

# 网络的四面八方





Surname First name

陈	慧	晶
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@hj\_chen





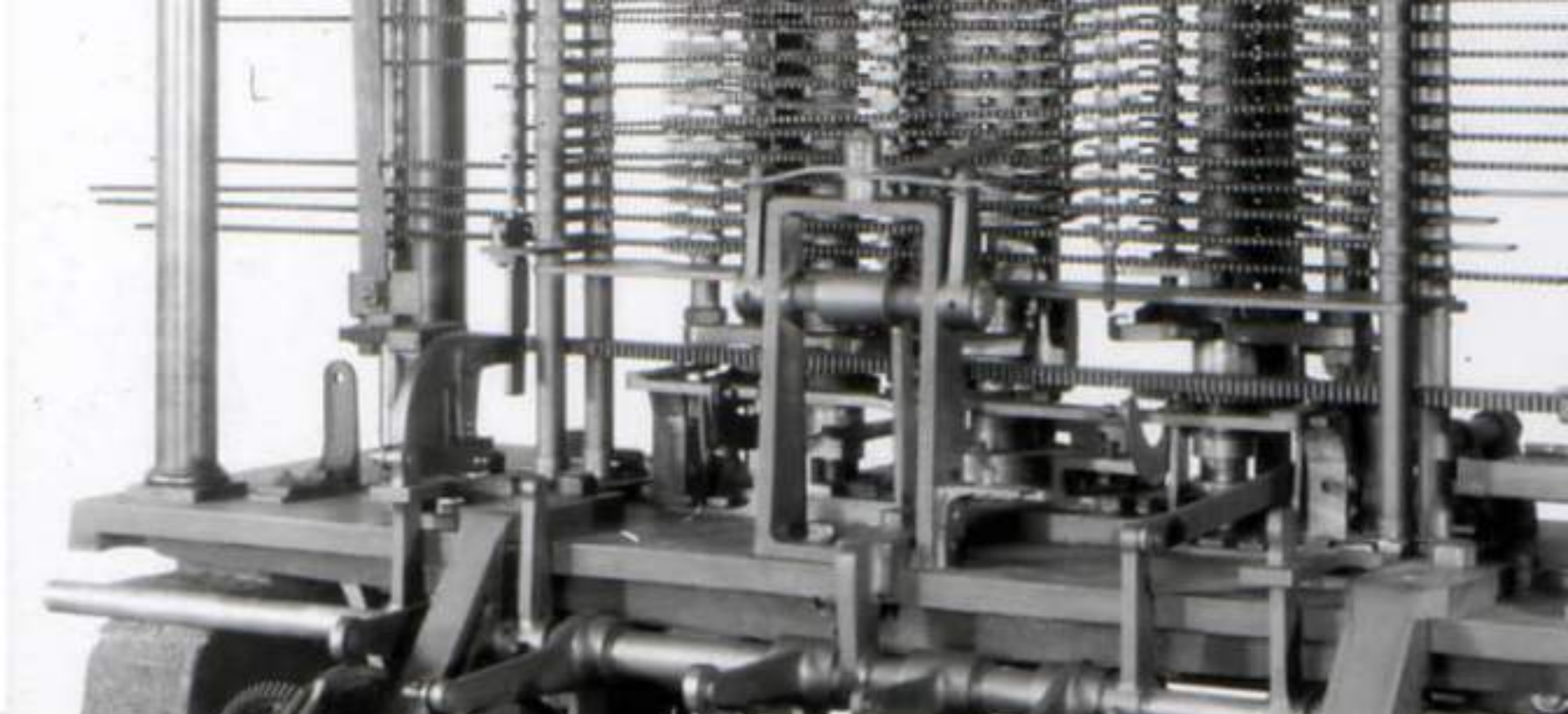


🥑 Developer Advocate 🥑

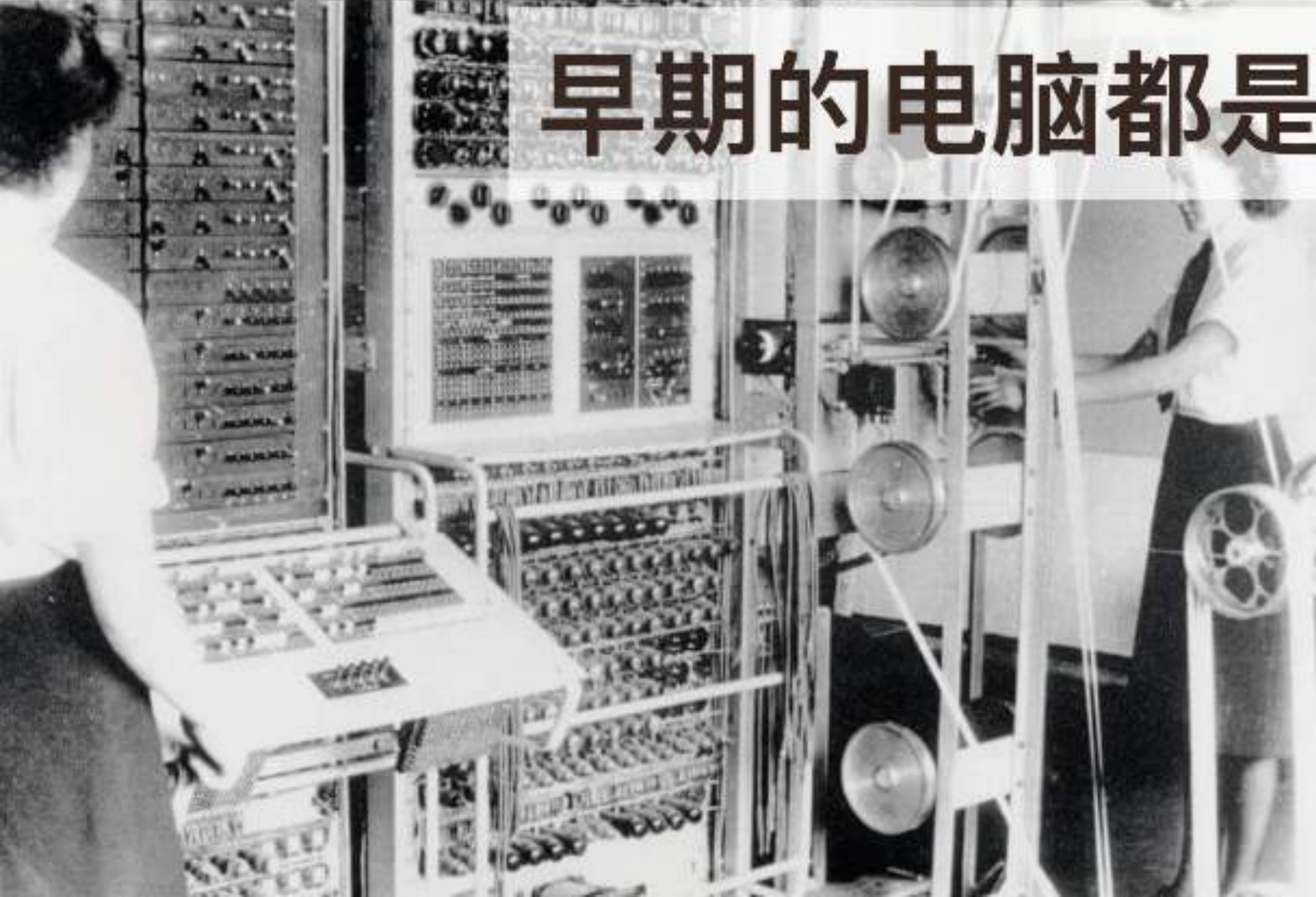
**nexmo**<sup>®</sup>  
The Vonage<sup>®</sup> API Platform







早期的电脑都是在欧美国家研发的







# 早期的浏览器都注重西文文字的排版

- 关于 [2]
- 嘉宾 [3]
- 日程 [4]
- 地点 [5]
- 赞助商 [6]
- 门票 [7]

[8] 中国第五届CSS大会 03.30 / 深圳

中国第五届CSS开发者大会于2019年03月30日在深圳举办。由W3C、w3tech、前办。本次大会我们将邀请行业内知名讲师，与大家共聚深圳，畅聊CSS。

立即抢票 [9] 关注“前端圈”公众号，个人中心查看门票

扫描二维码抢票  
演讲嘉宾 与大牛一起探讨

陈慧晶 知名CSS专家、Hexmo开发大使  
大漠 知名CSS专家、阿里巴巴前端技术专家  
袁川 资深前端工程师、css-doodle 作者、欣赏他的创意 [10]







## 运用中文字型的提示（一）

- 中文字型通常有上万个字符，系统字型依然比较实际
- 市场上的webfont服务：[JustFont](#)、[有字库](#)、[文鼎云字库](#)、[華康字型](#)
- 在@font-face规矩里先声明西文字型
- 用自定义字型，建议做一些子集化：[字蛛](#)、[FontPrep](#)、[Font Squirrel](#)



## 运用中文字型的提示（二）

- 注意系统字型是否用对了，SC vs TC
- 跟西文混排时要调整文本字号
- 别忘了调好行距，浏览器默认值太小了
- 在文本设尽量调整头尾对齐，可以用CSS调
- 把叙体的默认值换成normal
- 段落区隔可以设定在0.5em–1em之间



致輕悍成風臣到  
授據本府公并即  
中風俗稍變頗益  
指揮下本府管勾  
右奉  
依奏劉付永興軍准  
景祐二年十一月一日

壤茫茫人心殊觀未免因  
載一方輿邨更長沙不澤  
風冷攀緣汗浹應歎苦區  
須蠟屐誰暇膏車點存處  
未鸞羽客窺倒景拊掌崎  
為洗泥塗  
謁金門 和從周宣教韵  
壽請呼段馬二  
止述壽席香風度人與  
付與 好在青雲岐路願  
赤松辭萬戶鸞花猶是主

宋楊炎

歌頭 登多景樓

閣客意不勝秋強呼斗酒發興特上  
卷江山圖画應會龍魚悲嘯不暇顧  
巧欺客分冷入衣裘 忽醒然成感  
可憐報國無路空白一分頭都把平  
做如今顚顚歲晚若為謀此意仗江  
及古閣

點絳脣 葛守坐上出點  
思婦之意走筆  
報會風光滿傾瓊液休息睡  
棠底 太守新詞解釋無窮  
事軍寸里中

月六日立學業契約  
保證商  
經

元 全年十二個月計  
一切規約依照國民學校暨  
則及本縣國民學校中心國  
規程暨教員服務細則之規

姜山鎮中心國民學校校長徐應清

經理	籍貫	住址
與被保證		
人之關係		
營業種類		
開設地址		

不屬通訊新



三十八年后。

汪淼觉得，来找他的这四个人是一个奇怪的组合：两名警察和两名军人，如果那两个军人是武警还算正常，但这是两名陆军军官。

汪淼第一眼就对来找他的警察没有好感。其实那名穿警服的年轻人还行，举止很有礼貌，但那位便衣就让人讨厌了。这人长得五大三粗，一脸横肉，穿着件脏兮兮的皮夹克，浑身烟味，说话粗声大噪，是最令汪淼反感的那类人。

「汪淼？」那人问，直呼其名令汪淼很不舒服，况且那人同时还在点烟，头都不抬一下。不等汪淼回答，他就向旁边那位年轻人示意了一下，后者向汪淼出示了警官证，他点完烟后就直接向屋里闯。

「请不要在我家里抽烟。」汪淼拦住了他。

「哦，对不起，汪教授。这是我们史强队长。」年轻警官微笑着说，同时对姓史的使了个眼色。

三十八年后。

汪淼觉得，来找他的这四个人是一个奇怪的组合：两名警察和两名军人，如果那两个军人是武警还算正常，但这是两名陆军军官。

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「请不要在我家里抽烟。」汪淼拦住了他。



# 网络书写方向

Unicode双向算法（中文翻译）

Unicode竖排形式

CSS书写模式Level 3

CSS书写模式Level 4





# 网页汉字竖排

在宇宙间，一个技术文明等级的重要标志，是它能够控制和使用微观维度。对于基本粒子的一线使用，从我们那些长毛裸体的祖先在山洞中生起篝火时就开始，对化学反应的控制，就是在二维层次上操控微观粒子。当然，这种控制也是从低级到高级，从篝火到后来的蒸汽机，再到后来的发电机。现在，人类对微观粒子一维控制的水平已达到了顶峰，有了计算机，也有了你们的纳米材料。但这一切，都局限于对微观维度的一维控制，在宇宙间一个更高级的文明看来，篝火和计算机、纳米材料等等是没有本质区别的，同属于一个层次，这也是他们仍将人类看成虫子的原因。

```
.wm-cont1 {  
  writing-mode: vertical-rl;  
}
```



# 网页西文竖排

Halt and Catch Fire

the thing that gets us to the thing."  
"Computers aren't the thing. They're

"How did we all get here today? The choices we made, the sheer force of our will, something like that? Here's another answer... the winds of fate. Random coincidence, some unseen hand just pushing us along. Destiny."

What are you searching  
for?

```
.wm-cont2 .vert-rl {  
  writing-mode: vertical-rl;  
  color: #f48136;  
}  
  
.wm-cont2 .vert-lr {  
  writing-mode: vertical-lr;  
  color: #f9d056;  
}  
  
.wm-cont2 .upright {  
  text-orientation: ;  
  font-size: ;  
}
```







CSS transforms



**team  
Layout**

# team Layout

## CSS transforms

Defines a set of CSS properties that affect the visual rendering of elements to which those properties are applied

Lets you do photoshop effects in your browser



# Creating CSS pencils

*(Transforms edition)*

1. Mark-up
2. Visual styles
3. Layout styles





# 1. Mark-up

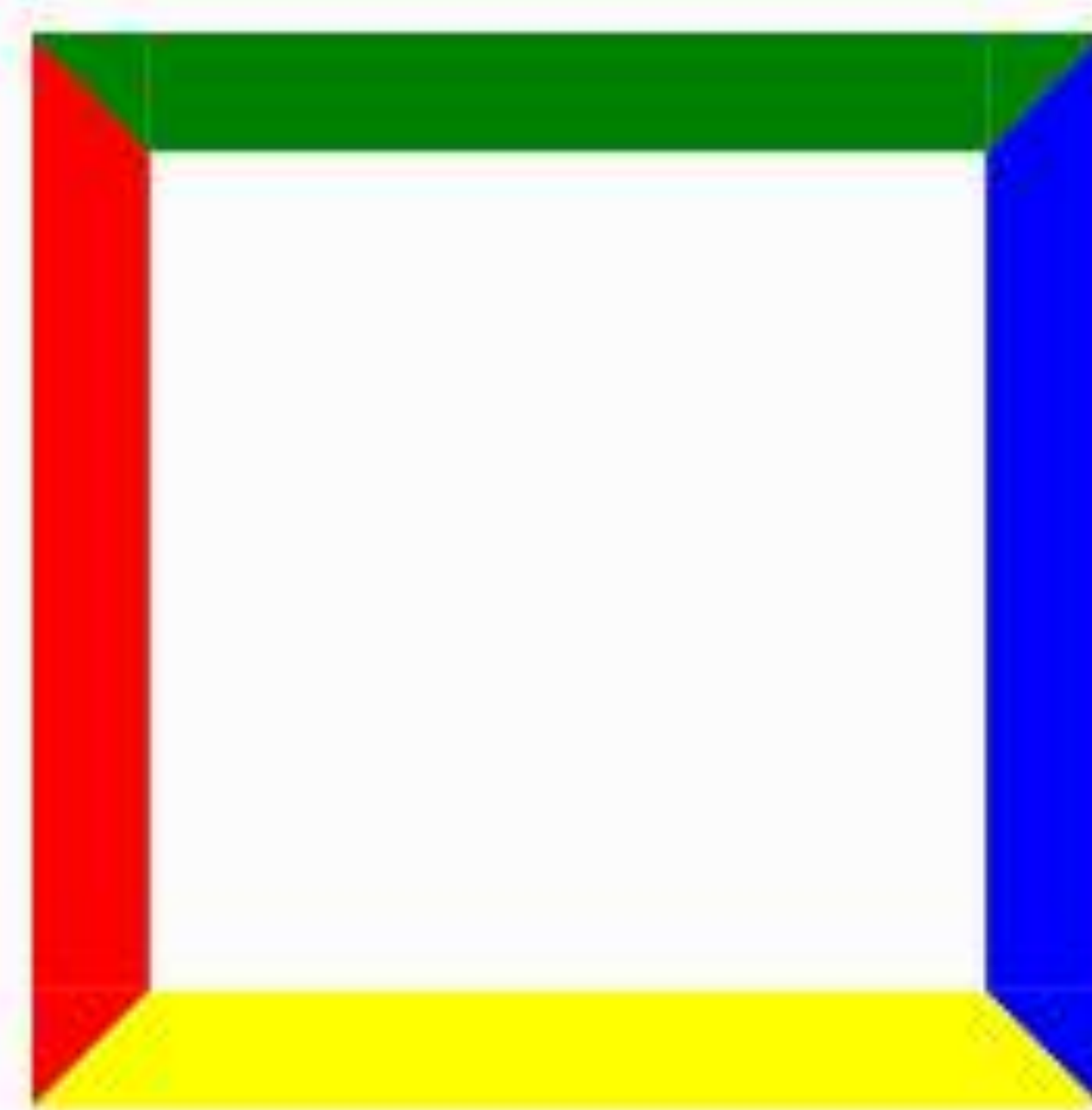
- This is a pencil
- A CSS only pencil
- Because why not

```
<ul>
  <li>
    <p>This is a pencil</p>
  </li>
  <li>
    <p>A CSS only pencil</p>
  </li>
  <li>
    <p>Because why not</p>
  </li>
</ul>
```





# 纯CSS的三角形





# 纯CSS的三角形





# 纯CSS的三角形

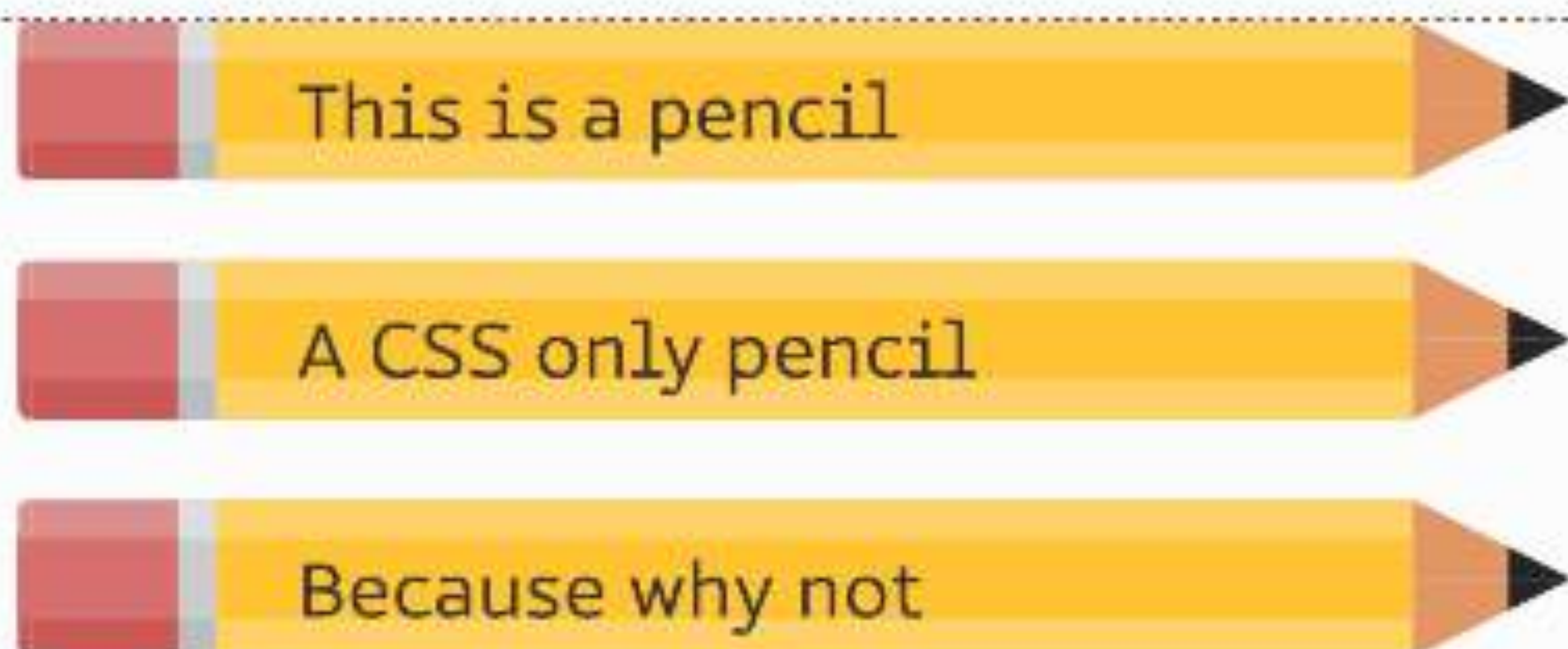


```
.triangle {  
  border-top: 18.75vmin solid transparent;  
  border-bottom: 18.75vmin solid transparent;  
  border-left: 18.75vmin solid #1e292f;  
}
```





## 2. Visual styles



```
.transforms1 li {  
  display: flex;  
  align-items: start;  
  margin-bottom: 1em;  
}  
  
.transforms1 li::after {  
  content: '';  
  border-style: solid;  
  border-color: transparent transparent  
transparent #e29663;  
  border-width: 1em 2em 1em;  
}  
  
.transforms1 li::before {  
  content: '';  
  width: 2.5em;  
  height: 2em;  
  background: #d76f6e;  
  border-top: 0.5em solid #da8e8d;  
  border-bottom: 0.5em solid #c85957;
```





### 3. Layout styles



```
.transforms2 {  
  transform: rotate(90deg)  
  translateY(-150%);  
  transform-origin: 0% 0%;  
}
```





## 变形元素时会发生什么事？

- 会在元素上创建新的本地坐标系 (new local coordinate system)
- 不影响被变形元素周边的内容流
- 会产生层叠上下文 (stacking context)





📅 Saturday, 9th Dec  
📍 Impact Hub Singapore @ Prime

👉 Check out the videos

Follow on Facebook! · Chat with us!

👤 **Simi Sai?**

Tired of building the next unicorn? Take a break from making the world a better place and join us at the first Super Silly Hackathon!!!

Come together with fellow developers, engineers and designers to build cool projects with absolutely no value whatsoever. Yes, the more boliao the better.

Don't say we bojio, you hiamjio.







**team  
Layout**

w  
r  
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d  
e

# team Layout

writing mode

Specifies the block flow direction, which determines the ordering direction of block-level boxes in a block formatting context

Can make content horizontal or vertical



# CSS书写模式

定义了CSS如何支持各种不同国际化语言的书写模式，例如拉丁（Latin）语系及印度（Indic）语系采用从左到右的书写模式，希尔伯特语（Hebrew）或阿拉伯语（Arabic）采用从右到左的书写模式，一些混合了拉丁语和阿拉伯语的文字可能采用双向书写（bidirectional），而一些东亚文字则需要竖排（从上到下）的书写模式。





# writing-mode 属性

horizontal-tb	从1987到现在
vertical-rl	从1987到现在
vertical-lr	从1987到现在
sideways-rl*	从1987到现在
sideways-lr*	从1987到现在

有\*印记的属性被延期到Level 4





# text-orientation 属性

从1987到现在

*mixed*

从1987到现在

*upright*

从1987到现在

*sideways*





# text-combine-upright 属性

民國107年6月1日

*none*

民國107年6月1日

*all*

民國107年6月1日

*digits <integer>\**

[Codepen example for text-combine-upright](#)





古巴  
Cuba

愛沙尼亞共和國  
Estonia

列支敦斯登  
Liechtenstein





# Creating CSS pencils

*(writing-mode edition)*

1. Mark-up
2. Layout and visual styles





# 1. Mark-up

- This is a pencil
- A CSS only pencil
- Because why not

```
<ul>
  <li>
    <p>This is a pencil</p>
  </li>
  <li>
    <p>A CSS only pencil</p>
  </li>
  <li>
    <p>Because why not</p>
  </li>
</ul>
```





## 2. Layout styles

This is a pencil  
A CSS only pencil  
Because why not

```
.writingmode1 {  
  writing-mode: vertical-rl;  
}
```





### 3. Visual styles



```
.writingmode2 li {  
  margin-left: 1em;  
  display: flex;  
  align-items: start;  
}  
  
.writingmode2 li::after {  
  content: '';  
  display: block;  
  border-style: solid;  
  border-color: #e29663 transparent  
transparent transparent;  
  border-width: 2em 1em 1em;  
}  
  
.writingmode2 li::before {
```





## team Layout



Logical properties

## team Layout

### Logical properties

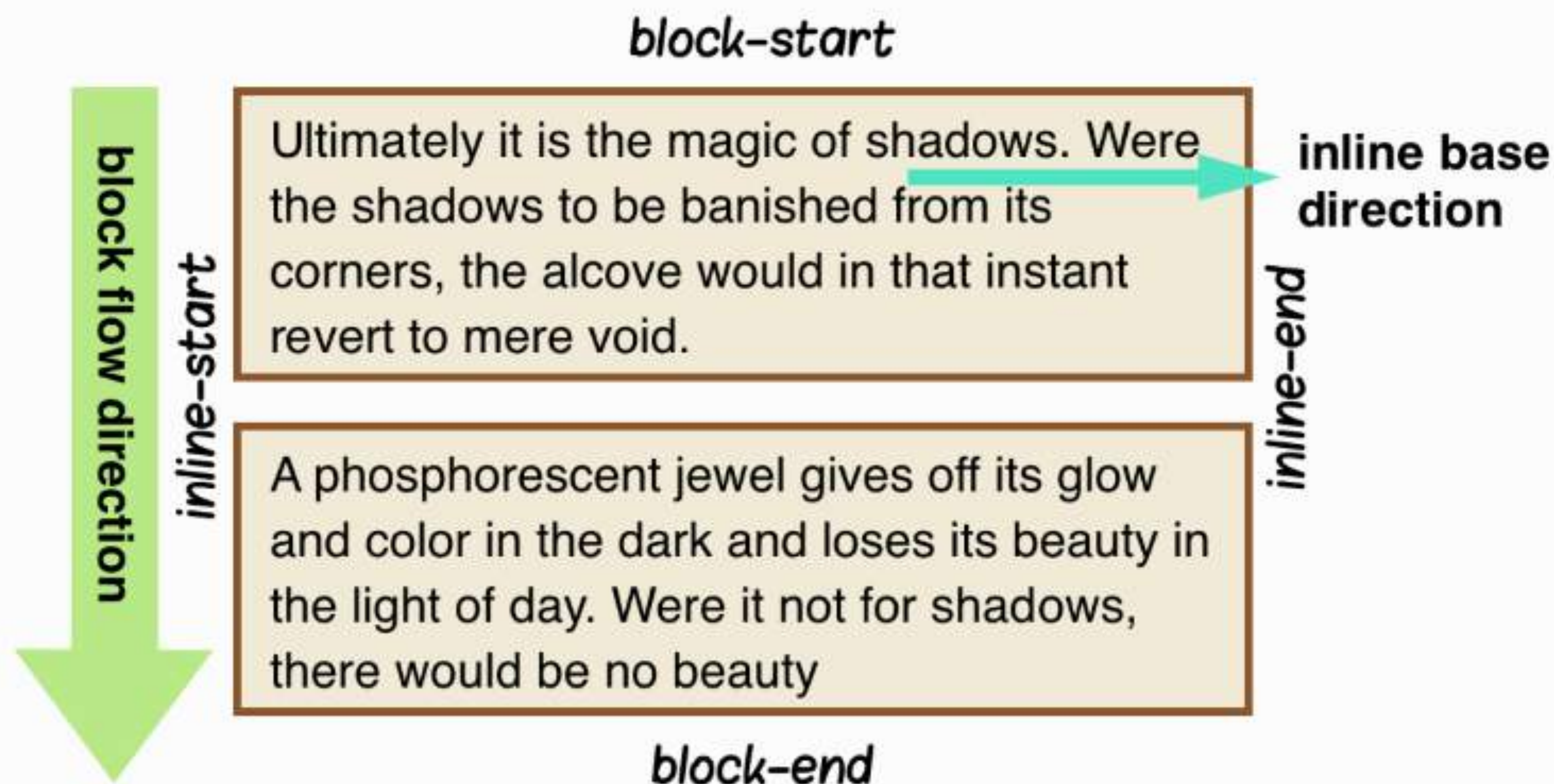
Allows control of layout through logical, rather than physical, direction and dimension mappings

Resolves confusion with left and right when writing-mode changes





# 逻辑方向







<https://www.smashingmagazine.com/2018/03/understanding-logical-properties-values/>

## CSS逻辑属性和值







**team  
Layout**

Flexbox

# team Layout

Flexbox

Describes a CSS box model optimized for user interface design

Makes vertical centring a pleasant dream instead of a horrible nightmare



# Moar pencils, please

- This is a pencil
- A CSS only pencil
- Because why not
- This is a pencil
- A CSS only pencil
- Because why not
- This is a pencil
- A CSS only pencil
- Because why not
- This is a pencil
- A CSS only pencil
- Because why not
- This is a pencil
- A CSS only pencil
- Because why not
- This is a pencil
- A CSS only pencil
- Because why not

```
<div>
  <ul>
    <li>
      <p>This is a pencil</p>
    </li>
    <li>
      <p>A CSS only pencil</p>
    </li>
    <li>
      <p>Because why not</p>
    </li>
  </ul>

  <ul>
    <li>
      <p>This is a pencil</p>
    </li>
```





# Mixed writing-modes?

Because why not  
A CSS only pencil  
This is a pencil

This is a pencil  
A CSS only pencil  
Because why not

This is a pencil  
A CSS only pencil  
Because why not

Because why not  
A CSS only pencil  
This is a pencil

Because why not  
A CSS only pencil  
This is a pencil

This is a pencil  
A CSS only pencil  
Because why not

This is a pencil  
A CSS only pencil  
Because why not

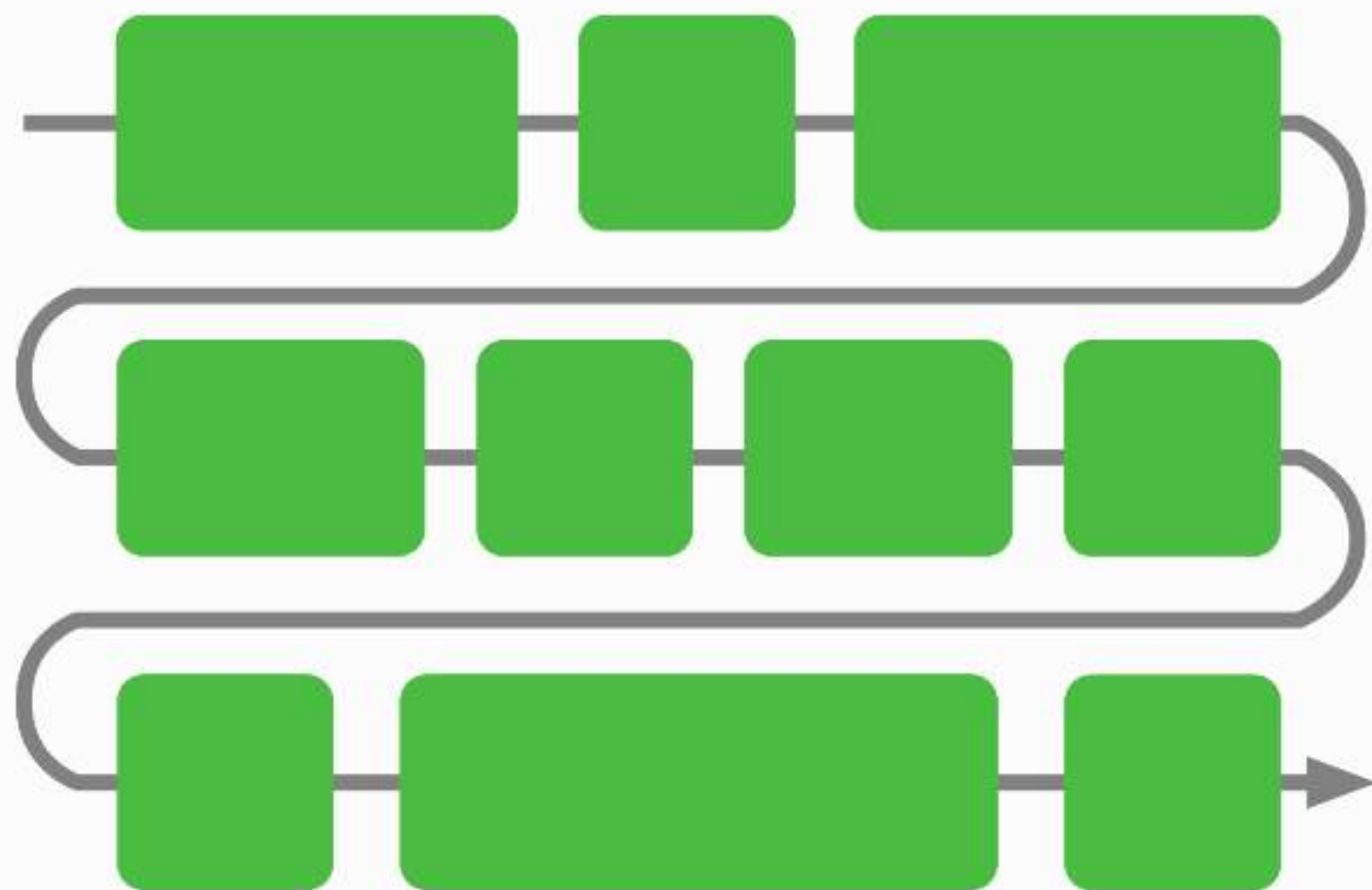
Because why not  
A CSS only pencil  
This is a pencil

```
.flex1 .vert {  
  writing-mode: vertical-rl;  
}  
  
.flex1 .vert li {  
  display: flex;  
  align-items: start;  
  margin: 0.5em;  
}  
  
.flex1 .vert li::after {  
  content: '';  
  display: block;  
  border-style: solid;  
  border-color: #e29663 transparent transparent  
transparent;  
  border-width: 2em 1em 1em;  
}  
  
.flex1 .vert li::before {  
  content: '';
```

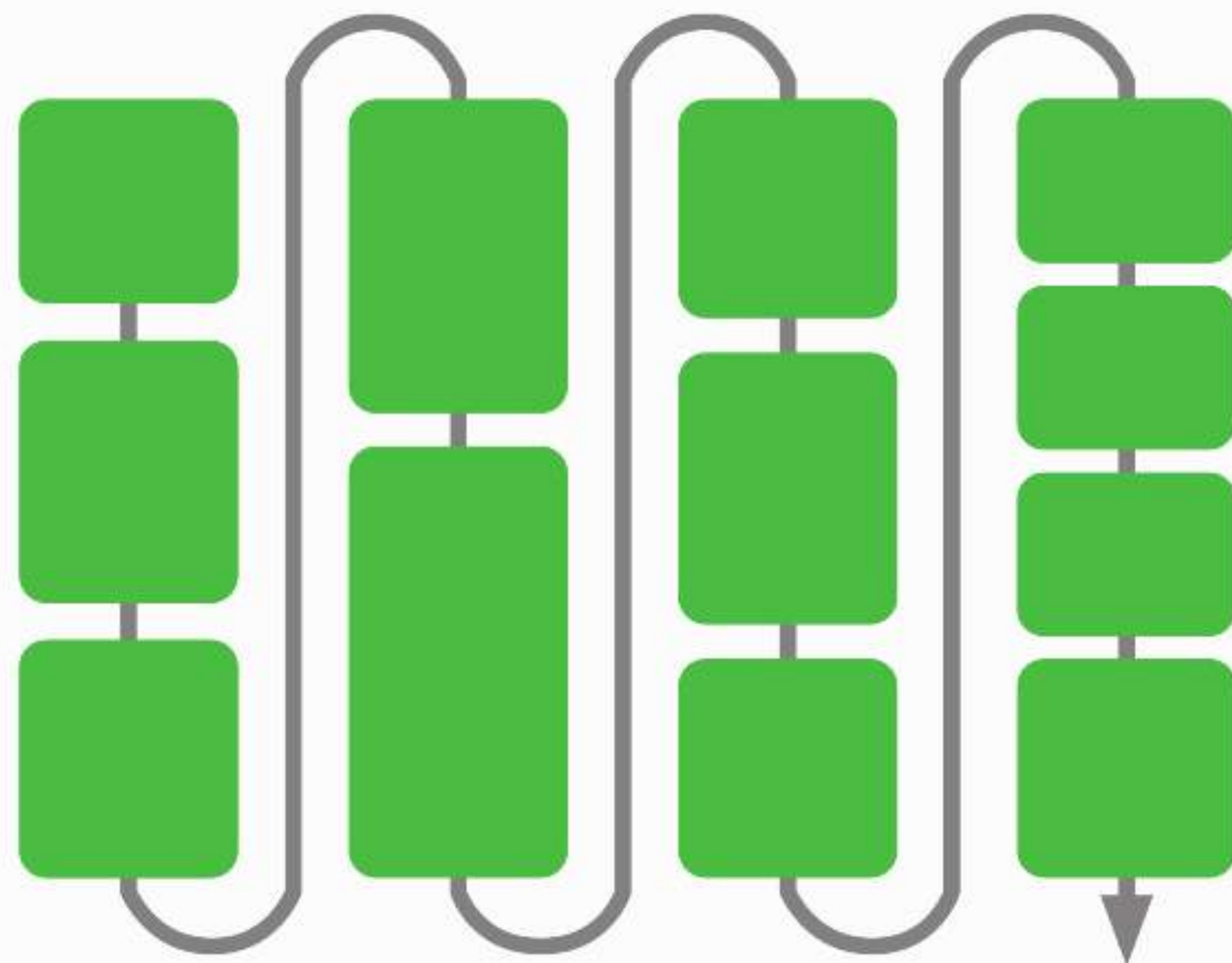




# 单维布局



*flex-direction: row*

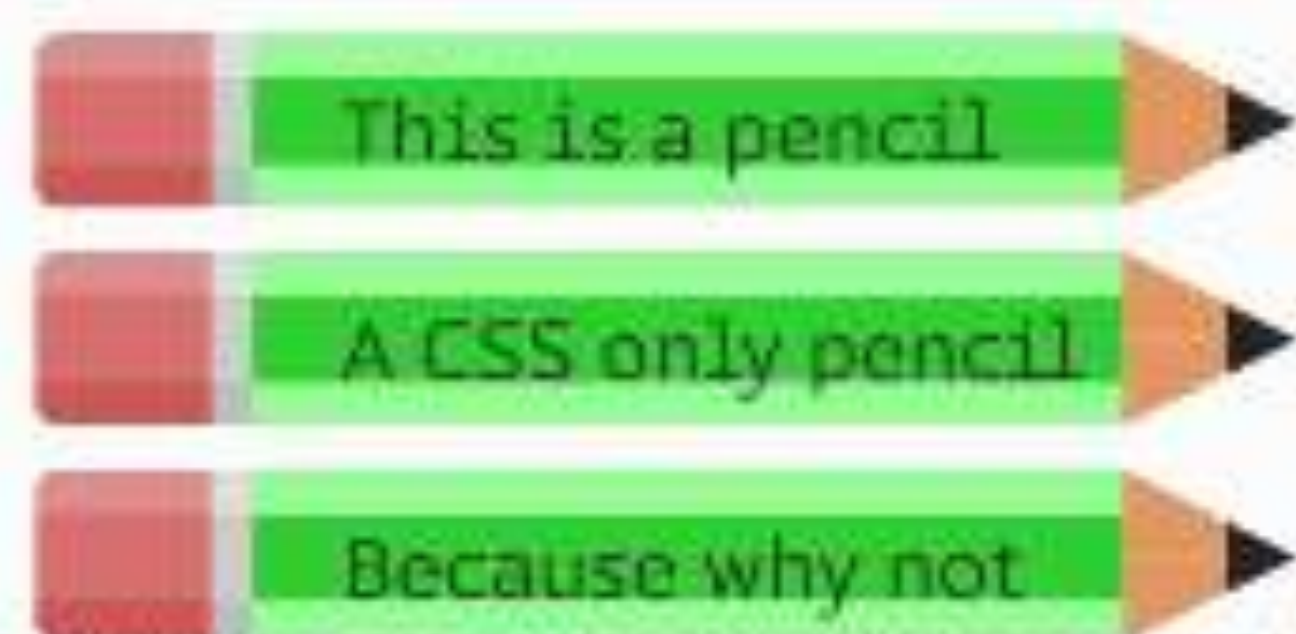
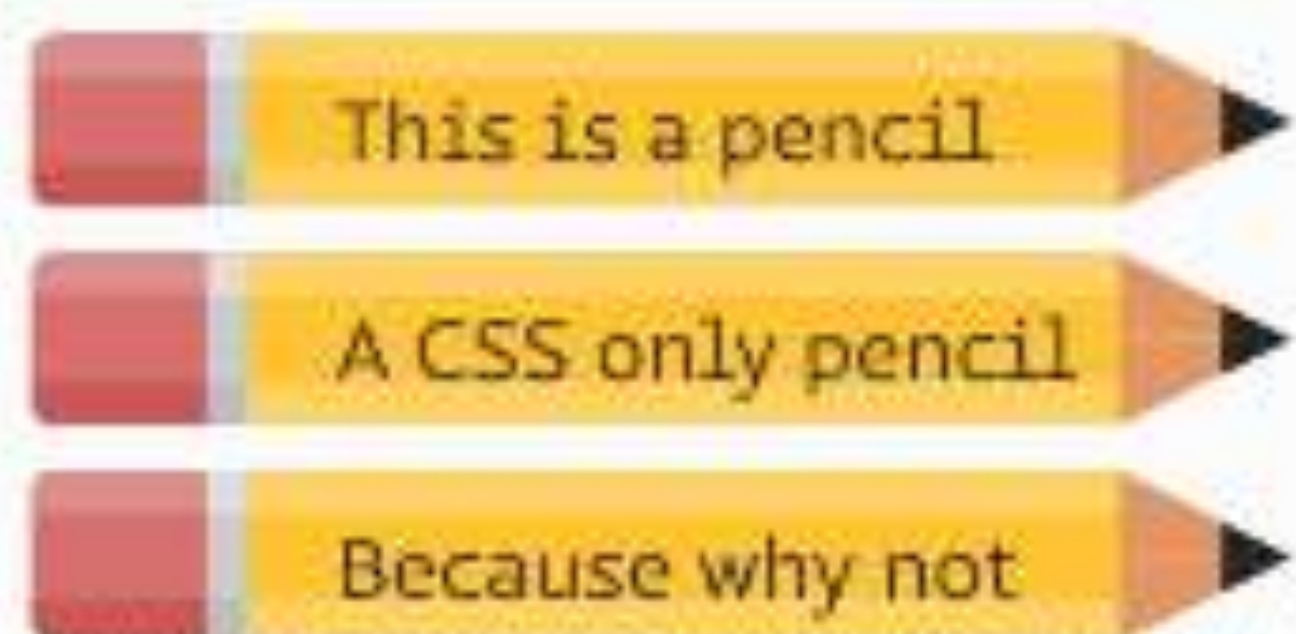
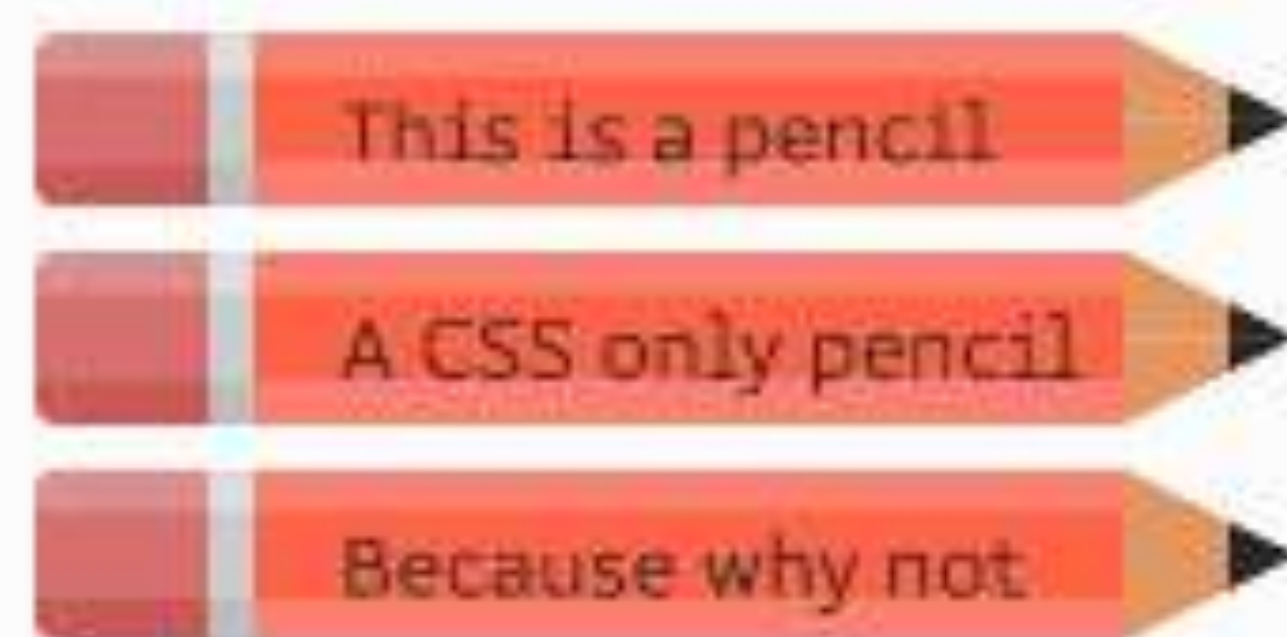
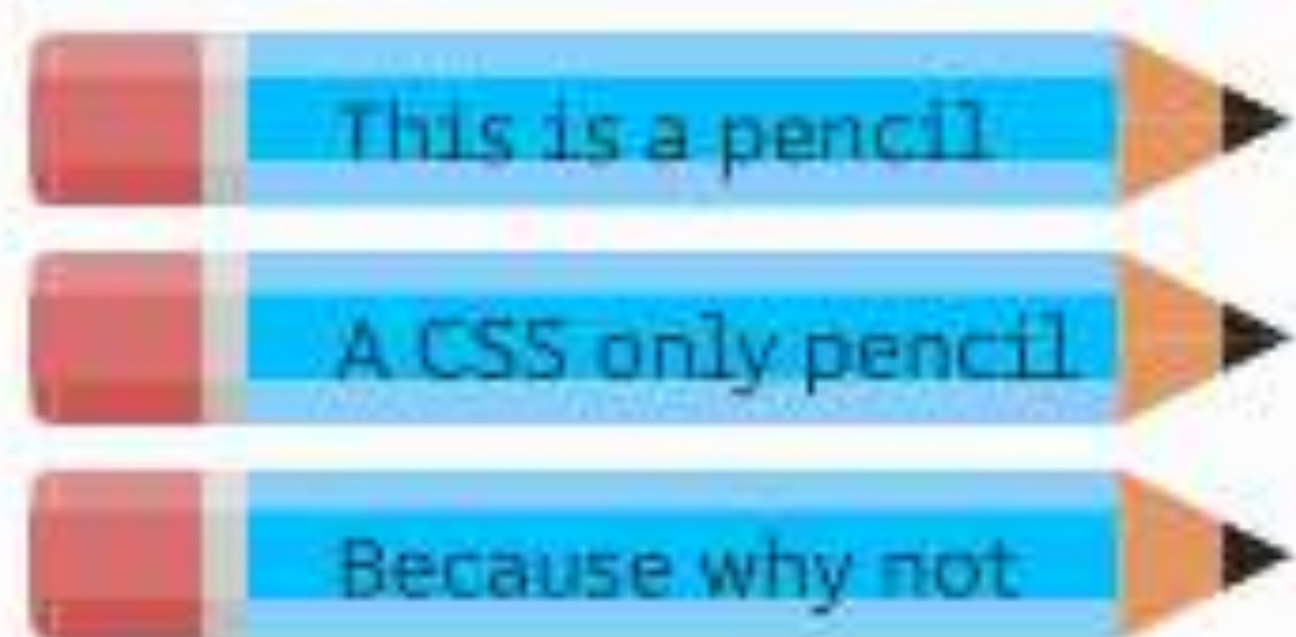
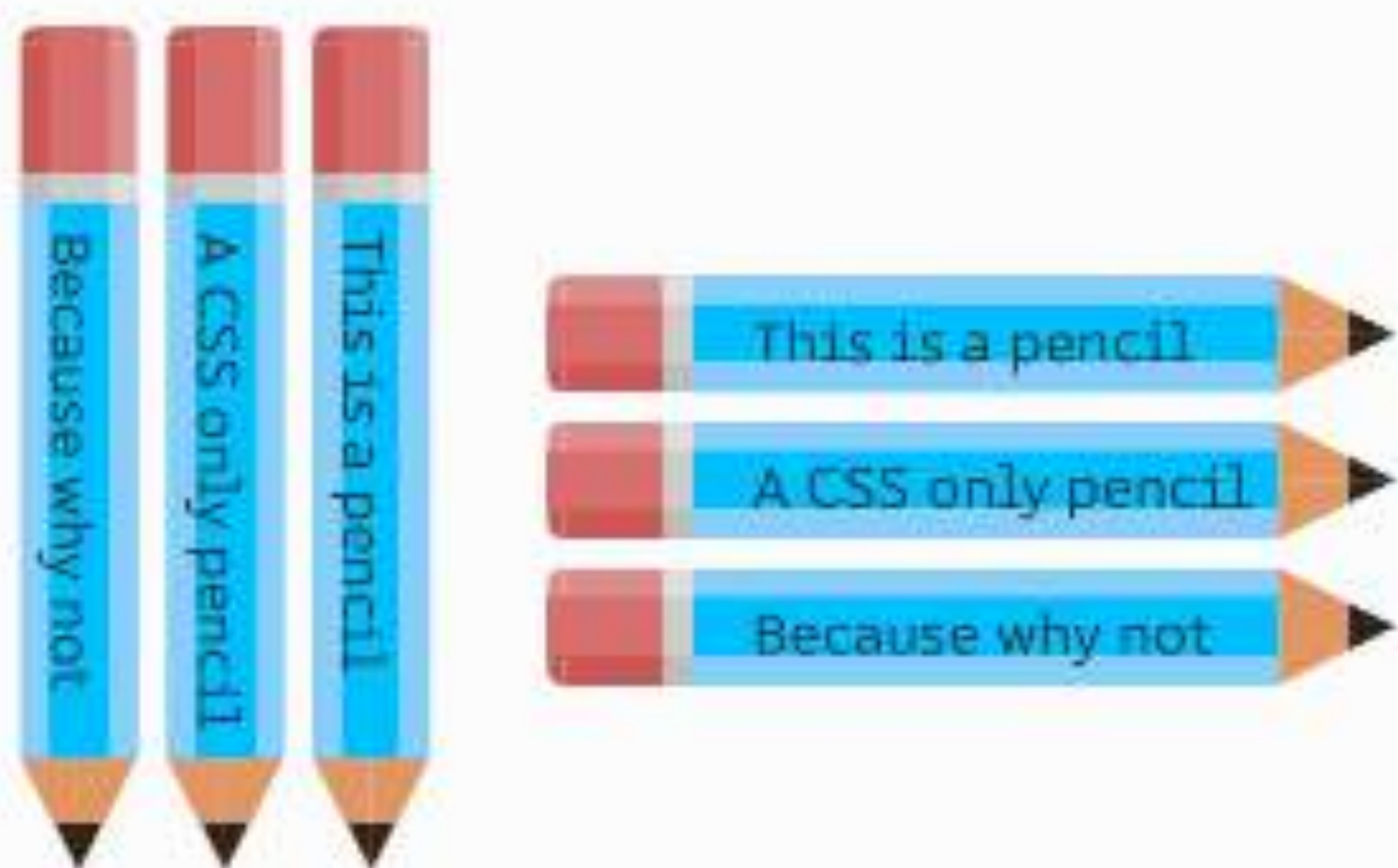


*flex-direction: column*





# 弹性布局转方向



```
.flex2 {  
  display: flex;  
  align-items: center;  
  height: 120%;  
  flex-wrap: wrap;  
  flex-direction: column  
  reverse;  
}
```





CSS Grid

**team  
Layout**



**team  
Layout**

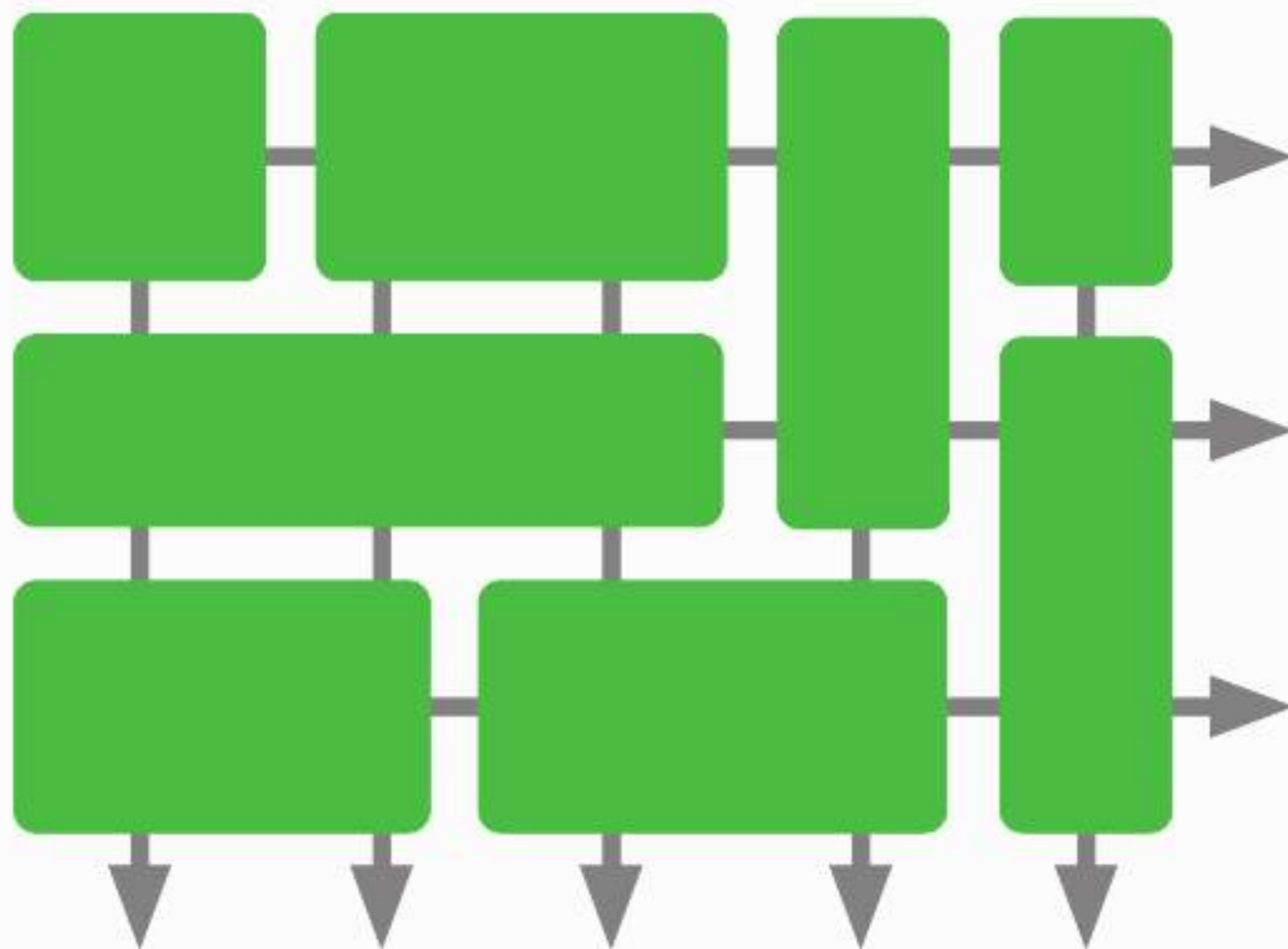
CSS Grid

Defines a two-dimensional grid-based layout system, optimized for user interface design

Makes it possible to do overlap and vertical white-space easily



## 二维布局行列之间的关系



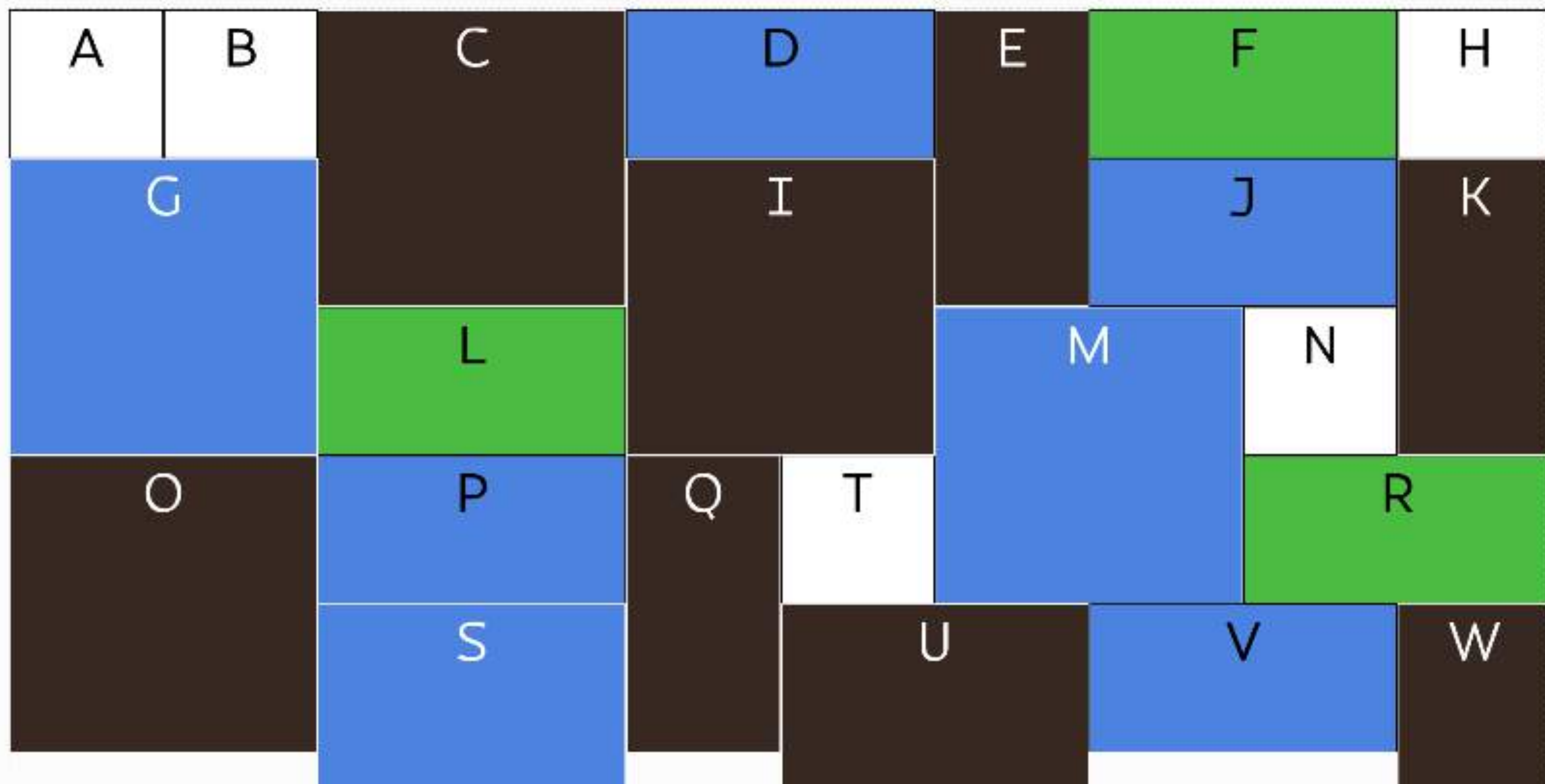
插图从Brenda Storer的演讲*Using CSS in the real world*引用。





# 网格布局转方向

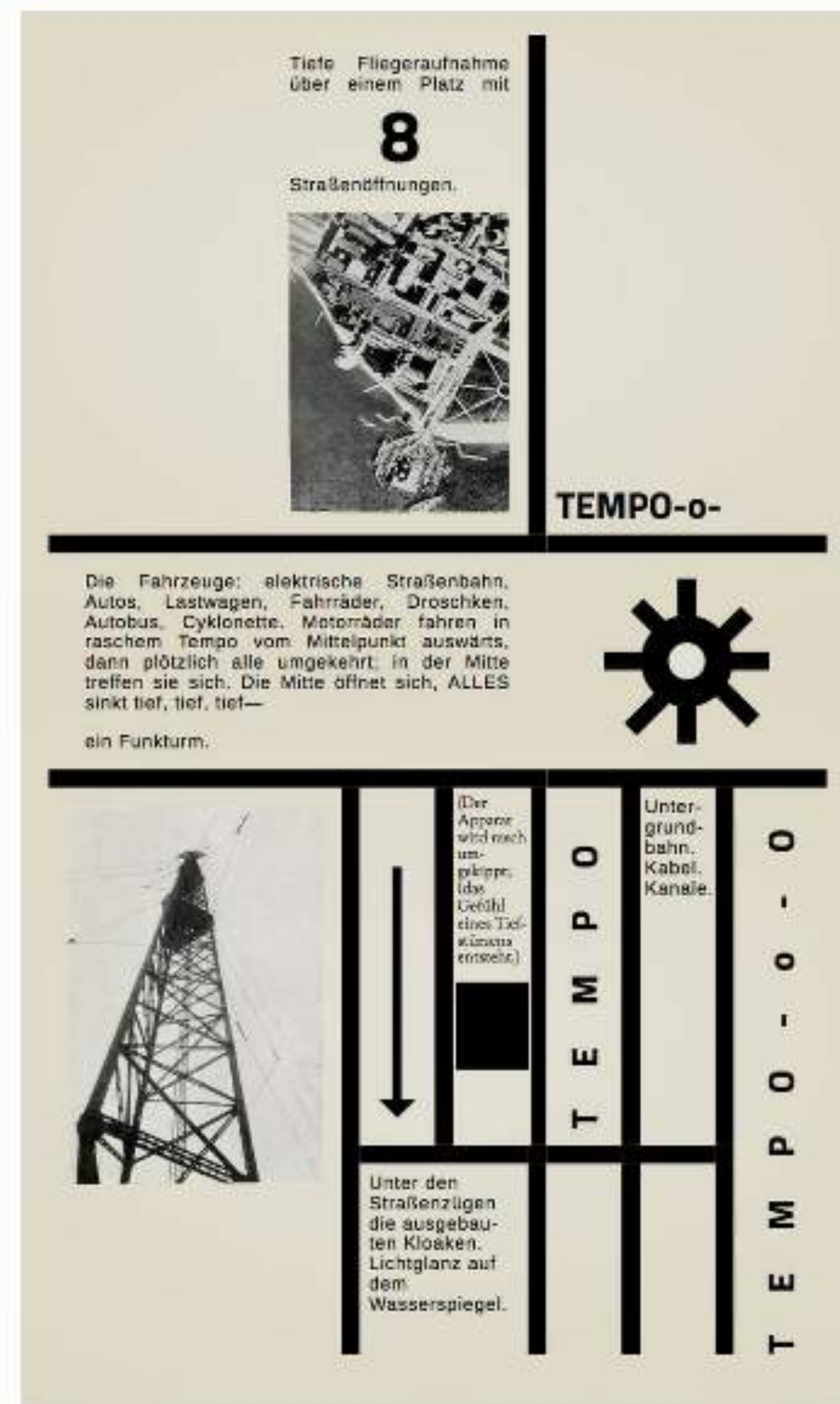
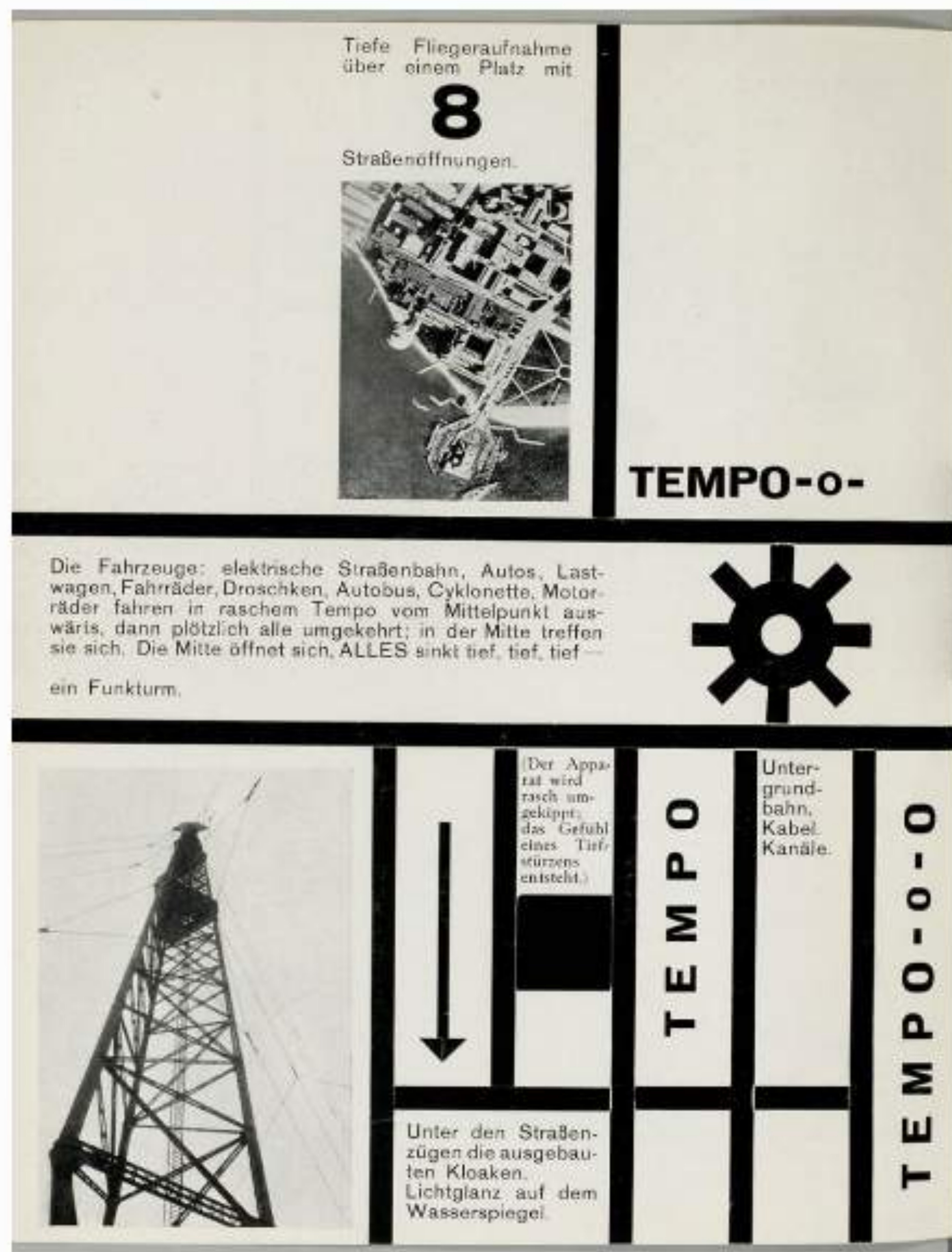
(以及调整项目密度)



```
.autoflow {  
  display: grid;  
  grid-template-columns:  
    repeat(auto-fit, minmax(120px,  
    1fr));  
  grid-auto-rows: 120px;  
  grid-auto-flow: row dense;  
}  
  
.autoflow__item:nth-child(3n) {  
  background-color: #4abc41;  
  grid-column-end: span 2;  
}
```





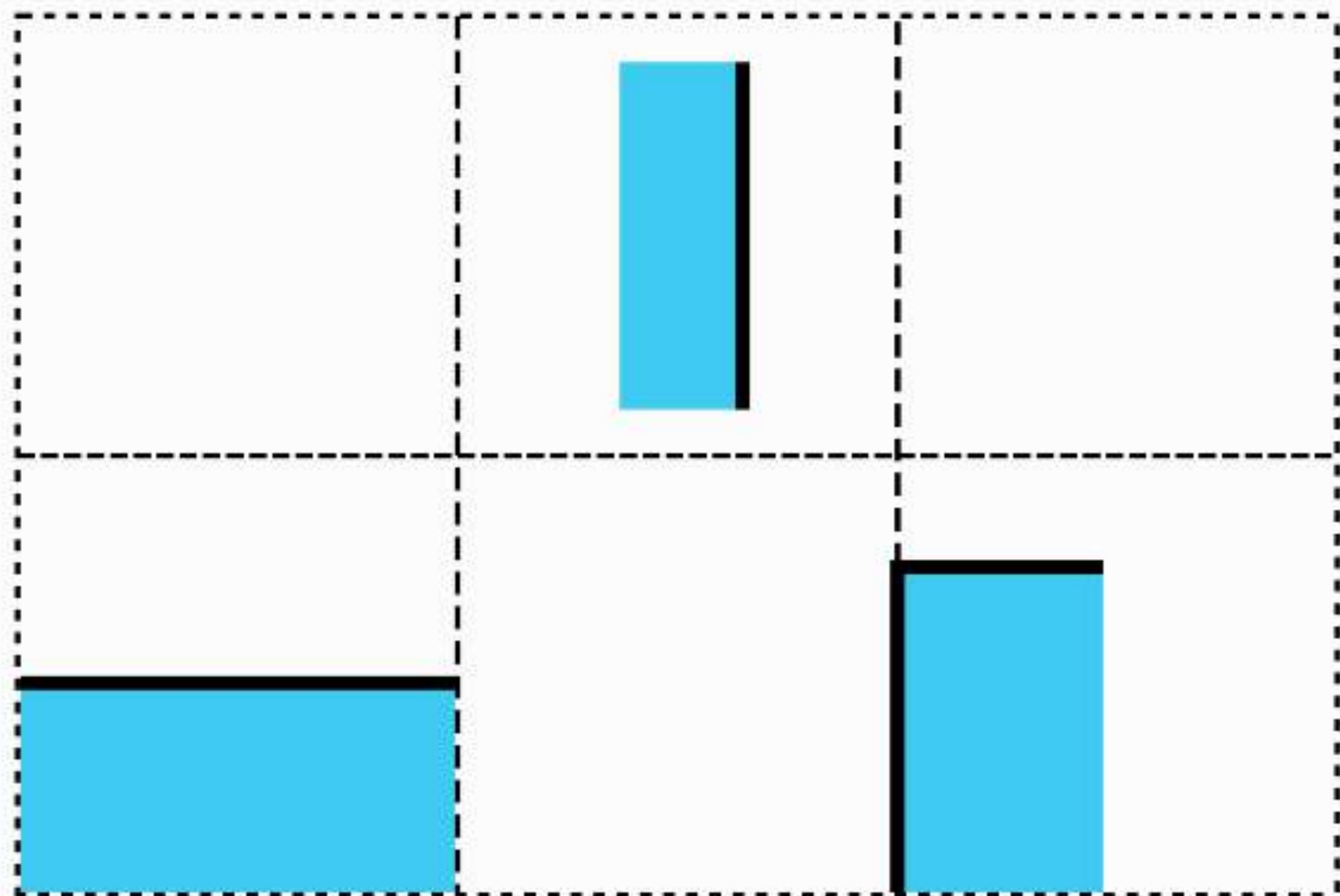


原作: Moholy-Nagy, Malerei, Fotografie, Film

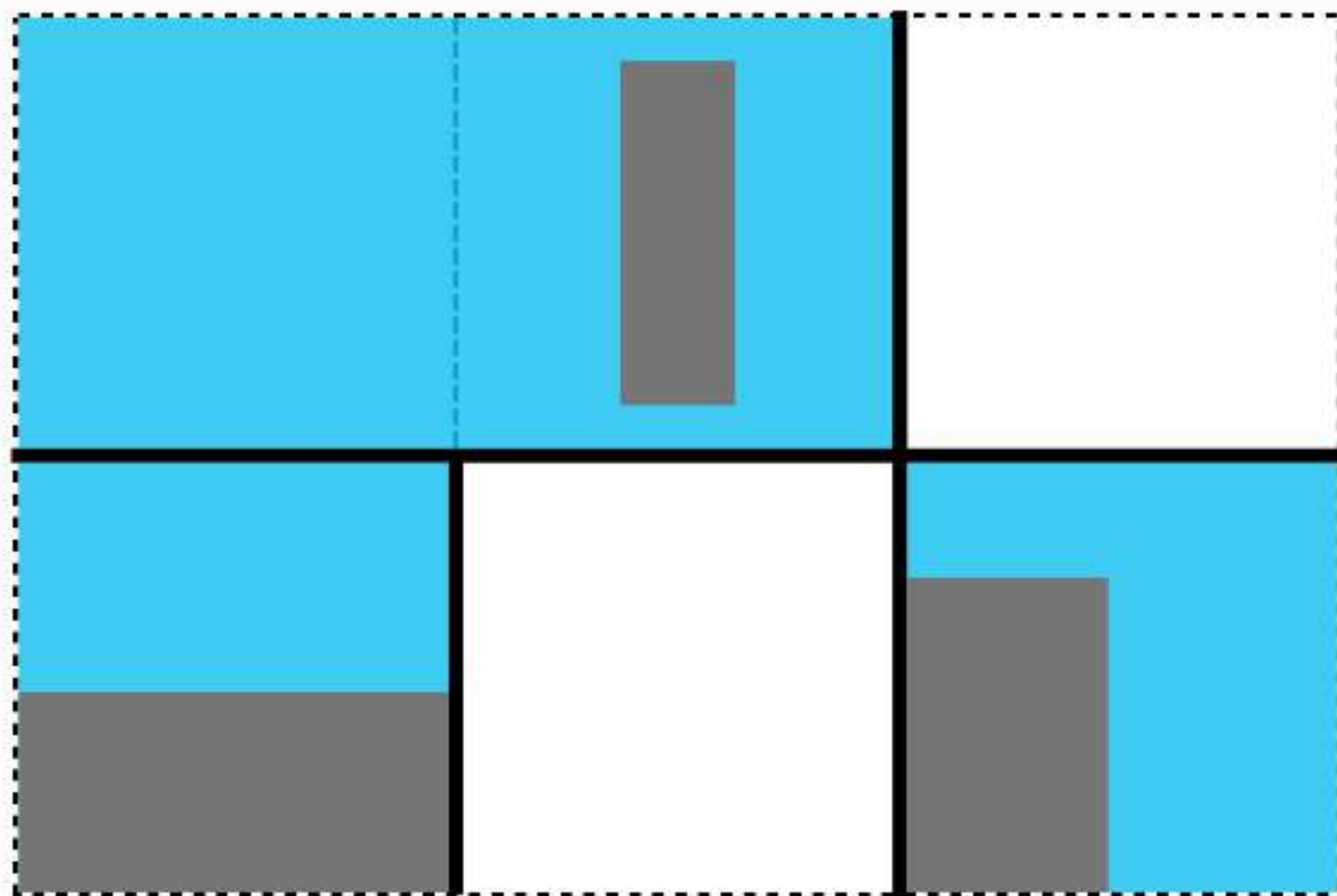




# Grid和Flexbox并用



*These are not the borders you are looking for*

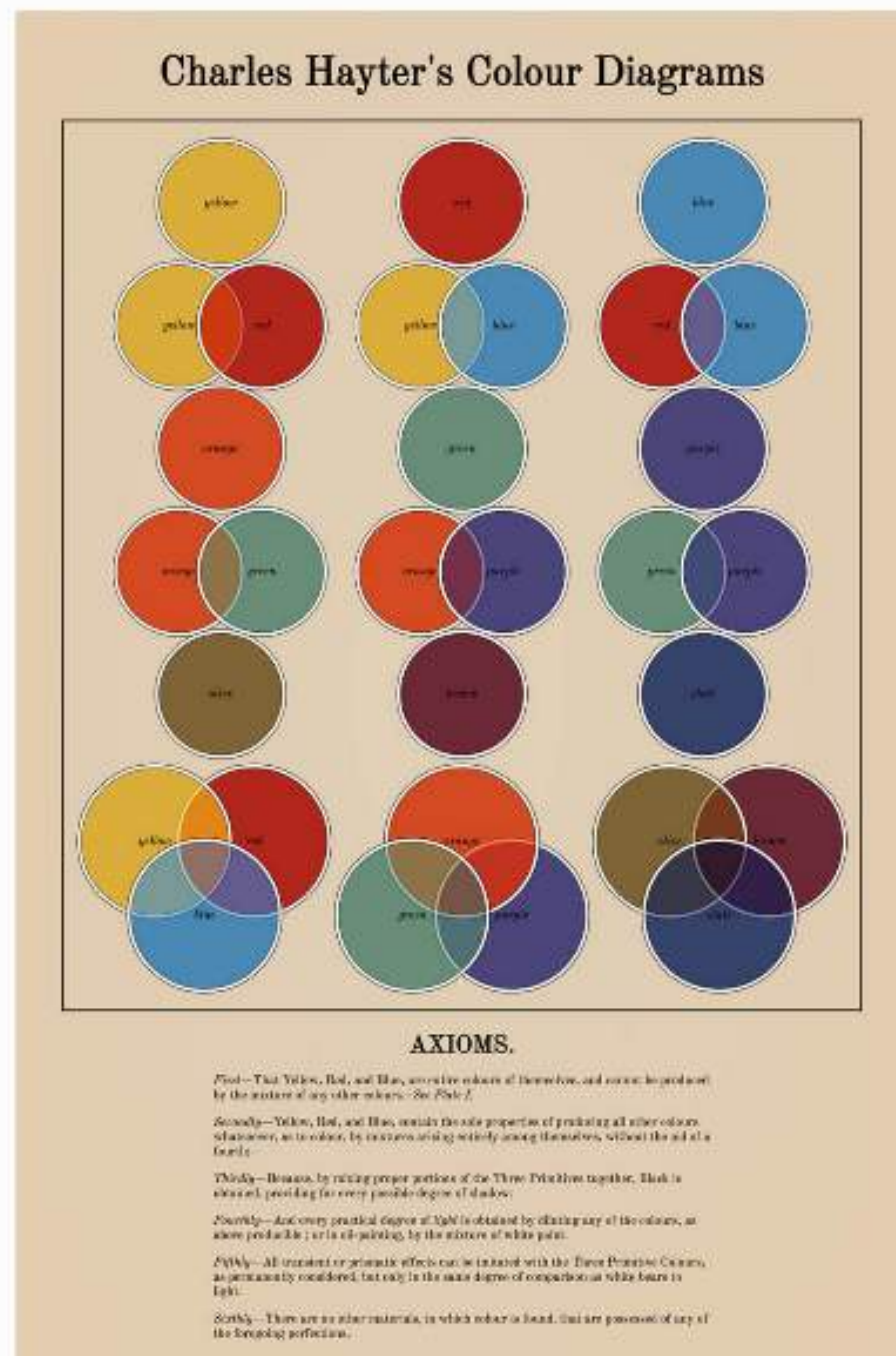
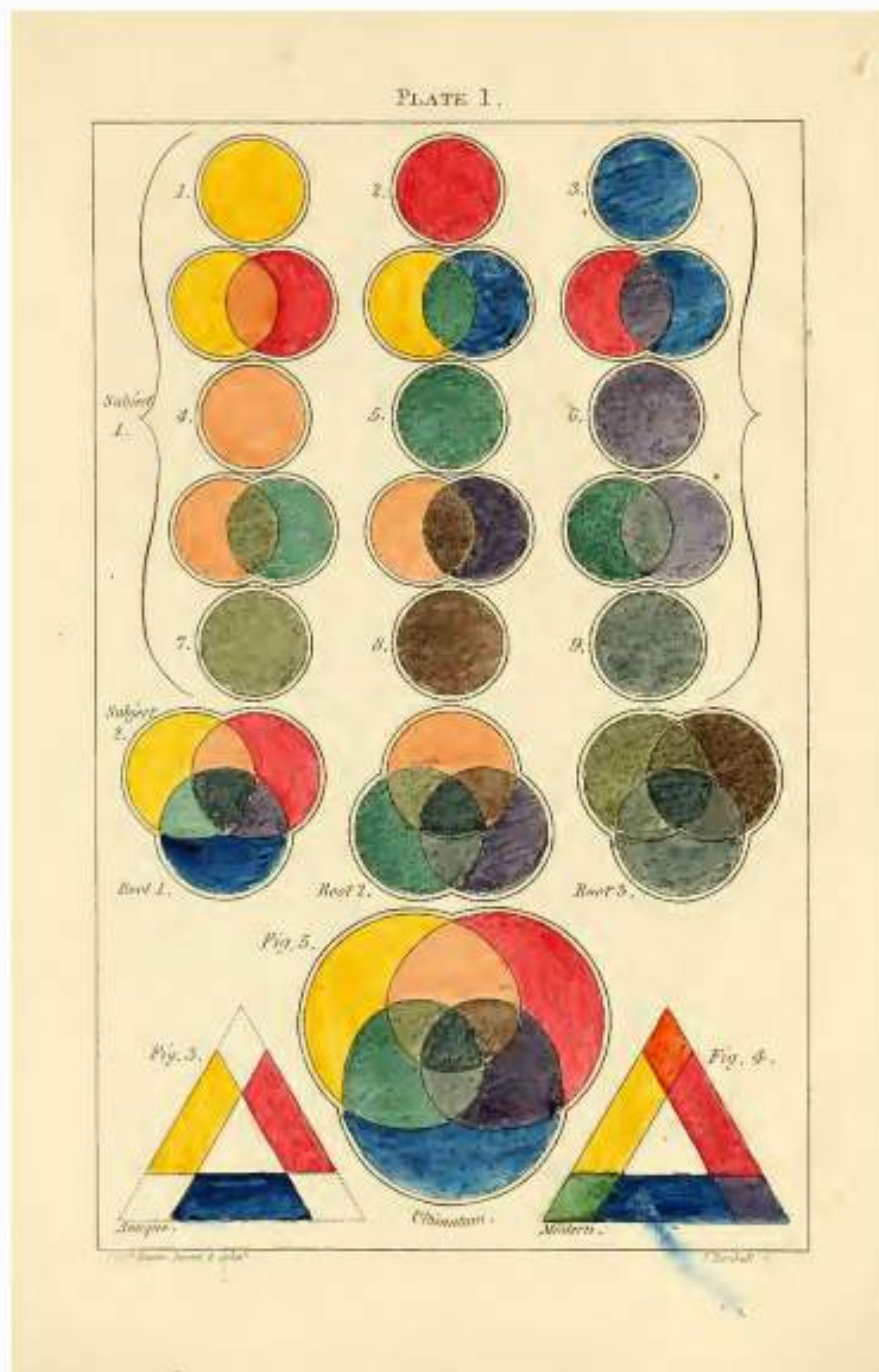


*That's more like it*





# Grid和mix-blend-mode





# Grid命名的网格区域定义

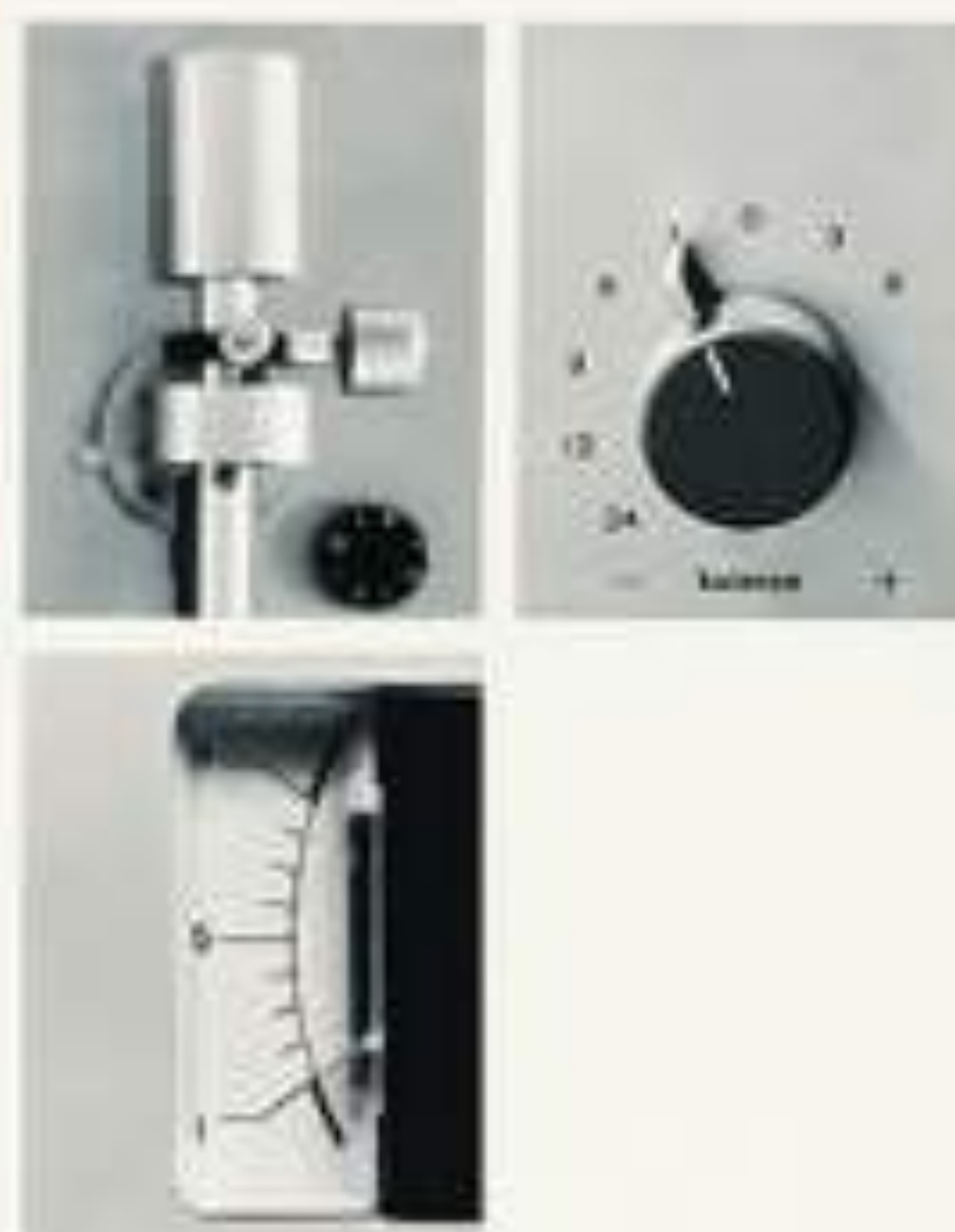
## Braun HiFi studio Anlagen

Als HiFi Spitzengeräte auf dem Weltmarkt erreichen Braun studio Anlagen das höchste Ziel: Musik so zu übertragen, wie sie wirklich ist.

Um diese so selbstverständlich scheinende Aufgabe in ihrer vollen Konsequenz zu lösen, bedurfte es jahrelanger Forschung, strengster Auswahl modernster elektronischer Bauelemente und Anwendung neuartiger Konstruktionen.

Braun studio Anlagen bestehen aus HiFi Komponenten, die man je nach Anspruch und Raumgröße individuell zusammenstellen kann. Jeder Baustein paßt zum anderen, technisch und formal.

BRAUN



## Braun HiFi studio Anlagen

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Braun studio Anlagen bestehen aus HiFi Komponenten, die man je nach Anspruch und Raumgröße individuell zusammenstellen kann. Jeder Baustein paßt zum anderen, technisch und formal.

BRAUN



原创: Wolfgang Schmittel





# Braun HiFi studio Anlagen

title

Als HiFi Spitzengeräte auf dem  
Markt erreichen Braun studio  
Anlagen das höchste Ziel: Musik so zu  
übertragen, wie sie wirklich ist.

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text

Braun



key

key



detail1



detail2



detail3





1

1

Braun HiFi studio Anlagen

2

2

2

Als HiFi Spitzengeräte auf dem Weltmarkt erreichen Braun studio Anlagen das höchste Ziel: Musik so zu übertragen, wie sie wirklich ist.

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3

3

3

key

key

key

key

key

key

4

4

4

detail1

detail2

detail3

5

5

5

4

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1

1

BRAUN

4

1

1

Braun HiFi studio Anlagen

2

2

2

Als HiFi Spitzengeräte auf dem Weltmarkt erreichen Braun studio Anlagen das höchste Ziel: Musik so zu übertragen, wie sie wirklich ist.

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3

3

3

key

key

key

key

key

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detail1

detail2

detail3

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1

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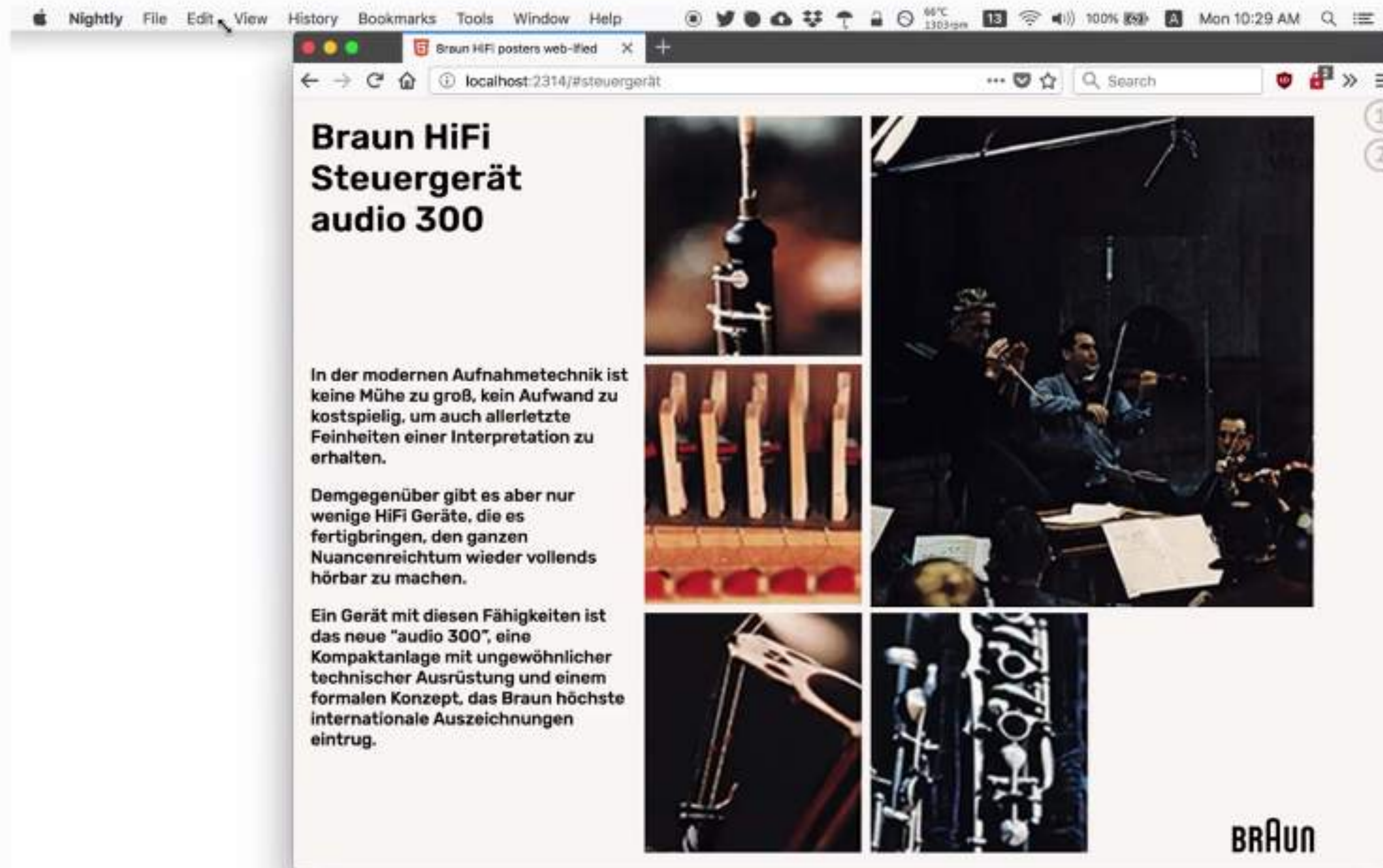
BRAUN

4





# 利用aspect-ratio媒体检测





# Grid、writing-mode、Flex等属性并用



9.24.16 PHILADELPHIA  
THE ELECTRIC FACTORY

TOUR DATES

ARTIST SPOTLIGHT

Earlier this year, San Francisco-based artist and designer Tycho announced a new album on the way for 2016, but gave some details about the project, leaving fans to speculate about just what the ambient master had in store. Fans need no longer worry, as Tycho's fifth studio album, *Epoch*, has arrived in grand fashion.

READ MORE



10.2.2016 TORONTO  
THE DRAKE HOTEL

TOUR DATES

ARTIST SPOTLIGHT

Tycho is an American ambient music project led by Scott Hansen as primary composer, songwriter and producer. Hailing from San Francisco, California, he is known as ISO50 for his photographic and design works. His music is a combination of downtempo vintage-style synthesizers and ambient melodies.

READ MORE

原创: Drew Sullivan







# Tycho

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10.2.2010 TORONTO  
THE DRAKE HOTEL

TOUR DATES

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READ MORE





# viewport单位、object-fit、:target等属性





**team  
Layout**



Feature queries

**team  
Layout**

Feature queries

Tests whether the user agent supports CSS property:value pairs

Like Modernizr, but in native CSS and makes it safe to use cutting edge features right now



# 支持旧款浏览器

利用@supports，本地CSS功能检测

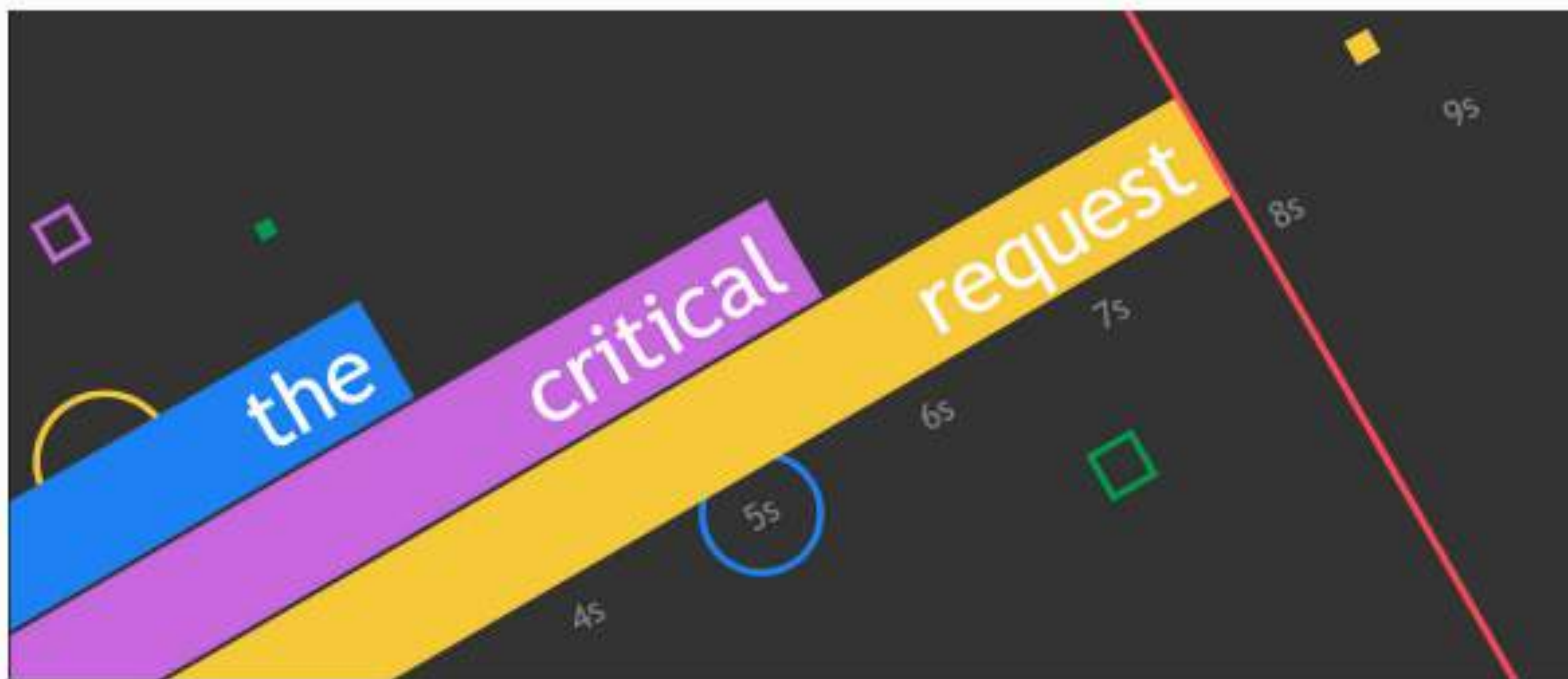
```
.selector {  
    /* Styles that are supported in old browsers */  
}  
  
@supports (property:value) {  
    .selector {  
        /* Styles for browsers that support the specified property */  
    }  
}
```



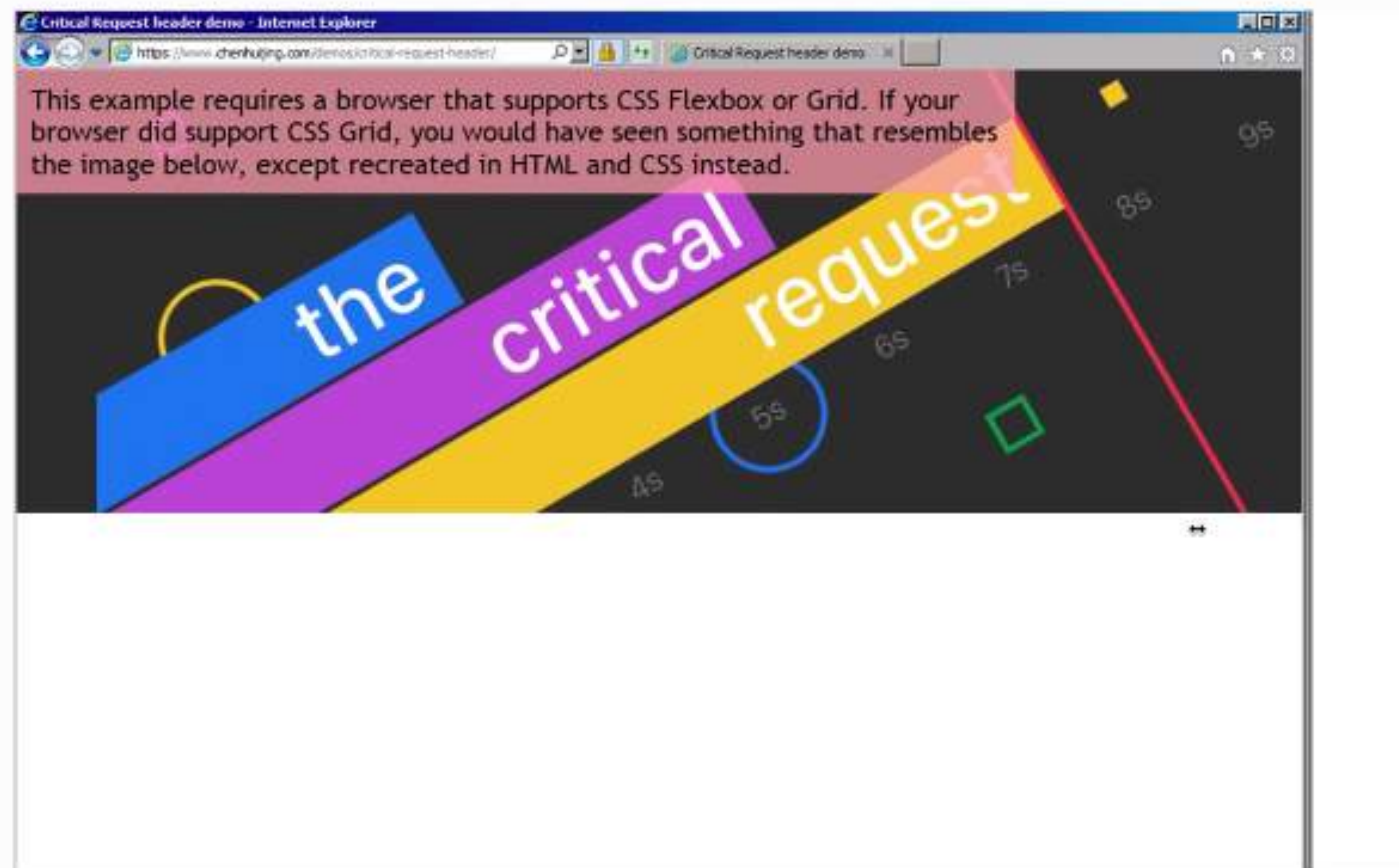




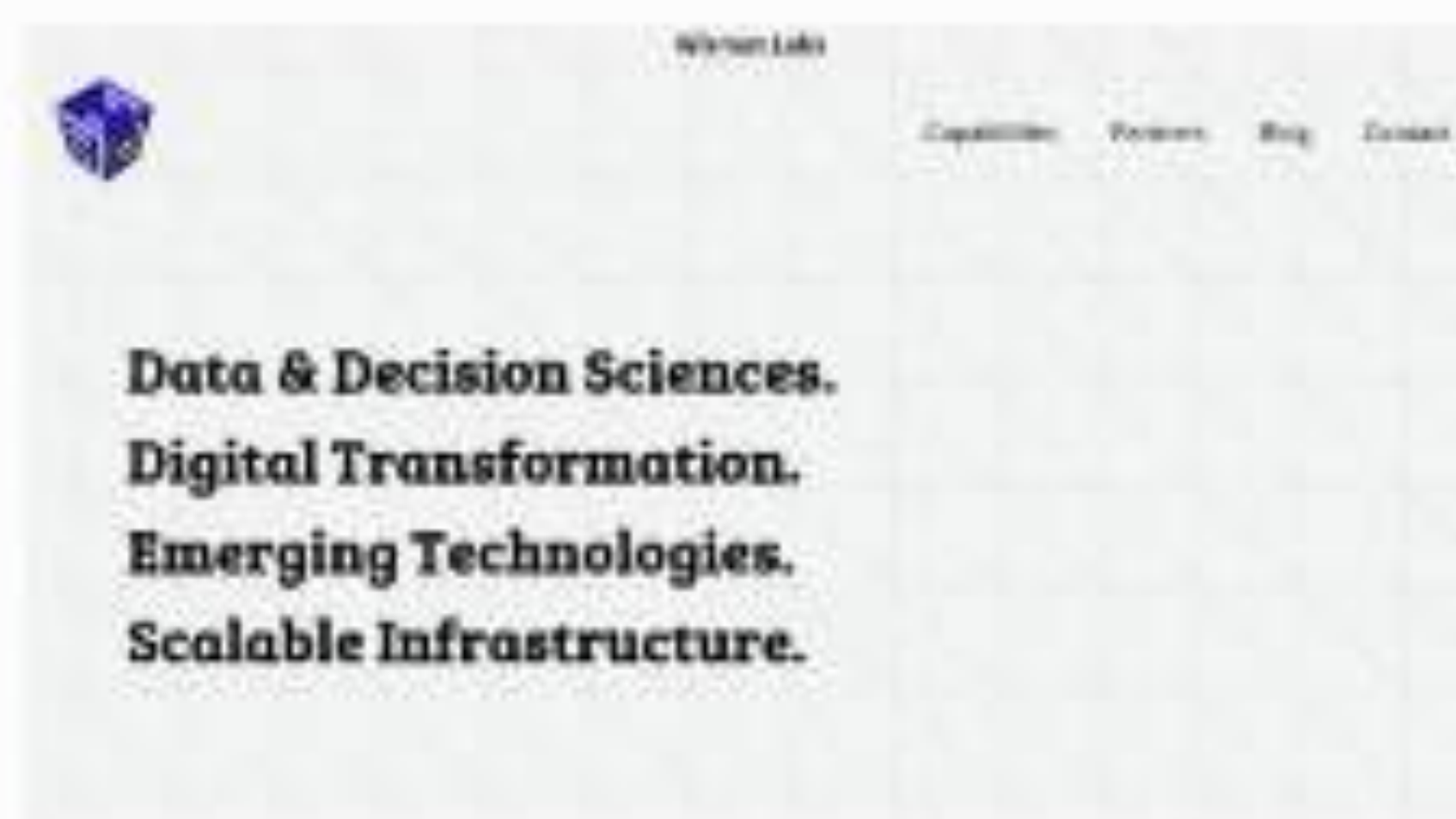
原作: *CSS tricks*



CSS复制







The world is more connected than ever before, resulting in an economy and a business environment that is increasingly volatile and uncertain. Innovation has been touted as the surest way to survive in such a risky climate, but often, organizations that try to implement it are unable to deliver the results they need. There can be a myriad of reasons for failure, from unrealistic expectations with regards to resources and time required, to unrealistic timelines or simply a lack of vision.

We believe that innovation is a collaborative process whereby organizations rapidly develop new and improved products, services or processes in order to address changing and different market needs and demands. The most important thing for organizations is to establish the value of their innovation processes. Wirenut Labs has proven expertise in helping organizations develop their own competitive edge through the adoption of modern and emerging technologies.

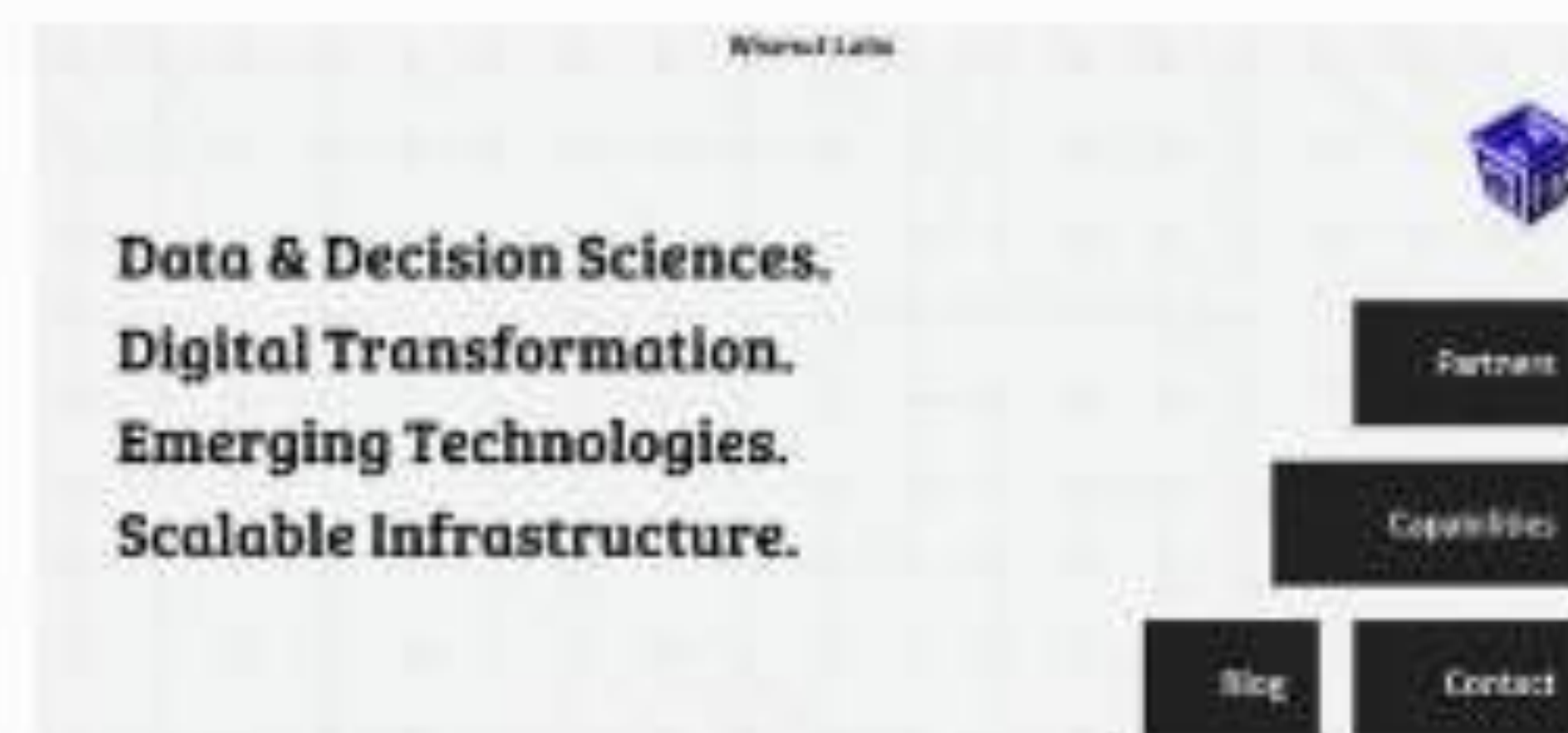
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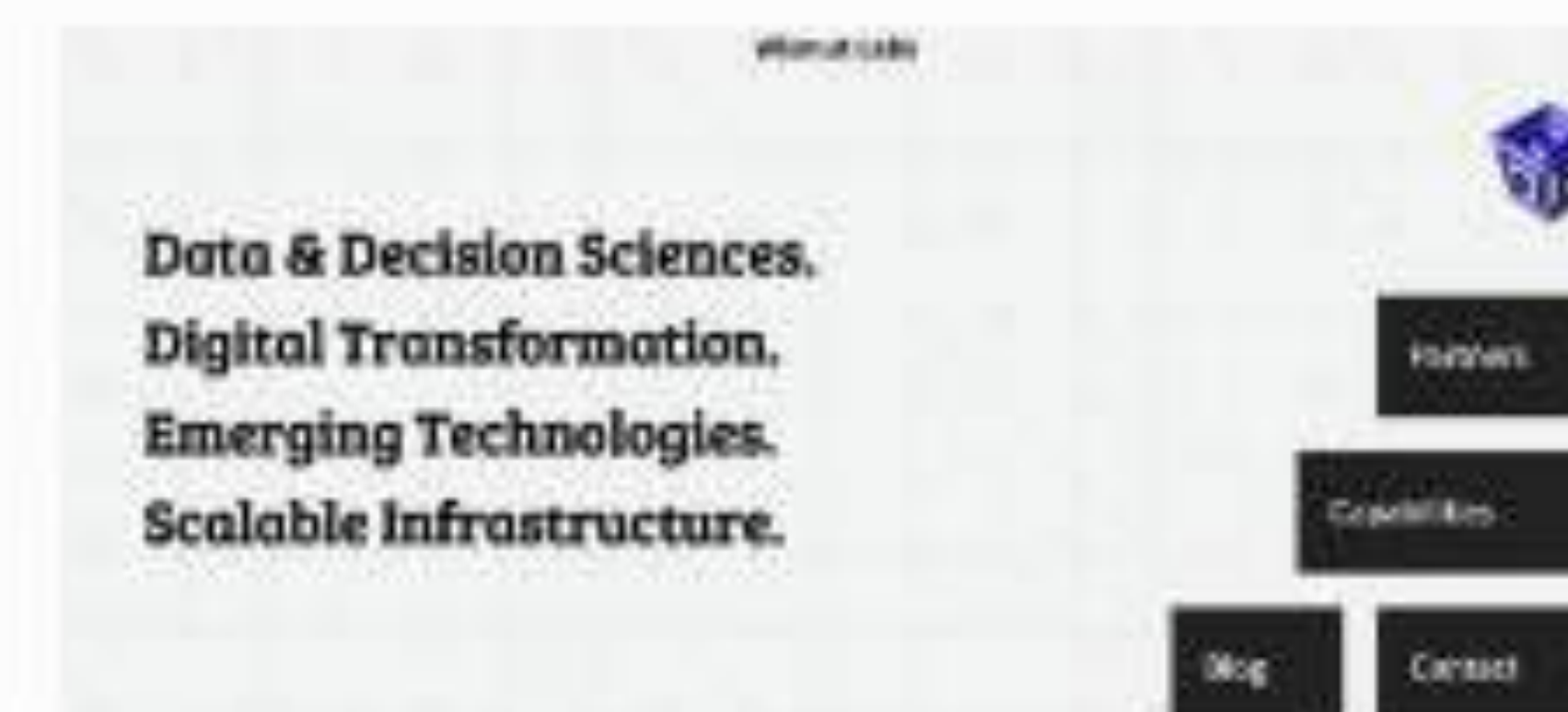
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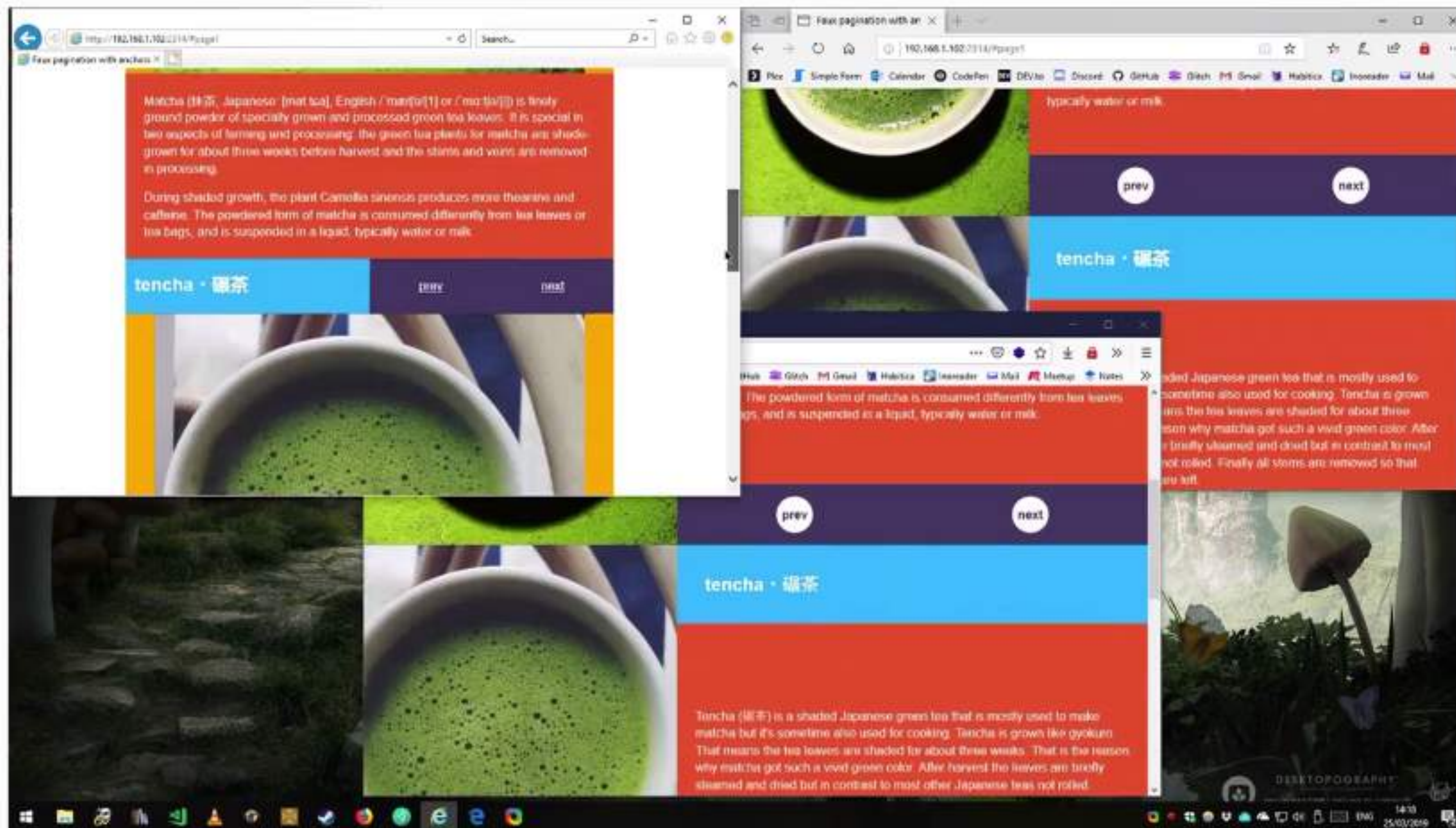


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- Unicode竖排形式
- CSS书写模式Level 3
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