Harnessing the Power of Helpers

Now with 50% More Dogs!

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Today's Menu

Properties that are.. Functions?

Still convincing you that Helpers are good

Enough Helpers to start a band

Demo Complete!

Handlebars Expressions

Numbers

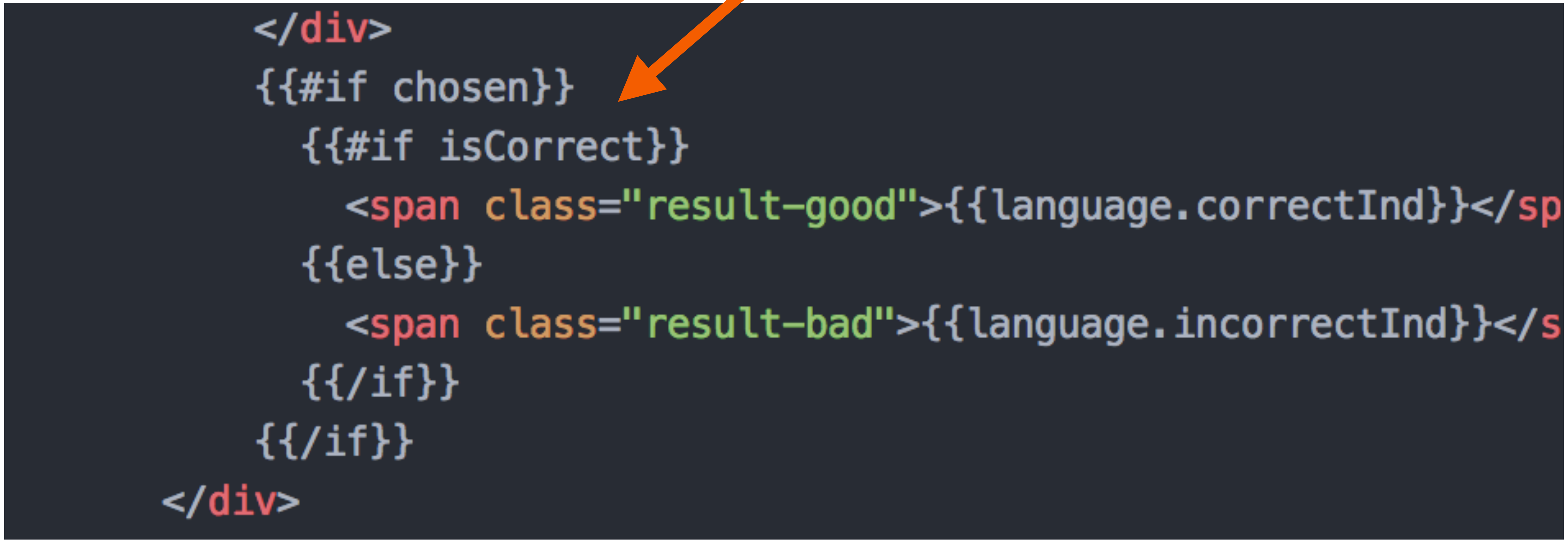
Strings

Functions?

Handlebars executes function properties

{{mustache}}

Function Property



```
    </div>
    {{#if chosen}}
      {{#if isCorrect}}
        <span class="result-good">{{language.correctInd}}</sp
      {{else}}
        <span class="result-bad">{{language.incorrectInd}}</s
      {{/if}}
    {{/if}}
</div>
```

Function Property Benefits

Works in Templates

Works in JavaScript

Unit Testable

Function Properties

Locally Scoped
Defined in Mustache

Helpers

Globally Scoped
Implemented in Handlebars

Helpers = $.ajax()?

Helpers…

are global references to JavaScript functions

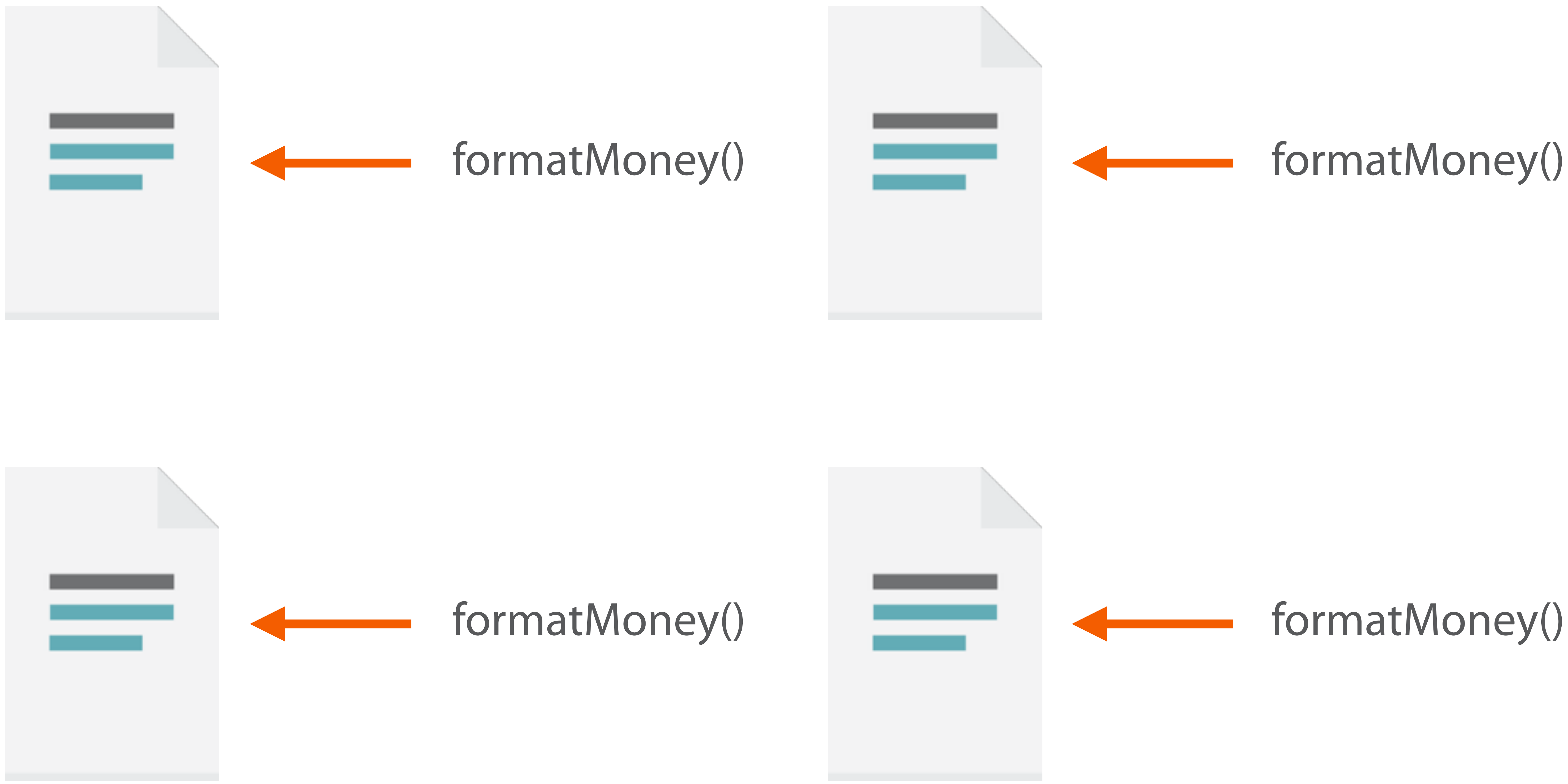
accept arguments

accept templates

output strings to render

Our Function

```
function formatMoney(number) {

    //returns money formatted number as string

}
```



formatMoney()

formatMoney()

formatMoney()

formatMoney()

Difficulties Arise in Iteration

```
{{#each moneyThings}}
   {{moneyAsNumber}}
{{/each}}
```

```
@root.formatMoney()?
```

Handlebars Only!

Calling Functions with Arguments

```
{{#formatMoney}}

   {{number}}

{{/formatMoney}}
```

Handlebars Helpers

One Function Call

One Expression

Done!

We’re Finally Creating Helpers!

“Took us long enough…” - *Everyone*

Helpers Birthplace

```
function exampleHelperFunction() {
     //doing some helper stuff
}
```

Helper Registration

```
Handlebars.registerHelper(‘myHelper’,
     exampleHelperFunction);
```

Helper Reference

Helper Function

Helper Arguments

```
function exampleHelperFunction(arg1, arg2) {
    //this.something
    //this.anotherThing
}
```

*this refers to context where helper was called

Register Helper Before Rendering It

Helper References Will Override Properties

Helpers in Templates

```
<script type=“text/x-handlebars-template” id=“main-templ”>

     {{myHelper arg1 ‘arg2’}}

</script>
```

Helpers - Also Great in JavaScript!

Helpers' Secret Hideout

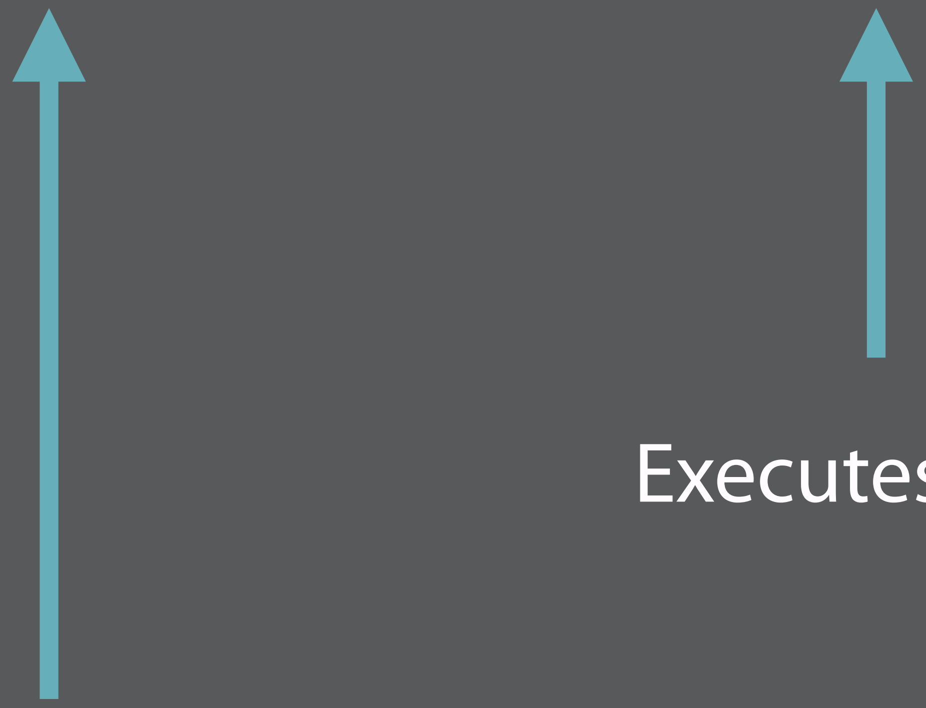
Handlebars.helpers

Subexpressions

Helpers inside Helpers

Subexpression Usage

```
{{formatMoney (applySalesTax 4589)}}
```



Executes First

Executes After

Implementing Pagination

Render Paginated Dogs

Render Page Links

Block Helpers

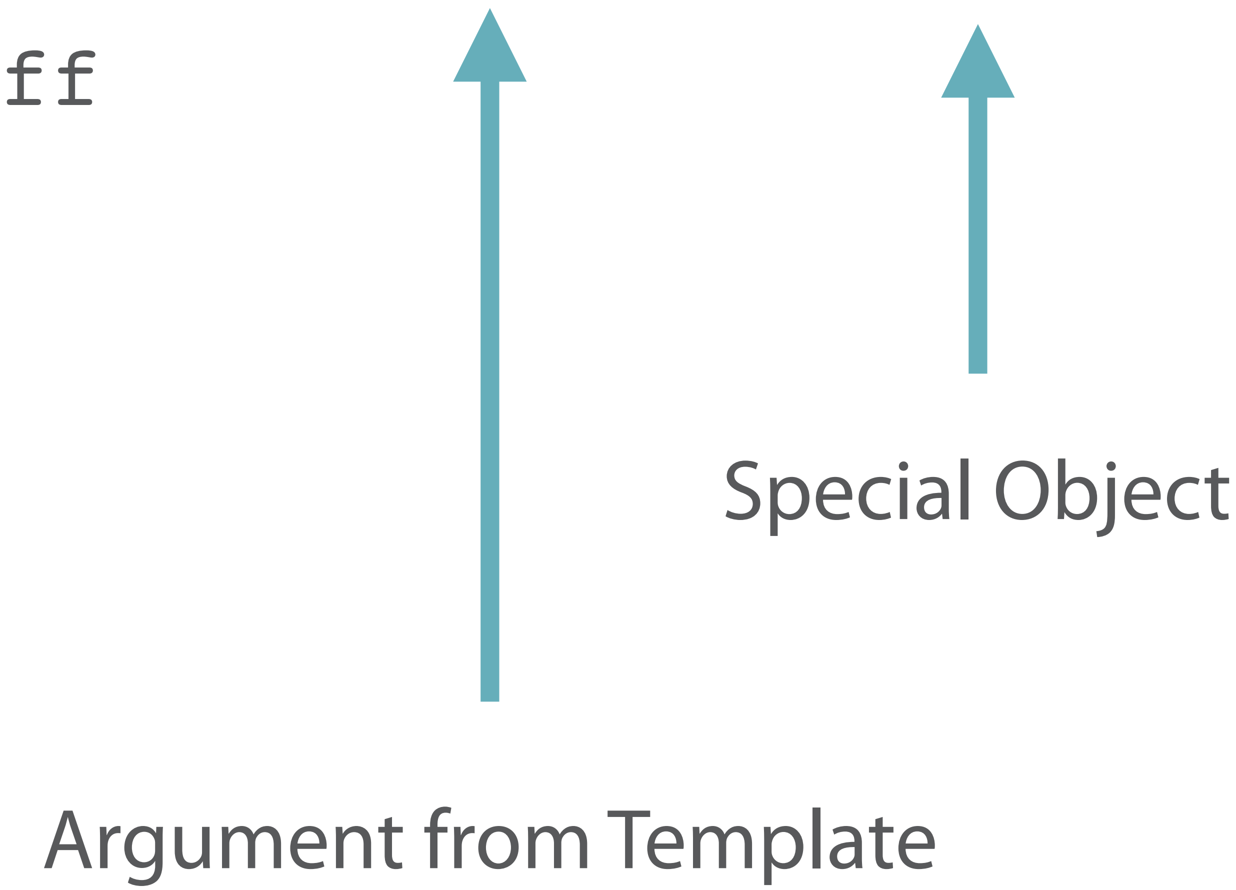
Block Helper Syntax

```
{{#myHelper onlyArg}}arg2=arg2 arg3=‘arg3’}}

     //helper stuff

{{/myHelper}}
```

Only One Argument Allowed

Block Helpers in JavaScript

```
function blockHelperFunction(context, options) {
    //block helper stuff
}
```



Special Object

Argument from Template

Options Argument Properties

`hash`

Contains hash arguments
from template expression

`fn`

Compiled function
containing
inner template

Using options.fn

```
function blockHelperFunction(context, options) {
    //logic
    return options.fn(context);
}
```

Summary

- Handlebars Second Cousins
- Helpers vs. The State
- First Helper of Many
- Multi-Dimensional Helpers
- Helper-ception
- The Final Helper

Next Time on JavaScript Templating with Handlebars

Handlebars in The Real World

Scalable Structure
Build Tools
Pre-Compilation