as illustrated by Farhat J. Ziadeh and R. Bayly Winder, cannot be reproduced with a single Unicode character (U+0621). The present specification for contextual behaviour causes the last word to split: خَطِيّةُ , مُرُوءَةٌ , سَاءَل Out of necessity, modern computer spellings add an extra Yeh as "chair" for Hamza to the last word: خَطِيّتُهُ instead of

² An alif is required after hamzah if the letter preceding the hamzah is one which can be joined to a following letter, e.g. مُعَافِعُ. Note that in this case the hamzah is written over the connecting line.

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Elaborating a spelling detail, Farhat J. Ziadeh and R. Bayly Winder explain that inline Hamza is surrounded by joining leters letters: شَيًّا



W. Fischer describes that after word-final syllable thats ends in a long vowel or a consonant, Hamza is written without a "chair". For all clarity regarding the consequences for joining, Fischer shows the nominal case of "فَتُعُ as well as the adverbial case:

f) Im Wortinnern hat s nach Konsonant oder Langvokal in der klass.

Orthographie keinen Träger: الله sāʾala, مُسْأَلَةُ masʾalatun, مُسْأَلَةُ sawʾatun, مُسْأَلَةُ hatīʾatun. Heute schreibt man statt dessen meist مُسْأَلَةُ oder مُسْأَلَةً بُسُواَةً .

W. Fischer describes that in the classic orthography word-internally, after a consonant or after a long syllable, Hamza is written without a "chair". Fischer illustrates this rule with non-joining سَوْءَةٌ ,سَاءَلَ and with joining examples: خَطِيَّةٌ , مَسَئَلَةٌ .

Anm. 3. Die Lautfolgen ' $\bar{\imath}$ und ' $\bar{\imath}$ werden im Inlaut heute gewöhnlich رخ bzw. و geschrieben. Die ältere Orthographie vermied die Folge zweier رو oder و und schrieb من المعارض على المعارض ال

W. Fischer describes that non-initial sequences of 'ī and 'ū are nowadays written في (NB: Yeh without dots) and '. However older orthography avoids repetitions of and wrote وي and أو Hamza is written without a "chair". A derived the pattern is applied rigorously and without exception in the 1924 Cairo edition of the Qur'ān. A Hamza is written inline whenever it is followed or preceded by a long vowel, regardless of the spelling of that long vowel. This leads to an exceptionally high frequency of Arabic letters inline Hamza - for which the present combination of computer typography and Unicode specifications offer no solution.

Rem. Accusatives like ظُفَّ and فَعُ are often written, though

A contrary to rule, قُفْ , شُفًا ; and in old Mss. we find such instances

as أَرْدَاءً for رَدَاءً .

are frequently written as طِعْمًا and شَيًا are frequently written as طِعْمًا and شَيْءً are frequently written as طِعْمًا and شَياً and شَياً is written شَياً

Inline characters in the manuscript tradition

The contextual behaviour of inline Hamza in the manuscript tradition is regular and straightforward: it is always placed between the preceding and following letter, where necessary over the middle of the connection³ – even if the line is very short⁴. The examples below illustrate final and non-final inline Hamza between connected letters.

When reproducing the computerized graphemic content of the 1924 Cairo edition with computer-synthesized naskh script, a small number of unexpected results were encountered. Certain spellings typeset with the dedicated typeface – designed especially for this Qur'ān – warrant a comparison with other codices.

1. A LN

In Q4:18 of the Cairo edition, the word *l-āna* is spelled with a cluster of four superscript graphemic attachments, <sukūn> <inline hamzä> <fatḥä> <inline alif>.

This cluster is the result of the spelling rule, characteristic of the Cairo edition, that glottal stop is written with inline hamzä when it is followed by long vowel.

Every grapheme of this word is present in Unicode, but the industrial does not design Arabic fonts to handle such character sequences.

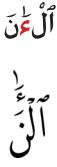
The rules of *naskh*, the style of choice for rendering the Qur'ān, do not allow elongation of Lam⁵, and as a result computer-generated naskh produces a correctly shaped text skeleton with an ugly stack of attachments.

Where the mechanized writing of the 1924 Cairo edition uses a spacious skeleton base ____, the calligraphic constraints of naskh allow only a very tight connection , ↓ that cannot accommodate the total of six superscript attachments of the second Letter Block⁶. Unlike the Cairo typography, in naskh calligraphy no elongation between initial $< l\bar{a}m >$ and final $< n\bar{u}n >$ can be attested⁷.

Ottoman codices, use a different spelling for the word *l-āna*, that does not conflict with calligraphic patterns8.









The supplement of the 1924 edition contains a section about the use of miniature letters: they are inserted where "essential letters were missing in the 'Utmānī codices". It gives a number of examples, one of which happened to show irregular results when printed with computer-generated, regular *naskh*:

2. w LY

The word *walīyiya* "my protector" (Q7:196) consists of the elements *walīy* "protector" and the suffix $-\bar{\imath}(iya)^{10}$ "my". The skeleton consists of three letters: <WLY>. In miniature, a missing <superscript $y\bar{a}$ '> is added including its own reduplication mark, $\check{s}add\ddot{a}$, and its own subscript vowel i, $kasr\ddot{a}$: $wal\bar{\imath}y$ -iya.

Every grapheme of this word is present in Unicode, there is even a code for elongation.

From such same text code, computer-generated, regular *naskh*– which cannot execute illegal elongation¹¹ – sahpes a Letter Block <LY> & that is too tight to accommodate the total of three superscript and two subscript attachments. By contrast, the 1924 Cairo edition is typeset with a stretched skeleton base that that breaks traditional script rules, but in this manner provides the necessary room.





When comparing the same passage in other codices, variant spellings of such problematic words are encountered. These illustrate the different ways that calligraphers have solved the same problem.

The 19th century masterpiece of Ottoman Calligraphy by Elhaç Hafız Mehmed Emin Rüşdi Efendi¹² adds a second letter $y\bar{a}$ ' to the main letter group: <WLYY>. In Nash, the curve preceding final $y\bar{a}$ ' is a distinct letter: it represents the penultimate form of medial $y\bar{a}$ '.



A recent Turkish Qur'ān in the Ottoman tradition¹³ adds the correction to $\langle WLY \rangle$ in an unusual and subtle manner by placing a double point under the – swashed – final $y\bar{a}$. Please note that $y\bar{a}$ never gets dots in final position, therefore the dots are a clear hint at the missing $y\bar{a}$ in middle position). Moreover, there are vowels for four consonants, but the skeleton contains only three : $\langle WLY \rangle$.

An Indian Qur'ān¹⁴ solves this calligraphic conundrum elegantly within the calligraphic constraints. It should be noted that it adds the missing $y\bar{a}$, in superscript final position instead of in the middle of the letter group.

A recent North African edition¹⁵ also writes the missing $y\bar{a}$ ' into the main text skeleton: <WLYY>. The resulting spelling does not conflict with calligraphic rules. Typical for North African writing, the extra inverted curve preceding final $y\bar{a}$ ' is part of the same final $y\bar{a}$ '.

NB. What makes this case interesting is that in terms of Arabic morpho-phonology, there is no letter missing at all. The elements $wal\bar{\imath}y$ "protector" and the suffix $-\bar{\imath}(iya)/-ya$ "my" contract into $wal\bar{\imath}ya$, eliding one $y\bar{a}^{16}$. The result is the text skeleton <WLY>, as seen in practically all quoted words. The annotational marks that superimpose the form $wal\bar{\imath}y$ -i-ya with an extra syllable <WLYY> cause problems with the computer-generated naskh. This in turn lead to the discovery of variant spellings in other codices.









The 1924 Cairo edition is apparently based on a comparison with older manuscripts possibly to correct spelling deviations seen in Ottoman Turkish codices. In this case the editors decided to return to the base form <WLY>. Without annotation marks, this *rasm* can be interpreted as a grammatically correct Arabic word meaning "my protector". It is intriguing why the editors inserted a complex correction (<miniature yā'> <šaddä> < kasrä > superimposing a grammatical form not recorded in standard grammars that is difficult to handle within the observed constraints of Persian and Ottoman calligraphy. One possible answer is that the skeleton text <WLY> reflects a version of the word, possibly walīya, that differs from the oral tradition which apparently has it as walīyiya.

ولي

ولتى

3. A LY

The word l- $l\bar{a}$ ' $\bar{\imath}$ (Q33:4) also contains a Letter Block <LY> that is even longer than the previous one. The long \bar{a} is not part of the rasm, instead it is written by a Fatha on the $l\bar{a}m$ followed by an inline alif – which in turn is marked with a cautionary $madd\bar{a}$ preceding the Hamza. Since this Hamza is followed by a long vowel, in the Cairo spelling it must remain without a chair, i.e., inline, producing a sequence of two inline letters between two letters that calligraphy cannot stretched to accommodate.

Again, all graphemes and supporting elongations of this word can be stored in the Unicode format, but no font can render them coherently.

As before, *naskh* script grammar does allow for stretched *lam*, as they have not been attested in the calligraphic corpus. As a result, again an unusual stack of attachments is printed by the *naskh* computer model.

Rüşdi Efendi, whose work belongs to the corpus used for the model, uses a different spelling for long \bar{a} : a superscript miniature *alif* followed by an *alif* in the *rasm*.









The recent Turkish codex in Ottoman tradition by Hamîd el-Âmidî has the same rasm as the Cairo edition, a single superscript miniature alif for \bar{a} and, typical for Ottoman orthography, subscript alif for long $\bar{\imath}$. Note the inverted order of miniature alif – cautionary $madd\ddot{a}$. No $waṣl\ddot{a}$ is written on the initial alif.

The Indian edition uses essentially the same spelling as Hamîd el-Âmidî. Note that a $suk\bar{u}n$ is written over the consonantal element of the final long $\bar{\iota}$.

4. A SBGR B

The word *sta'jarta* (Q28:26) contains a glottal stop, written with *Hamza* without chair, typeset over an extra connection line.

All graphemes and the extra connection line of this word can be stored in Unicode format, but no font can render them coherently.

Naskh rules preclude the extra connection line, and such elongated connections directly preceding letters of the *ǧīm* class cannot be attested in Ottoman *naskh*. As a result, the inline *Hamza* with its own *sukūn* creates an unusual cluster of superscript marks in computer-generated *naskh*.

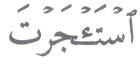
Rüşdi Efendi follows a different spelling that circumnavigates the problem of the clustering superscript marks: he writes the glottal stop with an *alif* (historically the original function of *alif*, before *Hamza* was introduced); the *sukūn* is rounded.

Hamîd el-Âmidî uses the exact same spelling as Rüşdi Efendi, but *waşlä i*s omitted.

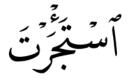
The Indian edition uses the same spelling as Hamîd el-Âmidî. Note that the *sukūn* has approximately the same shape as in the Cairo edition.















The North African edition has a *rasm* similar to the one in the Cairo edition, but it writes the glottal stop as an inline *alif*. The – rounded – *sukūn* is omitted from the miniature *alif*.



notes

- This treatise focuses on the 1924 spelling of the Qur'ān Codex, also known as the *King Fu'ad Qur'ān*. Its spelling prevails all over the Arabic world; it is referred to here as *Contemporary Qur'ānic Orthography*.
- 2 The Unicode Standard 4.0, The Unicode Consortium 2003, 8.3, page 199.
- This rules out the use of Unicode 0654 ARABIC HAMZA ABOVE because that character is designed to combine with the preceding letter.
- On the typographic or calligraphic level, the connecting line is often lengthened to create more room for the inline Hamza. However, the lengthening of a connecting line, or keshideh, is subject to calligraphic constraints that are taken into consideration by sophisticated typography. Moreover, some calligraphic styles (notably $Ruq^c\ddot{a}$) and the typography emulating them do not elongate connecting lines. This fact rules out standardizing the use of Unicode 0654 Arabic hamza above over the connecting element 0640 Arabic tatweel.
- In building this computer synthesis of traditional *naskh*, care was taken only to implement morphographic rules that were attested in manuscripts from a selected corpus of *naskh* calligraphy in the style of the Ottoman school.
- Letter Block: in calligraphy, this is the smallest unit of writing. It consists of a single letter or an uninterrupted group of connected letters. The morphographic rules of calligraphy determine the appropriate shape of a syntagm.
- Only in one instance (Q10:51), Ruşdi Efendi makes an exception to this apparent rule, to accommodate

for the same spelling: رَاكِينَ , corresponding to Egyptian رَاكِينَ ,

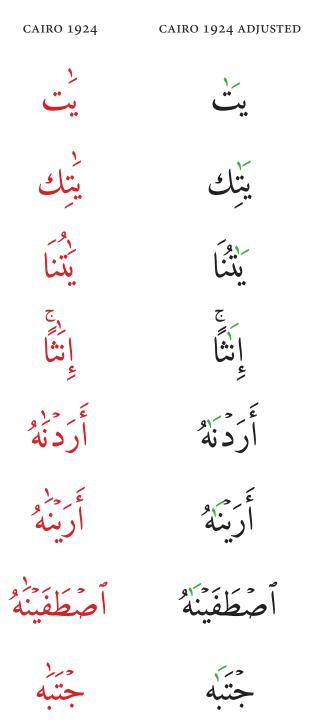
- 8 al-Qur'ān al-Karīm, handwritten by the calligrapher al-Hāǧǧ Ḥāfiz Muḥammad Amīn Rušdī Afandi, 1218/1803, reprint 1370/1951, Baghdad. This was one of the Ottoman codices analysed in order to design the DecoType ACE naskh simulator.
- 9 *al-Muṣḥaf aš-Šarīf*, Būlāq 1342/1924, page *yā'*. *Osman* refers to the third caliph, who reportedly suppressed the proliferation of Qur'ān variants.
- The possessive pronominal suffix, 1st person singular $\bar{\imath}$, followed by a binding vowel a, c.f. *Grammatik des klassischen Arabisch*, Wolfdietrich Fischer, Wiesbaden 1972, §268, Anmerkung 2.
- 11 Irregular elongation is suppressed by DecoType ACE's Trashide® technology.
- 12 al-Qur'ān al-Karīm, 1218/1803 reprint 1370/1951, Baghdad.
- 13 *Kur'ân-ı Kerîm*, handwritten by the calligrapher Hamîd el-Âmidî, Istanbul 1973.
- 14 The Holy Qur'ān, text, translation and commentary, Abdallah Yusuf Ali, Lahore 1934.
- 15 al-Qur'ān al-Karīm, printed in the 'Utmānī skeleton text, following the reading of Imam Warš in the Moroccan-Tunisian-Algerian-African unified calligraphic style, Dar al-Qur'ān wa l-Ḥadīt Baghdad 1985.
- Since the word *walīy* ends in y, the suffix allomorph would be -ya not $-\bar{\imath}(iya)$: see W. Wright, A *Grammar* of the Arabic Language, Cambridge-Leiden 1896, paragraph 317.
- This sample is again Q36: 1-12 using the spelling of *al-Muṣḥaf aš-Šarīf*, Būlāq 1342/1924 (the "Cairo Qur'ān").

SUPPLEMENT

The supplement lists a selection of actual Qur'ānic examples that cannot be printed without support for Arabic inline characters. The purpose is to handle these cases without breaking the overall integrity of classic Arabic script structure. The "adjusted" shapes are the planned result. With the present structures resulting from regular Unicode, printed in red, the exceptions cannot yet be rendered.

Please note that the sequence *Fatha*-superscript *alif* requires the superscript *alif* to be handled like an inline character.

NB - the examples are given in the the style of the metal typeface of the 1924 Cairo Qur'ān.



CAIRO 1924

CAIRO 1924 ADJUSTED

هَٰذَا	هَٰذَا
شعير	شعبر
شفعوا	شفعؤا
ٱلتَّبِبُونَ	ٱلتَّإِبُونَ
ٱلضِّعَفُوا	ٱلضُّعَفُواْ
أصبعهم	أصبعهم
أصبنهم	أصبنهم
بیتی	بني
فَتِتَ	قَنْتَتُ
آلاً منتِ آلاً منتِ	ٱلأَمْنَاتِ
ر ^ا برسلتی	برسًاكِتي

CAIRO 1924 CAIRO 1924 ADJUSTED

يهمن	يَهُمَنُ
ار بر	Ġ.
<u>ک</u> ک	د ' د
<u>ئ</u> و	ؿؙڒ
الهتنا	ألهتنا
إِسْرَء يلِ	إِسْرَآءِ يِلَ
بو	بُوَ
تُرْءَا	ترآءَا
مرا تر ما	قرر با ترا با
ر صر	صر
سَوْءَتِكُمْ	ڛۊٛٷڗڲؙؙؖۮ

CAIRO 1924 CAIRO 1924 ADJUSTED

صرط	صِرْطَ
<u>آ</u> طیر	طَيِّر
ٱلظّٰلِمُونَ	ٱلظَّلِهُونَ
تَيْنَكُمْ	تَيْنَكُمْ
شُركُواْ	و آوه شرگوا
اً نَكُا	اً : كُلُّ
ٱلْحَكِمِينَ	ٱلْحَكِمِينَ
ٱلۡمَلٰۡكِةَ	ٱلۡمَلَيۡكَة
أكبر	ٱكْبَرَ
ٳٙڴؙؙؙۿؚڣڹۜ	ٳۧػؙۿڡۣڹٙ
الما الما الما الما الما الما الما الما	عَ ^{صَّ} وْ آگلُو نَ

CAIRO 1924	CAIRO 1924 ADJUSTED
أكنا	أَكْنَا
وَلَٰكِنِ	وَلَكِنِ
56:	56
لف	لَف
علَ	كه
حُلِّم	حُلُم
ٱلْقَلَيْدَ	ٱلْقَلَيْدَ
أَغْلَلاً	كُلْلَةُ
قِيمًا	فيتما
اليتمي اليتمي مدوران العلمة	التمي
م و و را ه العلمة ا	مدور <u>و</u> ه العليه

CAIRO 1924 CAIRO 1924 ADJUSTED

أسميه	أسميه
أَصَنَّمَكُم	أُصْنَمَكُم
أَفْتُمْرُونَهُ	أفتكرونه
يمى	يمي
مبر	مبر
أصحب	أصحب
إصلحا	إِصْلَحًا
آ بر سیحتِ ۱	سَيحْتِ
ا س <u>ح</u> ر	سيحر
تكنجوا	تكنجؤا
ي المج	منجك

CAIRO 1924

CAIRO 1924 ADJUSTED

ٱلْمَوْءُودَةُ ٱلْمَوْءُودَةُ CAIRO 1924

CAIRO 1924 ADJUSTED