

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

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This book is typeset with Xe<sub>La</sub>TeX (via Quarto and pandoc) in the Charis, Vazirmatn, and Amiri typefaces.

Work in progress. Not ready for study.

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# Preface

بسم الله الرحمن الرحيم

This is a MWE of a Quarto book that 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

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

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



# 1 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 `_extensions/arabic_support/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

This is the transcription of the above Arabic text: *hādhā kalāmun ʿara-biyyun*.. It has been typed in the .qmd markdown source thus:

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

Another custom pandoc filter (`_extensions/arabic_support/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.

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### 1.6.1 Some subection

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tesque hendrerit ipsum dolor sed augue. Nulla nec lacus.

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>.

