

alocal.sty — Local Extensions of ArabTeX

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This package implements some of the notational extensions of Encode Arabic <http://github.com/otakar-smrz/encode-arabic/> to work in ArabTeX.

The alocal.sty package is invoked by ArabTeX as the file containing local extensions. Either overwrite your copy of this file in the ArabTeX distribution, or enforce in some other way the redefinitions that our version of alocal.sty consists of. Please report to us any bugs or incompatibility issues.

Defective writing of <_I> enables easy encoding of `m_I'aT` مائة *mi'ah* and its derivatives, just like <_U> works for `'_Ul_a'ika` أُولَئِكَ *ulā'ika*.

```
m_I'aTuN bi-al-m_I'aTi مِائَةٌ بِالْمِائَةِ mi'atun bi-'l-mi'ati
mi'aTuN bi-al-m_I'aTi مِئَةٌ بِالْمِائَةِ mi'atun bi-'l-mi'ati
mi'aTuN bi-al-mi'aTi مِئَةٌ بِالْمِائَةِ mi'atun bi-'l-mi'ati
\fullvocalize m_I'aTuN bi-al-mi'aTi مِائَةٌ بِالْمِائَةِ mi'atun bi-'l-mi'ati
\novocalize m_I'aTuN bi-al-mi'aTi مِائَةٌ بِالْمِائَةِ mi'atun bi-'l-mi'ati
m_I'atAni wa-m_I'AtuN مِائَتَانِ وَمِائَاتٍ mi'atāni wa-mi'ātun
```

Doubled vowels <ii> and <uu> are set equivalent to <I>, resp. <U>, in all contexts. This is similar to <aa> becoming <A>. The distinction between <I> versus <iy> and <U> versus <uw> is preserved.

```
zuuwaarii زُوَّارِي zūwārī          zUwArI زُوَّارِي zūwārī
zuwwaariy زُوَّارِي zuwwāriy
```

Silent *ʾalif* spelled as <UW> or <uW> compares more easily with the other <aW> variant of the verbal ending. Writing <uuW> is equivalent to <UW>.

```
katabUW كَتَبُوا katabū          katabUA كَتَبُوا katabū
katabuW كَتَبُوا katabuw        ramaW رَمَوْا ramaw
katabuuW كَتَبُوا katabū        ramaWA رَمَوْا ramaw
```

Along with that, we have fixed the ArabTeX's bug in equating the <uW> sequence with <UA>, thus printing مِوَا instead of مِوَا. Now, both look different.

```
muwA.tin مِوَاتِن muwāṭin      muwA.salaT مِوَاَصَلَة muwāṣalah
```

Vocalization degree is extended with the `\nodiaccritics` option, which suppresses the printing of *šadda* and all other diacritics. This option has an obvious `\noshadda` synonym, while `\novocalize` can also be invoked as `\novowels`.

Transcription of *waṣla* can be controlled and customized by redefining the `\wasl@symb` command. If it is set to `\relax`, no *waṣla* is typeset and the original auxiliary vowel is not dropped. The default setting is `\gdef\wasl@symb{'}`.

Czech-style transcription has been defined as an experimental modification of the standard. Enforce it with `\settrans{czech}`.

```
\settrans{czech}
```

```
yUladu ^gamI'u an-nAsi يُولَدُ جَمِيعُ النَّاسِ júladu džamīʿu an-nási
wa-qad wuhibUW 'aqlaN عَقَلُوا وَهَبُوا va-ḵad vuhibú ʿaqlan
bi-rU.hi al-'i_hA'i بِرُوحِ الْإِخَاءِ bi-rūḥi al-'ichá'i
```

```
\settrans{standard}
```

```
yUladu ^gamI'u an-nAsi يُولَدُ جَمِيعُ النَّاسِ yūladu ġamīʿu ʾn-nāsi
wa-qad wuhibUW 'aqlaN عَقَلُوا وَهَبُوا wa-qad wuhibū ʿaqlan
bi-rU.hi al-'i_hA'i بِرُوحِ الْإِخَاءِ bi-rūḥi ʾl-iḥāʾi
```

Fixing the *ḥ* accent is noticable with fonts other than Computer Modern.

Consistency of *waṣla* needs to be improved so that vowel tying does not apply across paragraph boundaries.

```
iqra' iqra' iqra'I iqra' iqra'iy 'qra'iy iqra'A iqraā iqra'UW 'qraū
iqra'uW 'qrauw iqra'UA iqraū iqra'na 'qra-na
إِقْرَأْ أَقْرَأْ أَقْرَأْ أَقْرَأْ أَقْرَأْ أَقْرَأْ أَقْرَأْ أَقْرَأْ
in'a in'a in'ay 'n'ay in'ayA in'ayā in'aW 'naw in'aWA in'aw in'ayna
in'ayna
```

إِنَّ أَنْأَيَّ أَنْأَيَا أَنْأَوْا أَنْأَوْا أَنْأَيْنَ

```
u'mul uṁmul
```

أُؤْمَلُ

```
u'mulI uṁmulī
```

أُؤْمَلِي

```
u'mulA 'mulā
```

أُؤْمَلَا

```
iyqa.z iyqaz
```

اِيَقْظ

```
iyqa.zI iyqazī
```

اِيَقْظِي

iyqa.zA 'yqazā

اَيَقَطَا

u'mulI اُوْمَلِي u'mulī iyqa.zI اَيَقْطِي iyqazī

Consistency of *hamza* with <aa>, <ii>, <uu> needs to be revisited.

iqra'I iqra' iqra'ii 'qra' iqra'A 'qra' iqra'aa 'qra'a' iqra'UW 'qra'u
iqra'uuW 'qra'u muqra'U muqra'u muqra'u muqra'u

اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي اِقْرَئِي

ra''As ra'ās ra''asa ra'asa ru''isa ru'isa mura''is mura'is
رَأْسُ رَأْسُ رَأْسُ رَأْسُ رَأْسُ رَأْسُ رَأْسُ رَأْسُ رَأْسُ رَأْسُ

Silent *tā marbūṭah* spelled as <H> needs to be revisited.¹

m_I'aHuN bi-al-mi'aHi مَائَةٌ مَائَةٌ mīahun bi-'l-mīahi

m_I'aH bi-al-mi'aT مَائَةٌ مَائَةٌ mīah bi-'l-mīah

m_I'aTuN bi-al-mi'aTi مَائَةٌ مَائَةٌ mīatun bi-'l-mīati

m_I'aHAni bi-al-mi'aTayni مَائَةٌ مَائَةٌ مَائَةٌ mīahāni bi-'l-mīatayni

Comparison with ArabX_qTeX can provide useful test cases for *hamza*.²

'amruN 'amrun 'ibiluN ibilun 'u_htuN uhtun "'u_ht"uN uhtun
'"Uql"Id"Is 'uqlidīs ra'suN rasun 'ar'asu 'arasu sa'ala sa'ala qara'a
qara'a bu'suN bwsun 'ab'usuN abrusun ra'ufa rarufa ru'asA'u ru'asāu
bi'ruN birun 'as'ilaTuN as'ilatun

أَمْرٌ إِبِلٌ أَخْتُ أَوْقَلِيدِيسَ رَأْسُ أَرَأْسُ سَأَلَ قَرَأَ بُوْسُ أَبُوْسُ رُوْفُ رُوْسَاءُ بَرُّ أَسْئَلَةٌ
ka'iba ka'iba qA'imun qā'imun ri'AsaTuN rī'āsātun su'ila su'ila samA'uN
samāun barI'uN barīun sU'uN sūun bad'uN bad'un ^say'uN šayun
^say'iN šayin ^say'aN šayan sa'ala sā'ala mas'alaTuN mas'alatun
saw'aTuN sawatun _ha.tI'aTuN ḥaṭṭātun jA'a ḡāa

كَتَبَ قَائِمٌ رِئَاسَةً سَيْلَ سَمَاءٍ بَرِيٍّ سُوءٌ بَدْءٌ شَيْءٌ شَيْءٌ شَيْئًا سَأَلَ مَسْأَلَةً سَوَاءً خَطِيئَةً جَاءَ
ridA'uN ridāun ridA'aN ridāan jI'a ḡāa radI'in radīin .daw'uN dawun
qay'in qayin .zim'aN zimān yatasA'alUna yatasā'alūna 'a'dA'akum 'a'dā-
'akum 'a'dA'ikum 'a'dā'ikum 'a'dA'ukum 'a'dā'ukum maqrU'aT maqrū'ah
mU'ibAt mū'ibāt

رَدَاءٌ رَدَاءٌ حِيٍّ رَدِيٍّ ضَوْءٌ فِيٍّ ظِمًّا يَتَسَاءَلُونَ أَعْدَاءُكُمْ أَعْدَائُكُمْ مَقْرُوءَةٌ مُؤْتَبَاتٌ
taw'am tawam yas'alu yas'alu 'a.sdiq^A'uh_u 'ašdiqā'uhū ya^g^I'u yaḡrū
s^U'ila sū'ila

تَوَامٌ يَسْأَلُ أَصْدِقَاءَهُ يَحْيَى سُوَيْلٌ

¹<http://ufal.mff.cuni.cz/~smrz/ICFP2006/icfp-encode.pdf#page=10>

²<http://mirrors.ctan.org/macros/xetex/latex/arabxetex/arabxetex.pdf#page=6>