

Minimum(ish) Working Example of Quarto with Arabic RTL text in an LTR document

The Authors

2024-11-16

© 2023 Author Names
All rights reserved.

This work may not be distributed or modified, without written permission from the copyright holder.

This book is typeset with Xe_{La}TeX (via Quarto and pandoc) in the Charis, Vazirmatn, and Amiri typefaces.

Work in progress. Not ready for study.

Table of contents

Preface	1
1 Introduction مقدمة الكتاب	3
1.1 Inline Arabic text	3
1.2 Transcription of Arabic <i>al-ʿarabiyyah</i>	3
1.3 Non-italic transliteration of Arabic	4
1.4 Arabic divs	4
1.5 Fonts	5
1.5.1 Arabic font	5
1.5.2 Latin font	5
1.6 Some section	6
1.6.1 Some subection	7
2 Summary	11
References	13

Preface

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

This is a MWE of a Quarto book that is in left-to-right text (English), with portions of right-to-left text (Arabic) in it. Examples:

1. The basmalah above.
2. This inline text: العربية and this one: سرب القطا

To learn how to type Arabic text and its transcription/transliteration see the next chapter Chapter 1.

The source code for this book can be found here: <https://github.com/adamiturabi/quarto-arabic-mwe>.

To learn more about Quarto books visit <https://quarto.org/docs/books>.

Work in progress. Not ready for study.

1 مقدمة الكتاب Introduction

1.1 Inline Arabic text

This is some inline Arabic text. هَذَا كَلَامٌ عَرَبِيٌّ. It has been typed in the .qmd markdown source thus:

```
] {ar.}[.
```

This is a pandoc span with the class name ar. I have written a pandoc filter in [inline-arabic-span.lua](#) that adds the correct attributes (lang="ar" and dir="rtl") to the span so that it is processed correctly in the output:

- HTML: Creates the following span:

```
<span class="artextreg" lang="ar" dir="rtl"> ... </span>
```

The class artextreg will be useful for selecting the Arabic font for HTML output as we will see below.

- Latex: Uses babel:

```
\foreignlanguage{arabic}{...}
```

1.2 Transcription of Arabic *al-ʿarabiyyah*

This is the transcription of the above Arabic text: *hādḥā kalāmun ʿarabiyyun*.. It has been typed in the .qmd markdown source thus:

```
[hApA kalAmun earabiyyun.]{.trn}
```

Another custom pandoc filter [transliteration-span.lua](#) processes the above ASCII and adds the Unicode dots, macrons, and other diacritics to render it correctly.

The mapping for ASCII to transliterated output is also found in the Lua file for the filter.

By default, it renders the transcription in *italics*.

1.3 Non-italic transliteration of Arabic

Sometimes, we may wish to use a transliteration in the English text unitalized. This is often done for names like ʿUmar (عُمَر) and ʿUsāmah (أُسَامَة).

These are typed thus: `[#eumar]{.trn2}` and `[E#usAmah]{.trn2}`

Note how the hash character # is used to capitalize a letter in the rendered output. `trn2` indicates non-italic output.

1.4 Arabic divs

This is an Arabic div:

هذا كلام عربي طويل. أريد أن أكتب حتى يبلغ الكلام سطرين. أستعمل برنامج قواطرو لإنتاج الملف الخارجي. هو برنامج جيد قد خلف البرنامج بكداؤن الذي كنت أستعمله من قبل.

It is typed thus:

```

::: {.otherlanguage data-latex="{arabic}" lang="ar"}
<Arabic text here>
:::

```

The `.otherlanguage` and `data-latex="{arabic}"` are needed for the correct Latex syntax.

1.5 Fonts

1.5.1 Arabic font

1.5.1.1 PDF output

For PDF output, the Arabic font is specified in the file `srctex/before-title.tex` thus:

```
\belfont[arabic]{rm}[Language=Default]{Vazirmatn-Light}
\belfont[arabic]{sf}[Language=Default]{Vazirmatn-Light}
```

1.5.1.2 HTML output

For HTML output, the Arabic font is specified using CSS. This can be done for per class. TODO.

1.5.2 Latin font

The Latin font should support the special characters needed by the transliteration. I am using a rather complex non-standard transliteration scheme:

Arabic letter	Transliteration
ء	’
ا	ā
ب	b
ت	t
ث	th
ج	j
ح	h
خ	kh
د	d
ذ	dh
ر	r
ز	z

Arabic letter	Transliteration
س	s
ش	sh
ص	ṣ
ض	ḍ
ط	ṭ
ظ	ḏh
ع	ʿ
غ	gh
ف	f
ق	q
ك	k
ل	l
م	m
ن	n
ه	h
و	w
ي	y

I have found very few fonts supporting this, like Charis SIL which is what I am using.

1.6 Some section

This is a book created from markdown and executable code.

See Knuth (1984) for additional discussion of literate programming.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius

orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

1.6.1 Some subection

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras

nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Donec odio elit, dictum in, hendrerit sit amet, egestas sed, leo. Praesent feugiat sapien aliquet odio. Integer vitae justo. Aliquam vestibulum fringilla lorem. Sed neque lectus, consectetur at, consectetur sed, eleifend ac, lectus. Nulla facilisi. Pellentesque eget lectus. Proin eu metus. Sed porttitor. In hac habitasse platea dictumst. Suspendisse eu lectus. Ut mi mi, lacinia sit amet, placerat et, mollis vitae, dui. Sed ante tellus, tristique ut, iaculis eu, malesuada ac, dui. Mauris nibh leo, facilisis non, adipiscing quis, ultrices a, dui.

Morbi luctus, wisi viverra faucibus pretium, nibh est placerat odio, nec commodo wisi enim eget quam. Quisque libero justo, consectetur a, feugiat vitae, porttitor eu, libero. Suspendisse sed mauris vitae elit sollicitudin malesuada. Maecenas ultricies eros sit amet ante. Ut venenatis velit. Maecenas sed mi eget dui varius euismod. Phasellus aliquet volutpat odio. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque sit amet pede ac sem eleifend consectetur. Nullam elementum, urna vel imperdiet sodales, elit ipsum pharetra ligula, ac pretium ante justo a nulla. Curabitur tristique arcu eu metus. Vestibulum lectus. Proin mauris. Proin eu nunc eu urna hendrerit faucibus. Aliquam

auctor, pede consequat laoreet varius, eros tellus scelerisque quam, pellen-
tesque hendrerit ipsum dolor sed augue. Nulla nec lacus.

Work in progress. Not ready for study.

Work in progress. Not ready for study.

2 Summary

In summary, this book has no content whatsoever.

Work in progress. Not ready for study.

References

- Knuth, Donald E. 1984. “Literate Programming.” *Comput. J.* 27 (2): 97–111. <https://doi.org/10.1093/comjnl/27.2.97>.

Work in progress. Not ready for study.