

# Tomorrow's CMS can provide increased accessibility

Peter Sunna



# Complex

Emergent

Probe → Sense → Respond.

# Complicated

Good Practise

Sense → Analyse → Respond.

# Chaotic

Novel

Act → Sense → Respond.

# Simple

Best Practise

Sense → Categorise → Respond.



# Peter Sunna



15 years in Content Management

Previously worked at Funka & Episerver.

Joined Contentful in Berlin 2015 to modernize how content flows when building and iterating on digital products

[@sunnaster](https://twitter.com/sunnaster)



# Agile principles in the complex quadrant

## People

Comfortable with experimentation and change

## Processes

Iterative and enhance learning.

## Technology

Support rapid delivery of products and services.



Innovation is so complex it requires multiple specialists to work together. Highly skilled people on a mission.



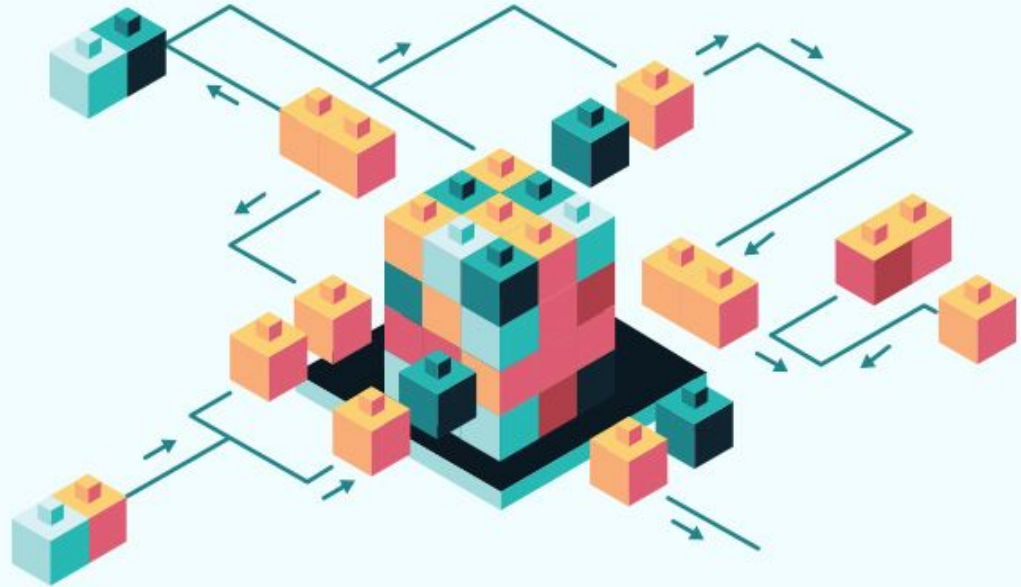


From slow but stable





To fast and flexible



From this

Standardised platforms and technologies



To this

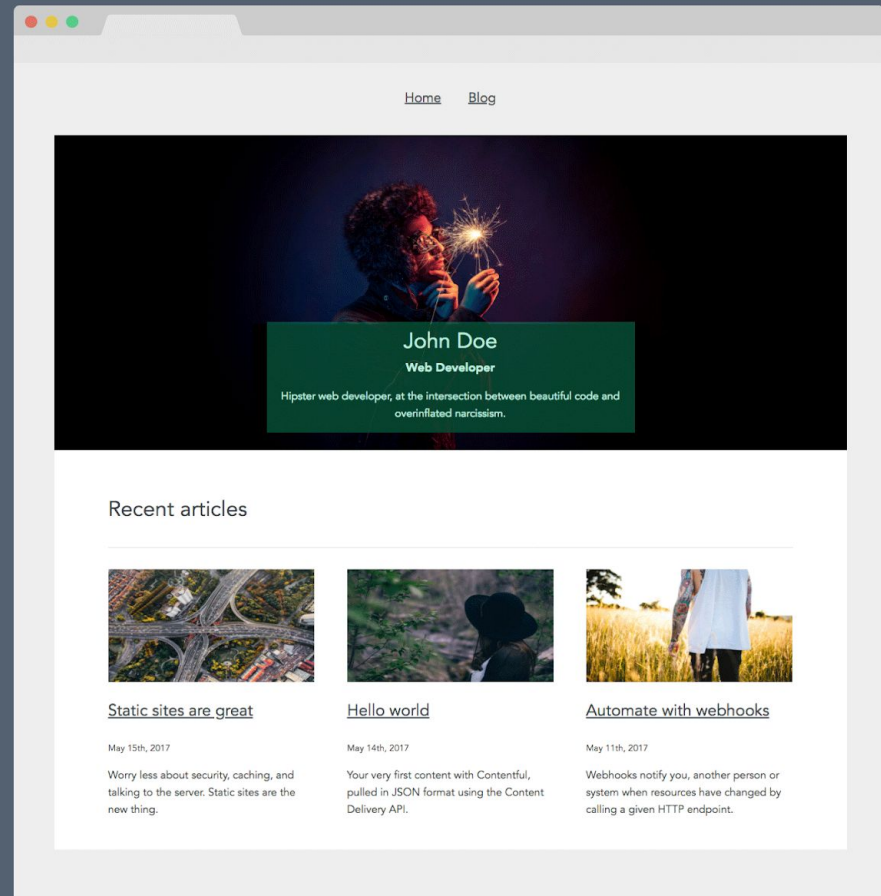
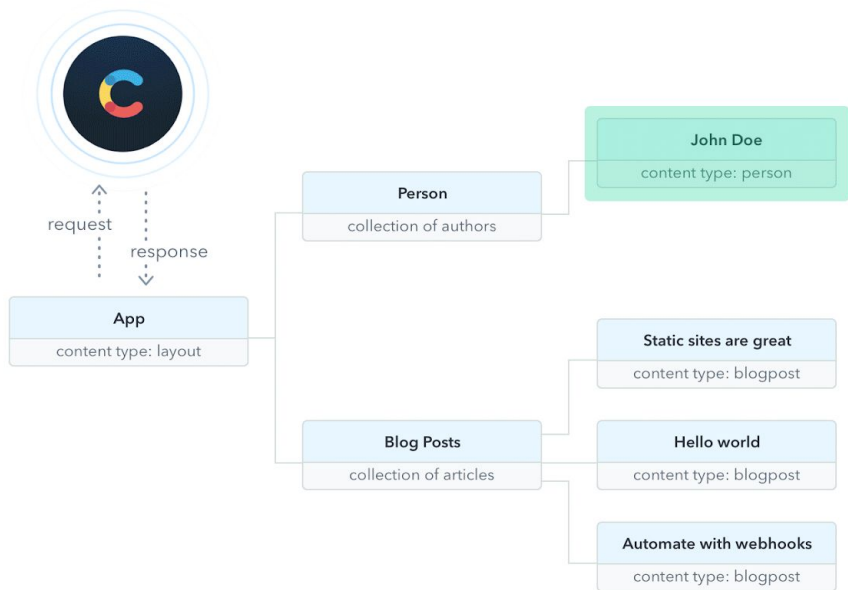
Simple tools for simple  
problems and complex tools for  
complex problems



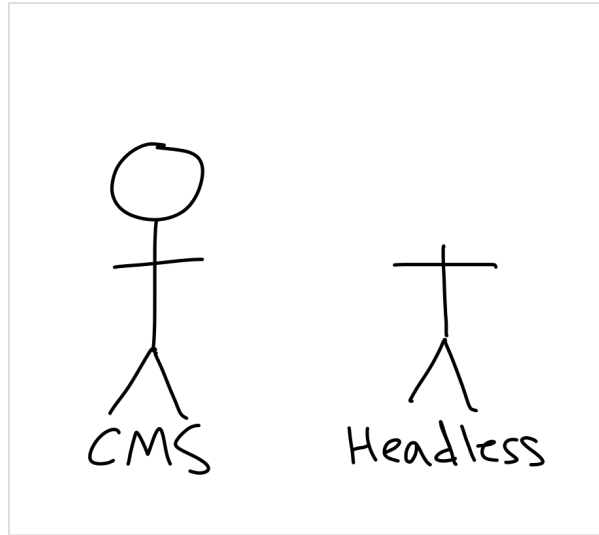


# Content needs to be structured

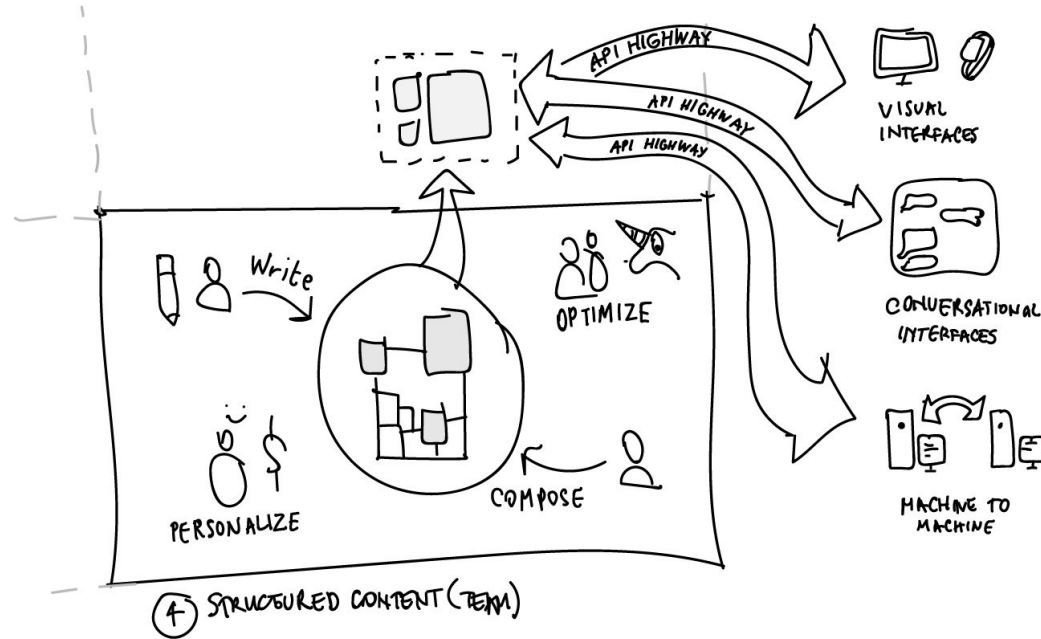




# Headless CMS. What is it, really?



# Headless CMS is all about structured content





# The misconception about headless CMS



# Headless CMS overview



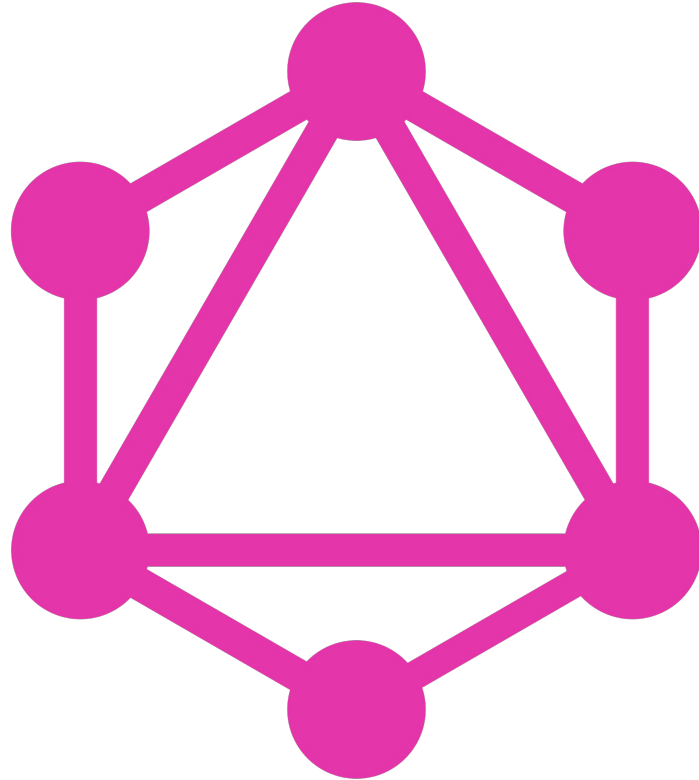
# Structured content using an API

```
export const ContentfulModels: ContentfulMap = {
  // ...
  Metadata: {
    metaName: { path: ['fields', 'metaName'] },
    propertyName: { path: ['fields', 'propertyName'] },
    propertyValue: { path: ['fields', 'propertyValue'] },
    valueName: { path: ['fields', 'valueName'] },
    page: {
      path: ['fields', 'page'],
      modelType: ContentfulModelType.ActionPage
    },
    value: { path: ['fields', 'value'] }
  },
  Menu: {
    contentId: { path: ['sys', 'id'] },
    title: { path: ['fields', 'menuTitle'] },
    pathComponent: { path: ['fields', 'pathComponent'] },
    pathAlias: { path: ['fields', 'pathAlias'] },
    menuType: { path: ['fields', 'menuType'] },
    type: { path: ['fields', 'type'] },
    subMenu: {
      path: ['fields', 'submenu'],
      isArray: true,
      modelType: ContentfulModelType.Menu
    },
    description: { path: ['fields', 'description'] },
    metadata: {
      path: ['fields', 'metadata'],
      isArray: true,
      modelType: ContentfulModelType.Metadata
    },
    oldUrl: { path: ['fields', 'oldUrl'] }
  },
  // ...
};
```

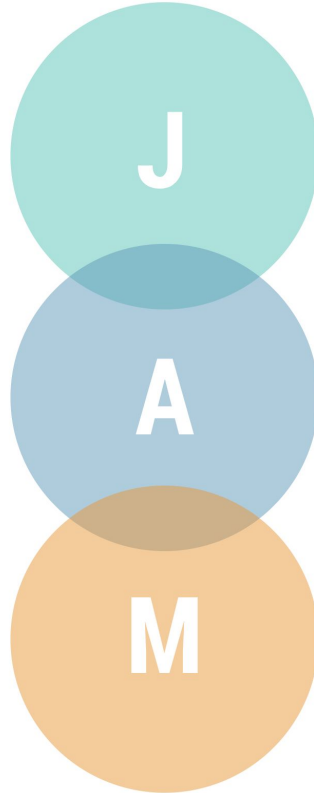
```
{
  "contentId": "7915xnUBzimYysISOiMYA8",
  "title": "Viasat",
  "pageTitle": "Viasat - tv, play, bredband",
  "description": "Med Viasat får du tv-underhållning ...",
  "pathComponent": null,
  "pathAlias": null,
  "menuType": "public",
  "type": "content",
  "subMenu": [
    {
      "contentId": "BfVup2juFMqIEEqMwASG8",
      "title": "Utbud",
      "pageTitle": "Tv-kanaler & ...",
      "description": null,
      "pathComponent": "utbud",
      "pathAlias": null,
      "menuType": "public",
      "type": "content",
      "subMenu": [
        {
          "contentId": "2uT6ua91GMc042k4sECM2U",
          "title": "Tv & Play",
          "pageTitle": null,
          "description": null,
          "pathComponent": "tv",
          "pathAlias": null,
          "menuType": "public",
          "type": "content",
          "subMenu": [],
          "oldUrl": null
        }
      ]
    }
  ],
  "oldUrl": null
}
```



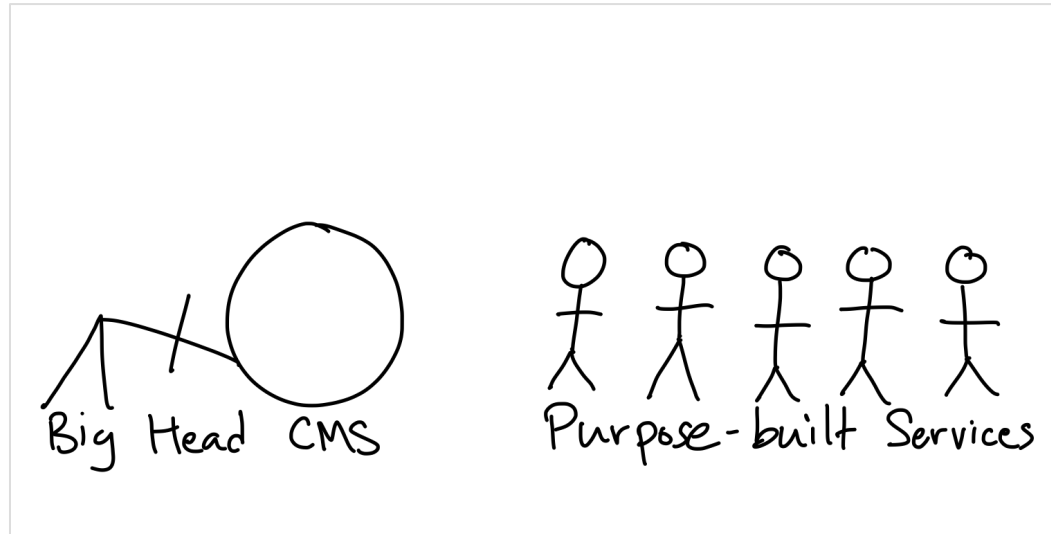
GraphQL gives even more possibilities



# Pick your own stack



# A CMS should not try to do everything



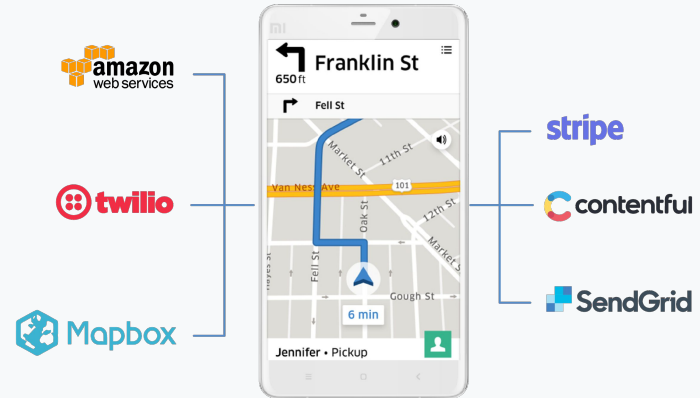
# But it should do content really well

Old



Customization

New



Interoperability

# A CMS should fit into modern development workflows

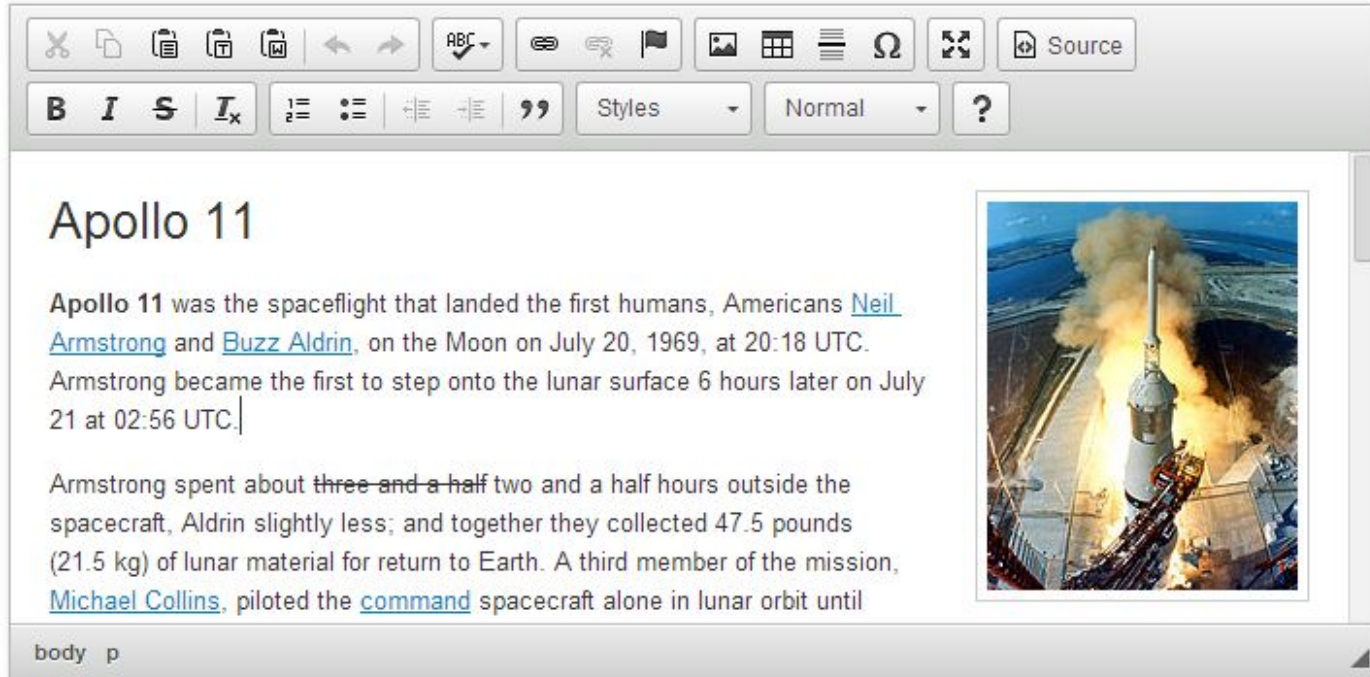




# How can a CMS empower editors to work with structured content?



# WYSIWYG editor?



The screenshot shows a WYSIWYG editor interface. At the top is a toolbar with icons for cut, copy, paste, undo, redo, text color, link, unlink, insert image, table, list, link, source, bold, italic, strikethrough, bulleted list, numbered list, indent, outdent, quote, styles, normal, and help. The main content area displays the title "Apollo 11" in a large font. Below the title is a paragraph of text: "Apollo 11 was the spaceflight that landed the first humans, Americans [Neil Armstrong](#) and [Buzz Aldrin](#), on the Moon on July 20, 1969, at 20:18 UTC. Armstrong became the first to step onto the lunar surface 6 hours later on July 21 at 02:56 UTC." To the right of this paragraph is an image of the Apollo 11 rocket launching from the launch pad, with a large plume of fire and smoke. Below the image is another paragraph of text: "Armstrong spent about ~~three and a half~~ two and a half hours outside the spacecraft, Aldrin slightly less; and together they collected 47.5 pounds (21.5 kg) of lunar material for return to Earth. A third member of the mission, [Michael Collins](#), piloted the [command](#) spacecraft alone in lunar orbit until". At the bottom of the editor, a status bar shows "body p".

## Apollo 11

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# Markdown?

The screenshot shows a side-by-side comparison of two text editors. The left editor is a plain text editor with a simple toolbar and no formatting. The right editor is a rich text editor with a more complex toolbar and various formatting options. The content of both editors is identical, demonstrating how the same text is rendered differently in each environment.

Scroll below for a brief illustrative overview of the update, and also for some obvious thoughts on why Markdown is something useful, not yet another buzzword. As an editor, you might dislike it. That's okay, [\[you're not alone\]](#)[1]. However, we encourage you to invest some time into understanding how Markdown improves authoring experience and what principles it's based upon.

## ## The update

### ### Markup highlighting

It's hard to believe it wasn't there before. The highlighting helps seeing how the finished copy would look like and simplifies editing.

```
![[New MD Editor Syntax Highlighting]]
([images.contentful.com/256tjdsmm689/418aHObbj7uMguW6a08kwum/33d38b52571c5ea2e5f30476d011e813/screenshot-syntax_highlighting.png])
```

### ### Full-screen mode

Focus on writing. Switch to full-screen to hide all the interface elements - except for the text area.

```
![[New MD Editor Full]]
([images.contentful.com/256tjdsmm689/62z1uVHCQMCisYcGRKsCu/a2ec858d1004dc57194f522041f0f272/screenshot-full.png])
```

You can also see an HTML preview of the Markdown-formatted content:

```
![[MD full-screen 2col]]
([images.contentful.com/256tjdsmm689/1behJsa4h684CI6QMKeAme/c85115955f36712715286edd87740780/MD_full-screen__2col.png])
```

### ### Media embedding

Use Markdown syntax to format your text. [Help](#)

720 words, 5579 characters

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## The update

### Markup highlighting

It's hard to believe it wasn't there before. The highlighting helps seeing how the finished copy would look like and simplifies editing.

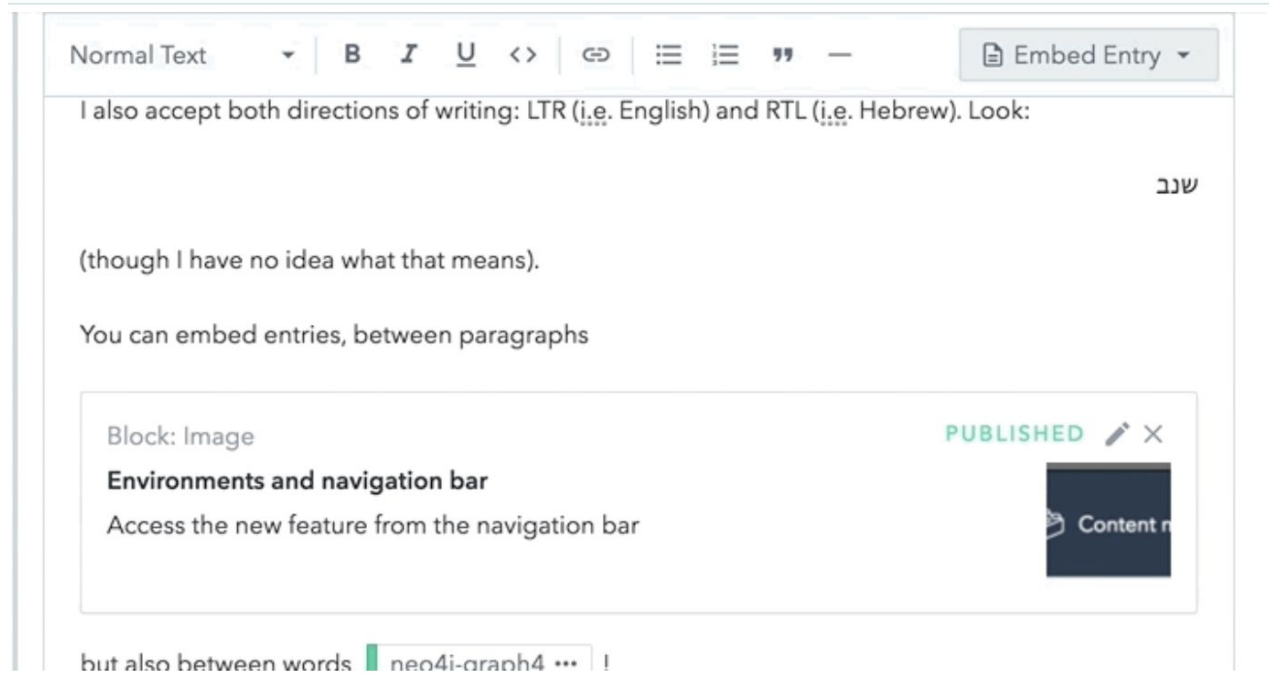
### Full-screen mode

Focus on writing. Switch to full-screen to hide all the interface elements - except for the text area.

You can also see an HTML preview of the Markdown-formatted content:



# Structured rich text!





The screenshot shows a rich text editor with a toolbar at the top containing options for text formatting (Normal Text, Bold, Italic, Underline, Link, List, Quote) and an 'Embed Entry' button. The main text area contains the following content:

I also accept both directions of writing: LTR (i.e. English) and RTL (i.e. Hebrew). Look:

שנב


(though I have no idea what that means).

You can embed entries, between paragraphs

Block: Image PUBLISHED  

**Environments and navigation bar**

Access the new feature from the navigation bar



but also between words `neo4i-graph4 ...` !



# Structured rich text!

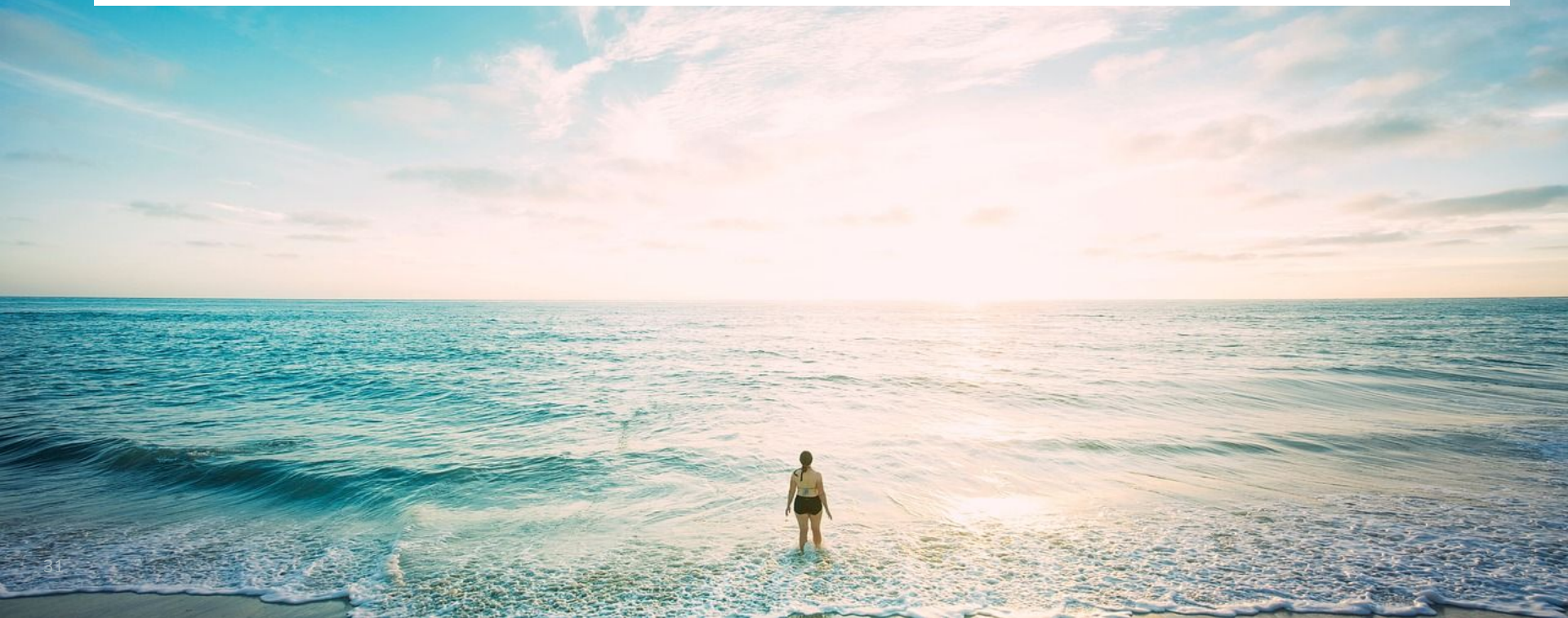
```
{
  data: {
    target: {
      sys: {
        id: "3v7XvVk8ZyQww8WsS2ocou",
        type: "Link",
        linkType: "Entry"
      }
    }
  },
  content: [
    {
      marks: [ ],
      value: "",
      nodeType: "text"
    }
  ],
  nodeType: "embedded-entry-inline"
}
```



# How can the CMS UI provide better a11y?



Will tomorrow's CMS provide increased accessibility?



Sometimes the only  
way to *really* know...





...is to just **try** it.

# Thank you!

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