

# The Prefabricated Website

Who needs a server anyway?

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[bit.ly/Prefabricated](http://bit.ly/Prefabricated)



# Quick summary

The projects: *Endings* and *The Map of Early Modern London (MoEML)*

What is a static site, and why would you build one?

The site build process

Advantages

Disadvantages





## **/e** Project *Endings*

*Endings* is a four-year project funded by the Social Sciences and Humanities Research Council (SSHRC) that is creating tools, principles, policies and recommendations for digital scholarship practitioners to create accessible, stable, long-lasting resources in the humanities.

Thank you SSHRC!



Social Sciences and Humanities  
Research Council of Canada

Conseil de recherches en  
sciences humaines du Canada

Canada



# *Endings* principles

- Data
- Products
- Processing
- Documentation
- Release Management



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# Static sites: what and why?



[www.tei-c.org](http://www.tei-c.org), early 2019...

Hmm. We're having trouble finding that site.

We can't connect to the server at [www.tei-c.org](http://www.tei-c.org).



**If that address is correct, here are three other things you can try:**

- Try again later.
- Check your network connection.
- If you are connected but behind a firewall, check that Firefox has permission to access the Web.

Try Again





# Dependencies

The TEI site depends on WordPress.

WordPress depends on PHP and MySQL (single point of failure).

Getting a new server running requires

- Installing PHP and MySQL
- Restoring the DB from backup
- Configuring WordPress
- ...



# No such problem with the Guidelines

The online version of the TEI Guidelines consists only of HTML, CSS and JavaScript.

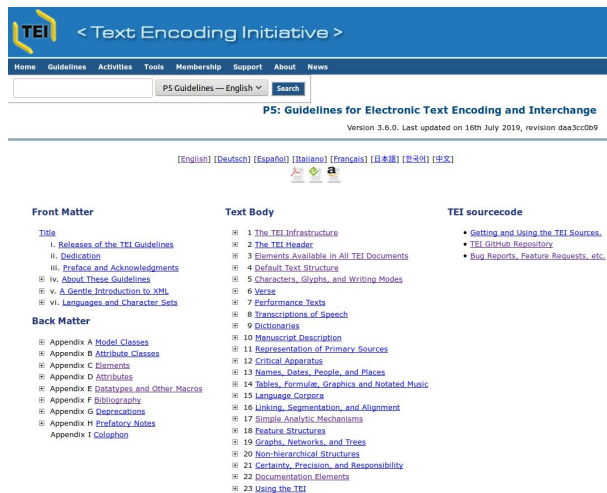
It's always in multiple places.

You can put a copy of it on any server.

You can use it from a local drive.

You can put as many copies as you like wherever you want.

That's a *static site*.



The screenshot shows the TEI Guidelines website. At the top is a blue header with the TEI logo and the text "<Text Encoding Initiative >". Below the header is a navigation bar with links for Home, Guidelines, Activities, Tools, Membership, Support, About, and News. A search bar is present with a dropdown menu set to "P5 Guidelines — English" and a "Search" button. Below the navigation bar, the page title is "P5: Guidelines for Electronic Text Encoding and Interchange" and the version information is "Version 3.6.0. Last updated on 16th July 2019, revision daa3cc09". There are language selection links for [English], [Deutsch], [Español], [Italiano], [Français], [日本語], [한국어], and [中文]. The main content area is divided into three columns: "Front Matter", "Text Body", and "TEI sourcecode". The "Front Matter" column lists items like "I. Releases of the TEI Guidelines", "II. Dedication", "III. Preface and Acknowledgments", "IV. About These Guidelines", "V. A Gentle Introduction to XML", and "VI. Languages and Character Sets". The "Text Body" column lists items from "1 The TEI Infrastructure" to "23 Using the TEI". The "TEI sourcecode" column lists "Getting and Using the TEI Sources", "TEI GitHub Repository", and "Bug Reports, Feature Requests, etc.". The TEI logo, a stylized bird, is visible in the bottom right corner of the page.

# Static sites:

Have no dependencies (other than a web server) ✓

Are pure HTML, CSS and JavaScript ✓

Can be replicated endlessly ✓

Need little or no curation ✓

Therefore have more chance of survival ✓



# We're not the only people who think so...

[Jamstack.org](https://jamstack.org) is an initiative to champion “modern web development architecture based on client-side JavaScript, reusable APIs, and prebuilt Markup,” in the interests of “better performance,” “cheaper, easier scaling,” “higher security,” and a “better developer experience.”



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  - Validate (Schematron)
  - Diagnose
    - Coherence: all links point to things.
    - Consistency: all documents conform to encoding and editorial guidelines.
    - Completeness: everything mentioned actually exists.
- (See Holmes and Takeda 2019, <http://dx.doi.org/10.1093/lc/fqz011>)





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*If anything is wrong, then stop. A Website with errors is not worth building.*



# In the bad old days before Endings...

...project members would happily upload anything they thought was finished into the live web application.

They linked to things that didn't yet exist or might never exist.

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We'll have no more of that.



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Credits



See XML



[Original XML](#)

[Standard XML](#)

[Standalone XML](#)

[TEI Lite XML](#)

[TEI Simple XML \(experimental\)](#)

[What are these XML versions?](#)

[Home](#) > [Encyclopedia](#) > [Placeography](#) > [Streets](#)

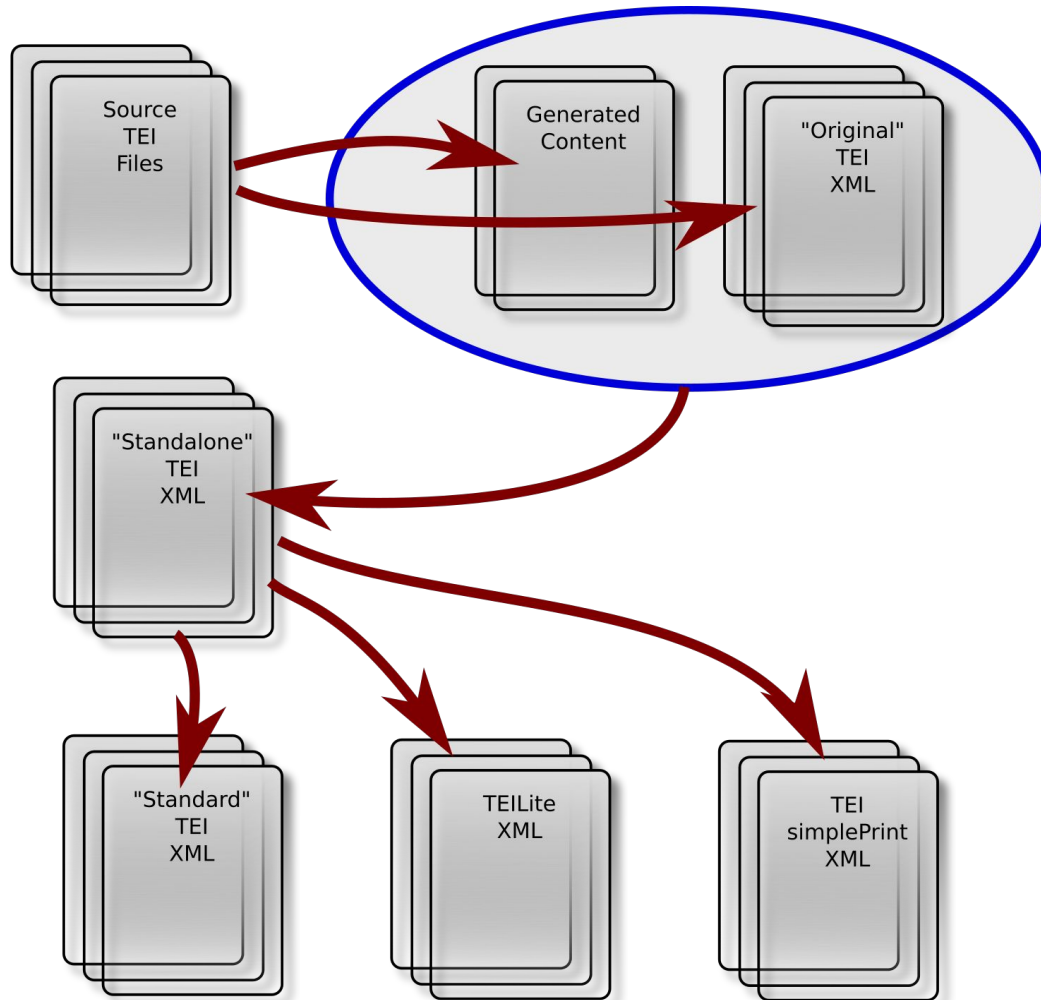
## ABCHURCH LANE

- [✿ Agas Map](#)
- [✿ Google Map](#)
- [✿ List documents mentioning Abchurch Lane](#)
- [✿ List variant names and spellings](#)

**Abchurch Lane** runs north-south from Lo  
**Abchurche lane.** It lies mainly in Cand  
Langbourne Ward and Candlewick Street Wa

While the lane clearly takes its name from t  
refers to **Abchurch Lane** only twice, both  
Langbourne Ward is terse, but the Candlew  
earch:





# MoEML's static site build process: Part 3

- Build the HTML, CSS and JavaScript.
- Validate all the HTML.
- Validate all the CSS.

If *anything* is wrong, then stop. *A Website with errors is not worth building.*



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- **Every page stands alone and complete** in terms of content.
- **All pages live together in the same folder**.



“But but but ....”

*But massive duplication of content across the site!*

*But thousands of files no-one may ever see!*

*But 10,591 files all in the same folder!*

We don't care.

We don't care.

We don't care.



# Advantages: 1

You can build hugely complex resources that could not be built on the fly.

For example:

- the Gazetteer (9000 entries)
- the [A-Z Index](#) (a single page with 10,500 entity ids)

(Because Control + F.)



# Advantages: 2

You can do really complicated, multi-pass processing of gnarly markup.

For example: `@style`, `<rendition>/@selector`

- Collect all identical `@style` on elements into a `<rendition>`
- Convert all `<rendition>/@selectors` into XPath, then to `@rendition`
- Then generate HTML/CSS



# Advantages: 3

Archiving the site is easy:

```
cp -r site somewhere_else/
```

Replicating the site is easy:

```
cp -r site somewhere_else/
```



# Advantages: 4

Everything is there.

Internal links never break.

Everything works.

Everything is valid.

Everyone is happy.



# Disadvantages

Deferred gratification.

- Builds take a long time.
- Builds often fail.
- It can be hours before you can see your work on the build server.

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  - If the same personography entry is replicated in fifty pages that mention that person, then good; any of those pages can now be used outside the context of the collection without loss.



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- **Everything that could conceivably be useful should be created and included.**
- **Redundancy is beneficial; in fact it is elegant.**
  - If the same personography entry is replicated in fifty pages that mention that person, then good; any of those pages can now be used outside the context of the collection without loss.
- **Patience is a virtue: let your build take a long time; let your releases be well-separated.**



Thanks for listening!

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