



# **TYPESETTING EAST ASIAN LANGUAGES ON THE WEB**

**(and how it can inspire alternative web layouts)**

By [Chen Hui Jing](#) / [@hj\\_chen](#)





Surname First name

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Chen	Hui Jing



@hj\_chen









А а	Б б	В в	Г г	Д д	Е е
Ё ё	Ж ж	З з	І і	Й й	К к
Л л	М м	Н н	О о	П п	Р р
С с	Т т	У у	Ў ў	Ф ф	Х х
Ц ц	Ч ч	Ш ш	Ы ы	Ь ь	Э э
Ю ю	Я я	Belarusian (32)			

א	ב	ג	ד	ה	ו
ז	ח	ט	י	כ	ל
מ	נ	ס	ע	פ	צ
ק	ר	ש	ת	Hebrew (22)	

ا	ب	ج	د	ه	و
ز	ح	ط	ي	ك	ل
م	ن	س	ع	ف	ص
ق	ر	ش	ت	ث	خ
ذ	ض	ظ	غ	Arabic (28)	


A a	B b	C c	D d	E e	F f
G g	H h	I i	J j	K k	L l
M m	N n	O o	P p	Q q	R r
S s	T t	U u	V v	W w	X x
Y y	Z z	English (26)			









A Romantic-style landscape painting. In the foreground, a river flows through a dense forest of tall, leafy trees. A small waterfall cascades over rocks into a pool. To the left, a small white cross stands on a grassy patch. In the middle ground, a valley opens up, showing a small settlement with white buildings and a church spire. The background features majestic, rugged mountains with some peaks covered in snow, partially shrouded in mist. The sky is filled with soft, white clouds. The overall mood is serene and majestic, typical of 19th-century landscape art.

**захапленне**  
(Belarusian) 10 letters

入  
迷







Communication  
(English) 13 letters

沟通





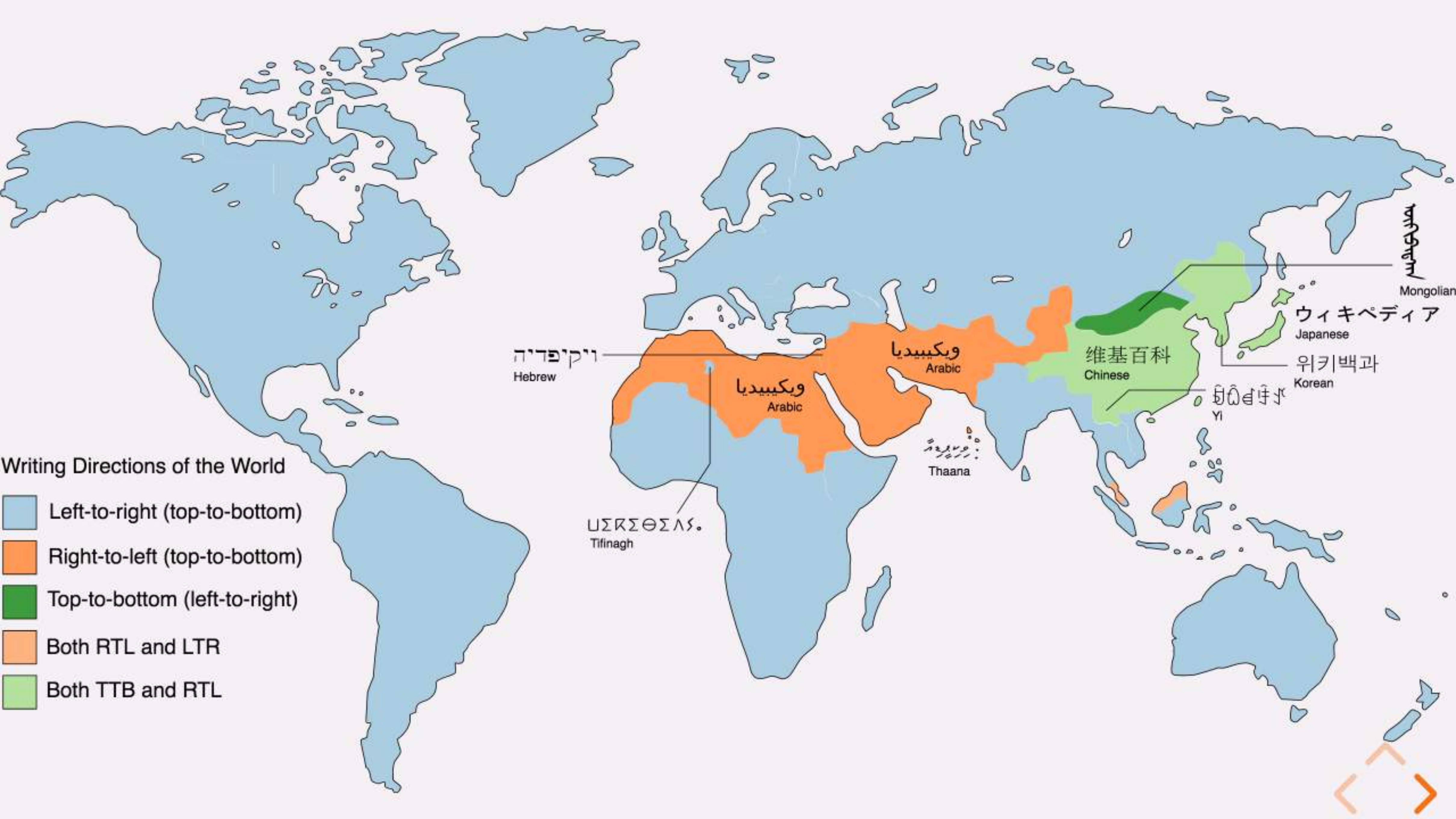


Grianghrafadóireachta  
(Irish) 21 letters

摄影









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  
為鷺羽客窺倒景拊掌崎  
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  
卷江山圖画應禽龍魚悲嘯不暇顧  
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  
報畬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

泰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		
保證商		
經		



**Phoenician alphabet**

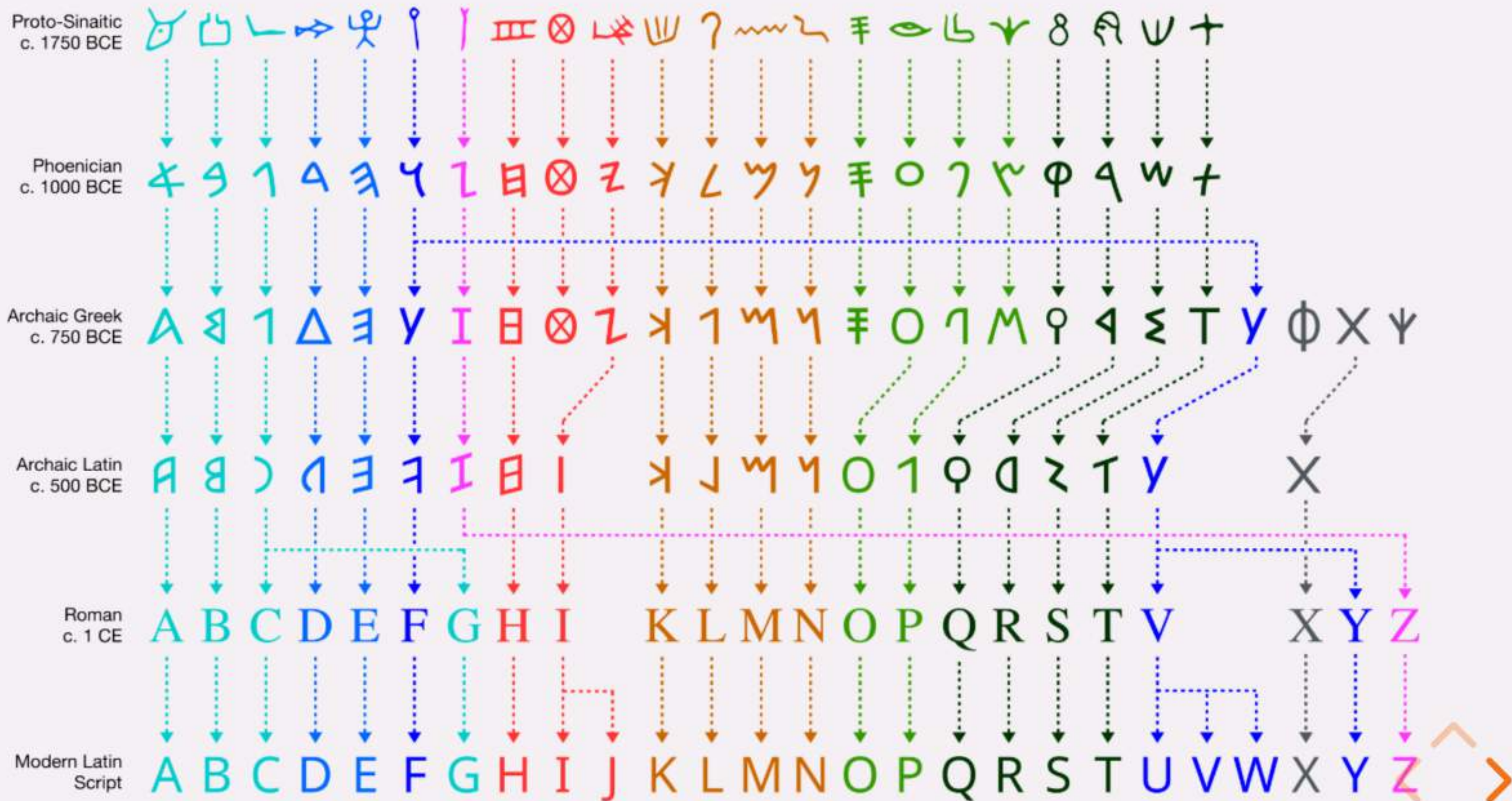
甲  
骨  
文



# Evolution of the Alphabet

By Matt Baker | UsefulCharts.com

Alphabetum font by Juan José Maroos used for Ancient Greek/Latin





甲骨文	𠄎	𠄎	𠄎	𠄎
金文	𠄎	𠄎	𠄎	𠄎
小篆	日	月	車	馬
隶书	日	月	車	馬
楷书	日	月	車	馬
草书	日	月	車	馬
行书	日	月	車	馬





宋体

Song Ti

楷体

Kai Ti

仿宋体

Fang Song Ti

黑体

Hei Ti







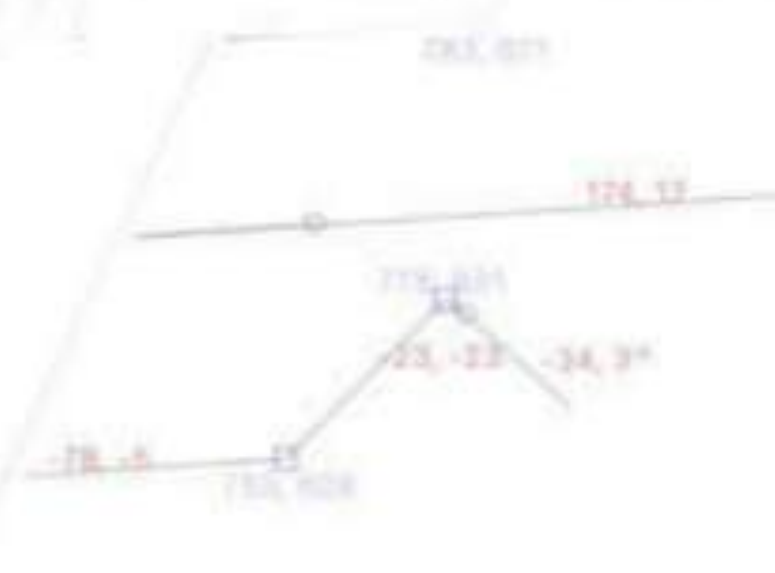
厭焰遠凹我回魁海外慨馨各茅瓦乾緩丸願希幾機季林  
校掬久吸會魚森電我孩參匆勦倆兩奠姨兒老嶝弩菱挈  
遼幼夕友爺脅興饗驚業桑祁形攜系劇激欠健玄孤獎礙  
交慌剛校今最災際作皿餐史子氏紙紫詩磁而室蕊瞞斜  
樹秋酬涎矮爆最集貶熟春循巡書嘗少承象賞蒸色心新  
人訓推勢成盛西隻石染穿鼠創双爽多妥怠袋隊大第鷹  
兆朝調綴定底庭鼎電東導毒瓣凸頓曇那內瞞發猴炒吧

Radical: 言 (words, speech) 入嫻忽菱念燃乃之囊能馬爆駁鳩

說 誓 訊 讚 嘉 彪豹品斌貧頻敏瓶不膚風 夕幼養立流龍旅良

“Chinese-script projects are crazy. The scope is mind-blowing.”

—David Březina from [The long, incredibly tortuous, and fascinating process of creating a Chinese font](#)



愛永校西多采  
穿鼠創双爽多蛋  
袋隊大第鷹東  
庭鼎電東





五  
初九日午時  
上海五二頁  
編輯公三

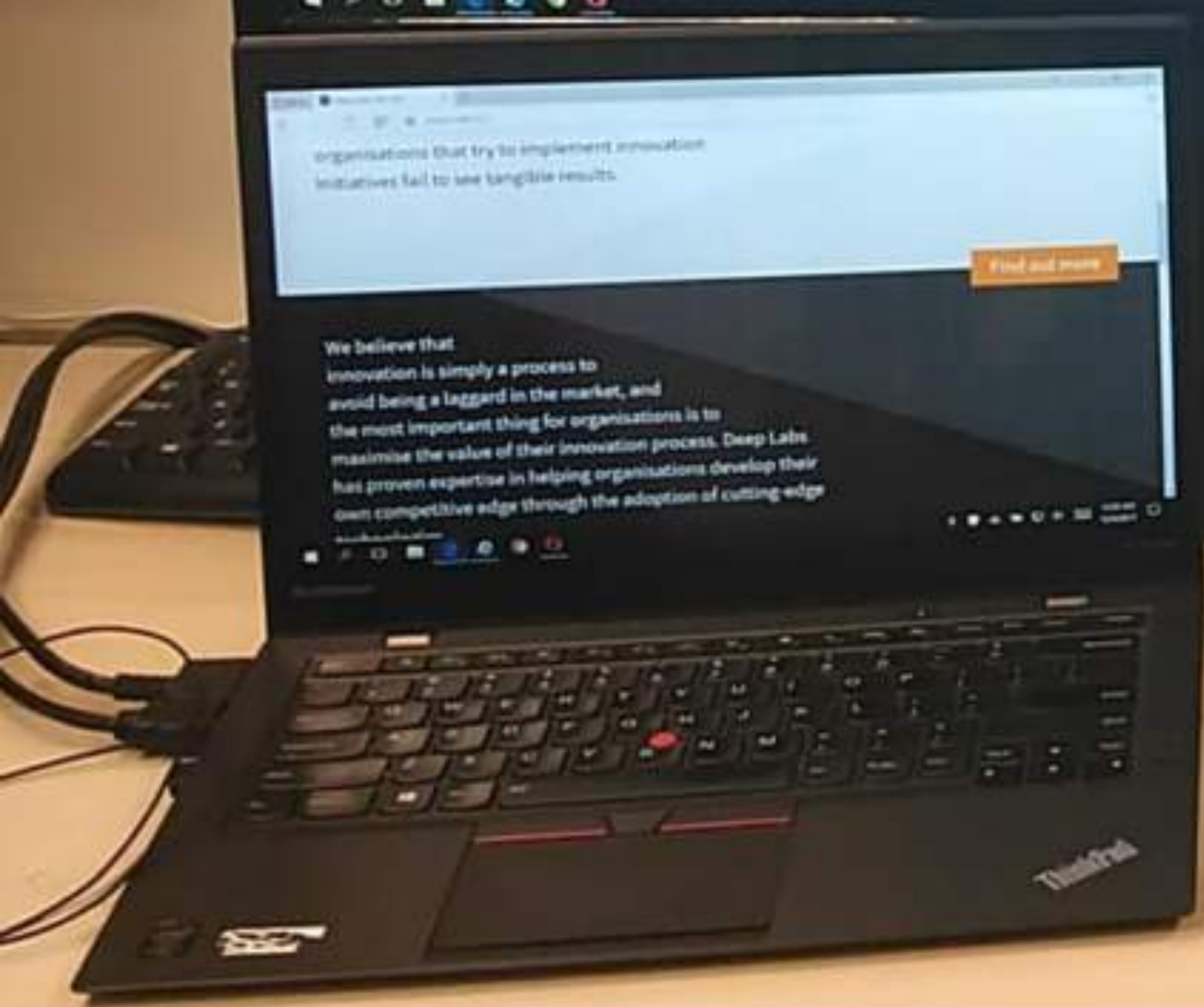
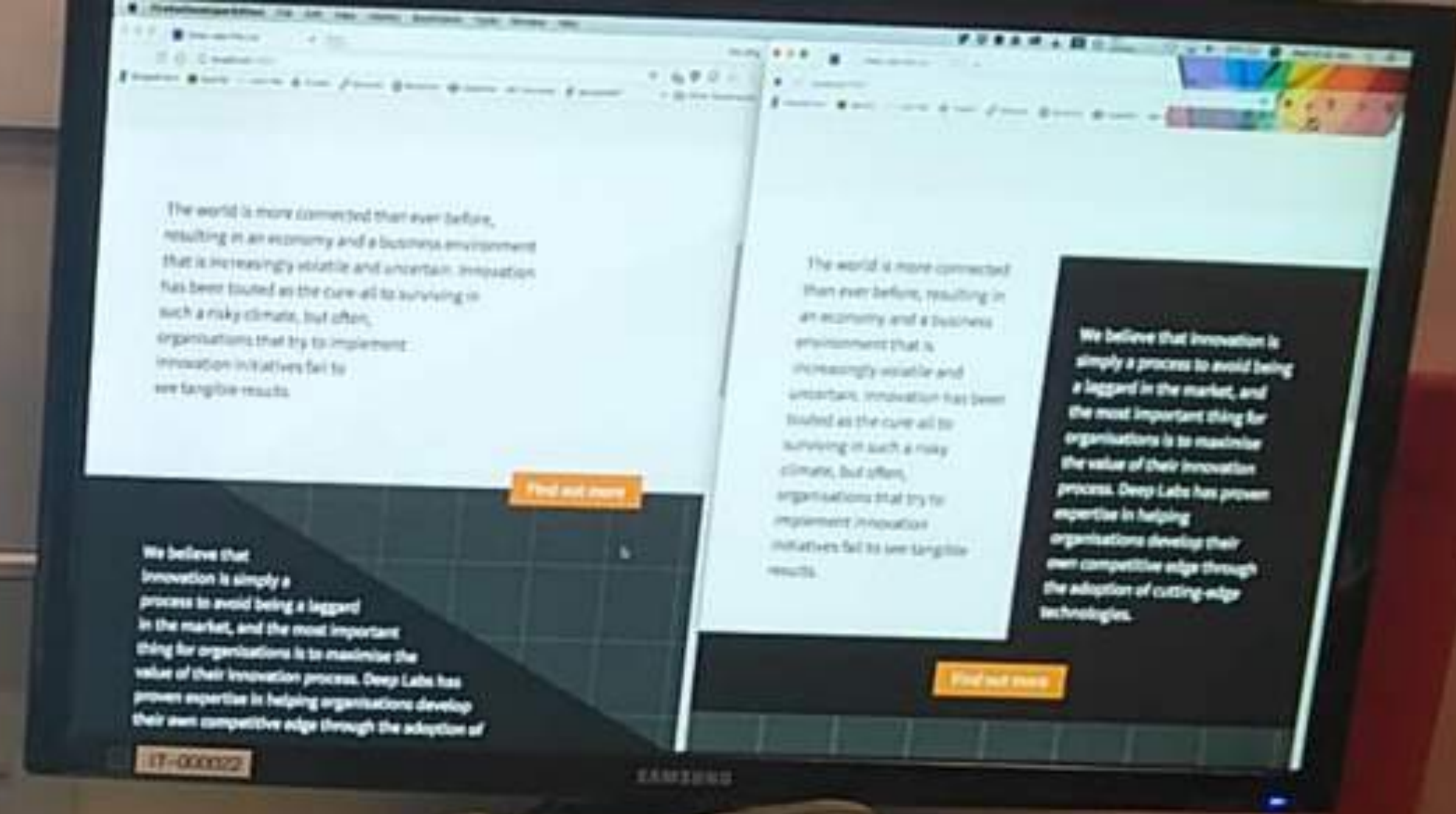
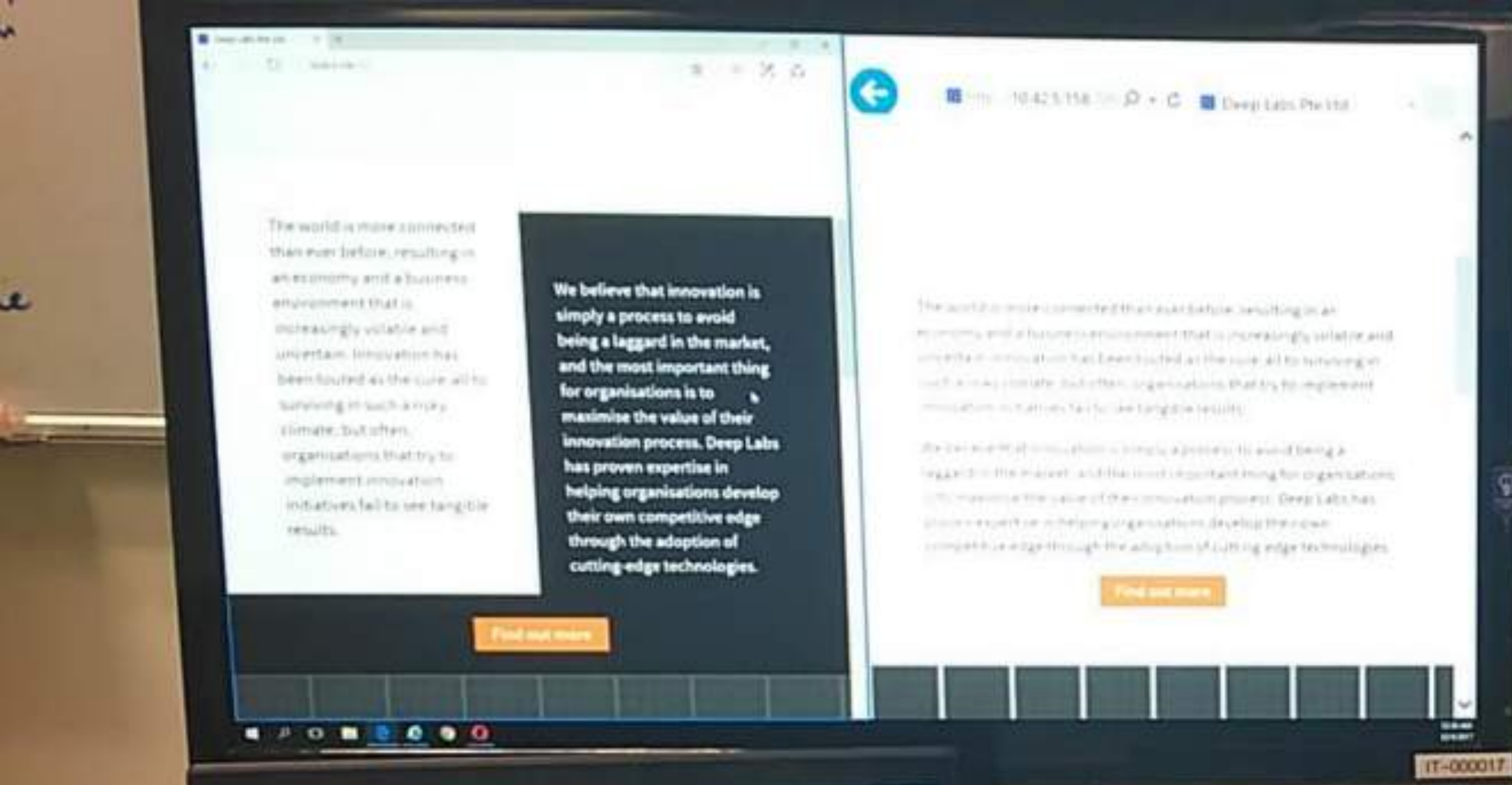
‘ ’ “ ” & 2 ;  
t T d D ö Ö  
5 & 8 + ^ ^  
S , ? v V ü Ü  
1 ‘ “ . 1 1  
u U f F ä Ä  
˘ ˘ ˘ ˘ ˘

diatype  
156 110  
Hawthorne  
breakdown  
21

de Bropien lot 1720



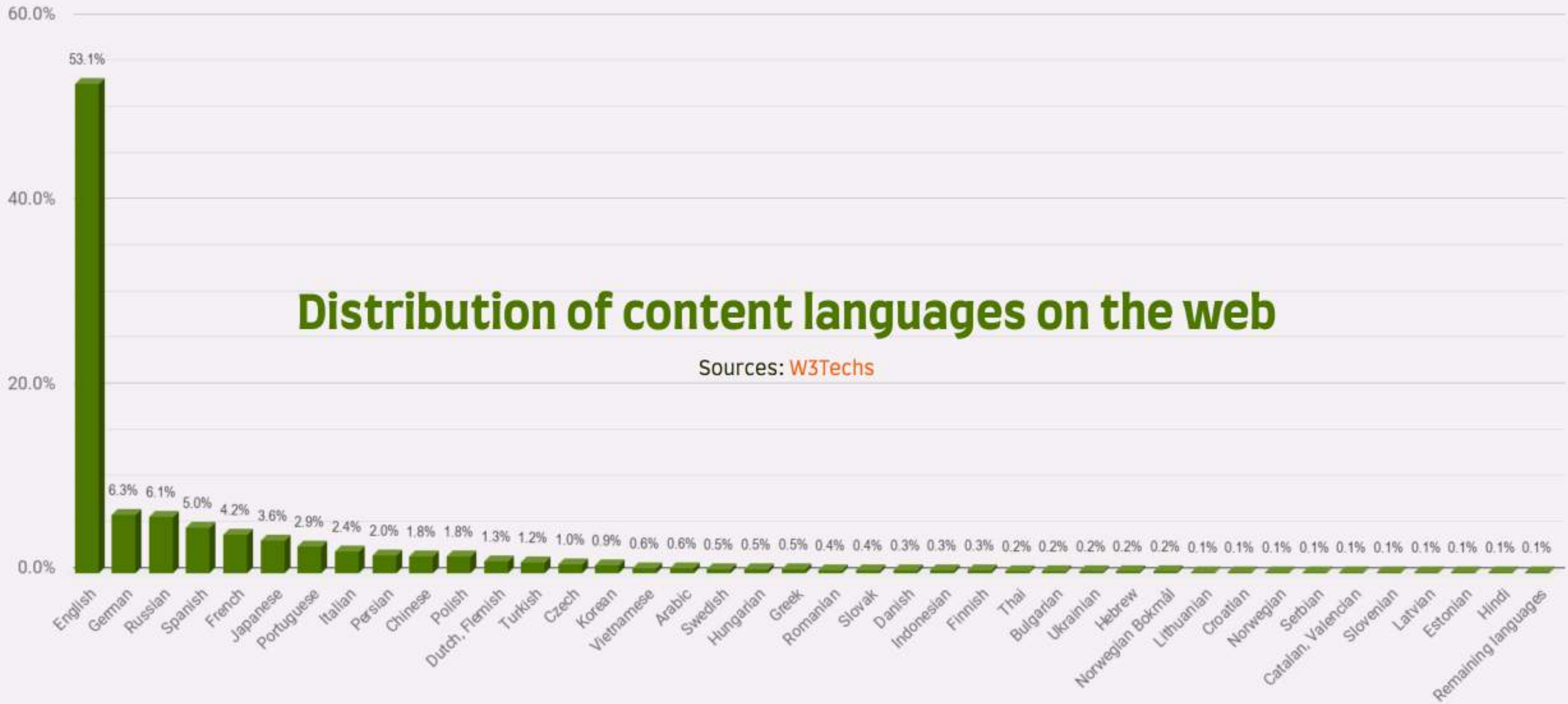






# Distribution of content languages on the web

Sources: [W3Techs](#)





“People long for their national identity, to be different, to be proud of who they are.  
Political is daily, cultural is eternal.”

—Alena Makouskaya, coordinator of Budzma





“Only 13% of pupils in Belarus study in the Belarusian language.”

—Alesia Rudnik, Belarus Digest





“In order to tend to the continued development of our languages, we must continue to create technologies that provide smaller languages with the same support enjoyed by larger ones.”

—Rihards Kalniņš, *The Guardian*





## Let's talk about CSS



CSS to do typography



CSS to do layout



## Web fonts

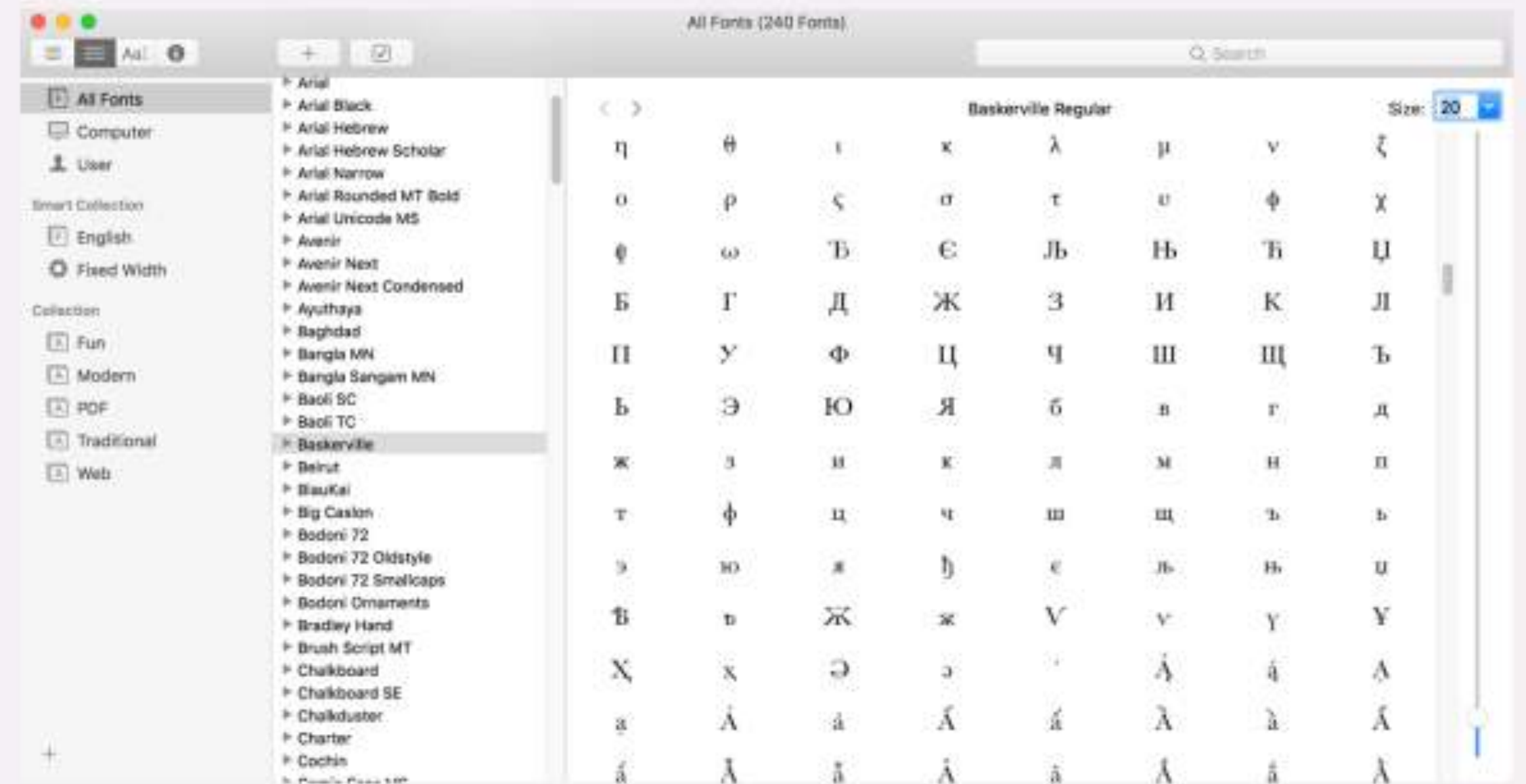
The CSS3 Fonts specification describes the basic controls CSS provides for selecting and using fonts within documents.

<http://bit.ly/css-font-history/>





# What is a font?

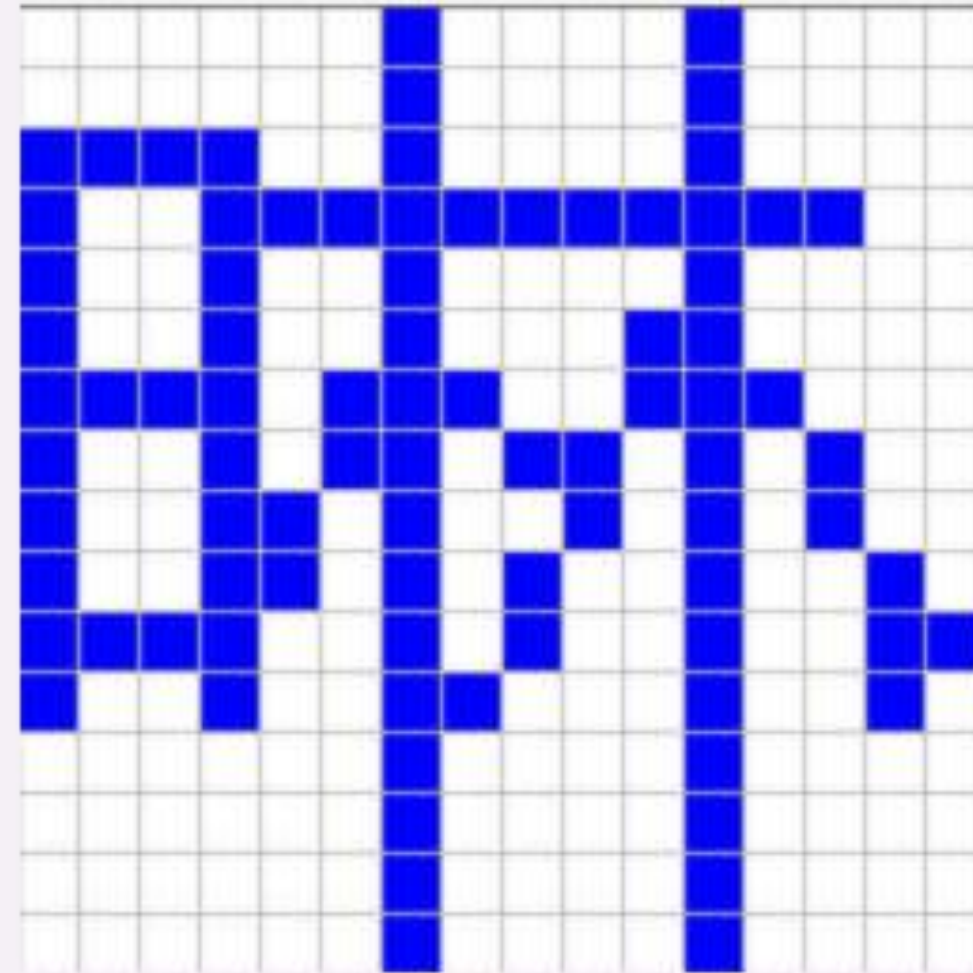




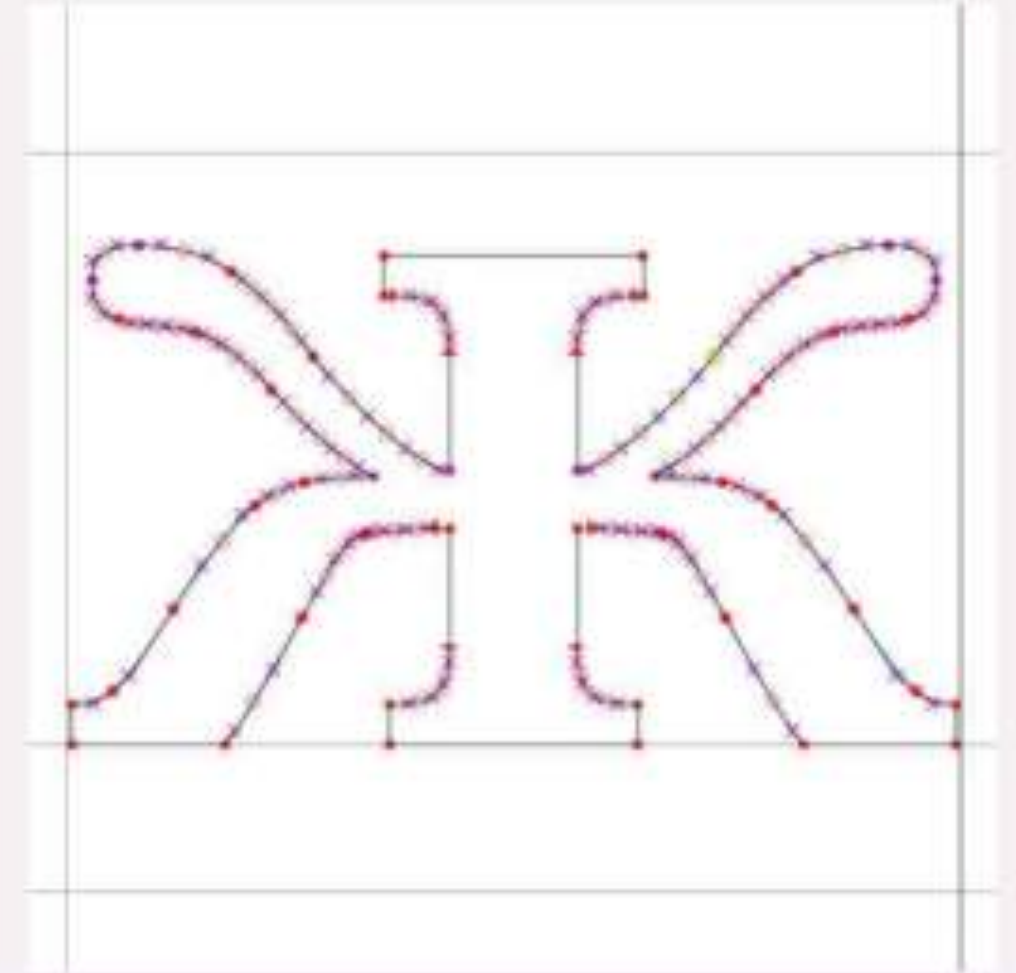
**And what are glyphs?**



M



琳



Ж





## Font formats for web use

WOFF2 (Web Open Font Format 2)	 Microsoft	 <b>moz://a</b>	 Opera
WOFF (Web Open Font Format)	 Microsoft	 <b>moz://a</b>	 Opera
OTF (OpenType)	 Microsoft		
TTF (TrueType)	 Microsoft		
EOT (Embedded Open Type)	 Microsoft		
SVG (Scalable Vector Graphics)	  		





# @font-face

```
@font-face {  
  font-family: 'Farro';  
  src: url('farro-light.woff2') format('woff2'),  
       url('farro-light.woff') format('woff');  
}
```

## WOFF - Web Open Font Format [🔗](#)

Compressed TrueType/OpenType font that contains information about the font's source.

IE	Edge	Firefox	Chrome	Safari	iOS Safari	Opera Mini	Chrome for Android	Android Browser	Samsung Internet
9	15	60	67	11	10.3			4.4	5
10	16	61	68	11.1	11.2			4.4.4	6.2
11	17	62	69	12	11.4	all	69	67	7.2
	18	63	70	TP	12				

✓ ✗ Partial Support

Global: 93.21% + 0% = 93.21%

Data from [caniuse.com](#) | Embed from [caniuse.bitsofco.de](#)

[Enable accessible colours](#)

## WOFF 2.0 - Web Open Font Format [🔗](#)

TrueType/OpenType font that provides better compression than WOFF 1.0.

IE	Edge	Firefox	Chrome	Safari	iOS Safari	Opera Mini	Chrome for Android	Android Browser	Samsung Internet
9	15	60	67	11	10.3			4.4	5
10	16	61	68	11.1	11.2			4.4.4	6.2
11	17	62	69	12	11.4	all	69	67	7.2
	18	63	70	TP	12				

✓ ✗ Partial Support

Global: 79.33% + 1.94% = 81.27%

Data from [caniuse.com](#) | Embed from [caniuse.bitsofco.de](#)

[Enable accessible colours](#)





## Anatomy of an @font-face rule

```
@font-face {  
  font-family: <family-name>;  
  src: [ <url> [format(<string> #)]? | <font-face-name> ] #;  
  font-style: normal | italic | oblique ;  
  font-weight: normal | bold | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900;  
  font-stretch: normal | ultra-condensed | extra-condensed | condensed | semi-condensed  
  unicode-range: <urange> #;  
  font-variant: normal | none | [ <common-lig-values> || <discretionary-lig-values> ||  
  font-feature-settings: normal | <feature-tag-value> #;  
}
```

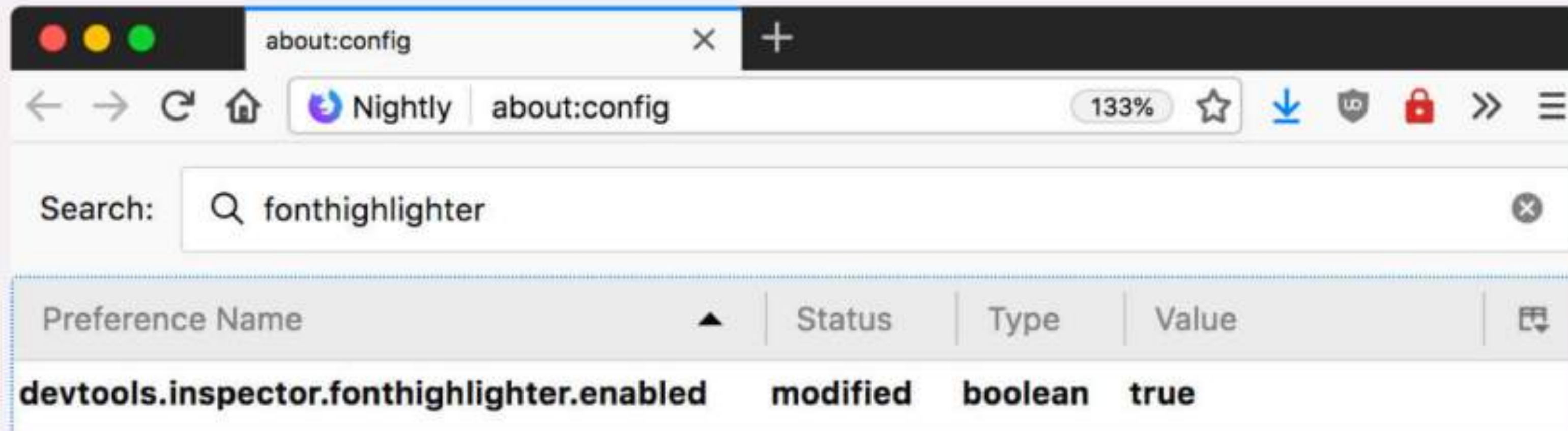




```
@font-face {  
  font-family: 'Farro';  
  src: url('fonts/farro-light.woff2') format('woff2'),  
        url('fonts/farro-light.woff') format('woff');  
  /* no range specified, defaults to entire range */  
}  
  
@font-face {  
  font-family: 'Farro';  
  src: url('fonts/linbiolimum.woff2') format('woff2'),  
        url('fonts/linbiolimum.woff') format('woff');  
  unicode-range: U+0400–U+04FF; /* Unicode range for Cyrillic characters */  
}
```







Go to `about:config` from your address bar

Search for *fonthighlighter* and double-click it to change its value to true





А а	Б б	В в	Г г	Д д	Е е
Ё ё	Ж ж	З з	И и	Й й	К к
Л л	М м	Н н	О о	П п	Р р
С с	Т т	У у	Ф ф	Х х	
Ц ц	Ч ч	Ш ш	Щ щ	Ъ ъ	Э э
Ю ю	Я я				

Belarusian (52)

א	ב	ג	ד	ה	ו
ז	ח	ט	י	כ	ל
מ	נ	ס	ע	פ	ץ
ק	ר	ש	ת		

Hebrew (22)

ا	ب	ج	د	ه	و
ز	ح	ط	ي	ك	ل
م	ن	س	ع	ف	ص
ق	ر	ش	ت	ث	خ
ذ	ض	ظ	غ		

Arabic (28)

A a	B b	C c	D d	E e	F f
G g	H h	I i	J j	K k	L l
M m	N n	O o	P p	Q q	R r
S s	T t	U u	V v	W w	X x
Y y	Z z				

English (26)

Inspector

Console

Network

Search HTML

<section class="past" data-background-image="img/writing-systems.png" data-background-size="contain" style="top: 438px; display: block;" aria-hidden="true" hidden=""></section>

<section class="present" style="top: 86px; display: block;">

<div style="display:grid;grid-template-columns:1fr 1fr;grid-template-rows:1fr 1fr">grid

<table class="tb-letters" style="font-size:70% lang="be">

<tbody>

<tr>

<td>A a</td>

<td>B b</td>

<td>C c</td>

<td>D d</td>

Filter Styles

Pseudo-elements

This Element

element {

display: grid;

grid-template-columns: 1fr 1fr;

grid-template-rows: 1fr 1fr;

}

Layout

Computed

Animations

Fonts

Fonts Used

Farro

Farro Light Regular, Linux Biolinum O

Arial

Arial

Geeza Pro

Geeza Pro Regular

Size

40 px

Line Height

1.3

Weight

400

Italic

All fonts on page



## CSS font properties

<code>font-size</code>	Indicates the desired height of the glyphs. Takes absolute or relative values.
<code>font-weight</code>	Specifies the weight of the glyphs in the font. Can use keywords or numerical values.
<code>font-style</code>	Allows italic or oblique faces to be selected.
<code>font-stretch</code>	Selects a normal, condensed or expanded face from a font family. Range spans over 9 keywords.
<code>font-size-adjust</code>	Adjusts the font-size to preserve the x-height of the first choice font.
<code>font-synthesis</code>	Controls whether user agents are allowed to synthesize bold or oblique font faces when missing.





## font-synthesis

Minion Pro

afwn

Roboto

afwn

Minion Pro

afeunyi

Minion Pro Faux Bold

afwn

Roboto Faux Bold

afwn

Minion Pro Faux Italic

*afeunyi*

Minion Pro Bold

afwn

Roboto Bold

afwn

Minion Pro Italic

*afeunyi*

Image credit: Piotr Grochowski





# Font feature properties

font-kerning

AV Wa

No kerning

AV Wa

Kerning applied

font-variant-position

C<sub>10</sub>H<sub>16</sub>N<sub>5</sub>O<sub>13</sub>P<sub>3</sub>  
C<sub>10</sub>H<sub>16</sub>N<sub>5</sub>O<sub>13</sub>P<sub>3</sub>

font-variant-position-

fi ▶ fi    tʒ ▶ ʒ  
WORDS ▶ WORDS  
labor of love ▶ labor of love

ligatures

font-variant-numeric

1st 17th 2a ▶ 1 <sup>st</sup> 17 <sup>th</sup> 2 <sup>a</sup>		
2 1/3 ▶ 2 <sup>1</sup> / <sub>3</sub>	Lining	Old-Style
4000 ▶ 4000	409,280	409,280
	367,112	367,112
	155,068	155,068
2 1/3 ▶ 2 <sup>1</sup> / <sub>3</sub>	171,792	171,792

font-variant-caps

The DOM, the HTML syntax, and the XHTML syntax cannot all represent the same content. For example, namespaces cannot be represented using the HTML syntax, but they are supported in the DOM and in the XHTML syntax.

font-variant-alternates

Jesuits ▶ Jefuits  
quick ▶ quick Quick ▶ Quick  
incroyable ▶ incroyable  
• ▶ ❄️ ❄️ ❄️ 519 ▶ ⑤①⑨





font-variant-east-asian


麴町 ▶ 麴町

大学 ▶ 大學

欧文フォント ▶ 欧文フォント





A still life photograph of a fondue meal. In the upper right, a large copper fondue pot sits on a matching copper stand. To the left and in the foreground are two white ceramic dipping platters, each divided into four sections containing different colored powders (yellow, red, orange, and white) and topped with cubes of red meat. A long, crusty loaf of bread lies horizontally across the top. In the bottom right corner, a green fringed napkin holds a silver fork and spoon. The background is a rustic brick wall.

## Drop a font!

Fonts aren't uploaded,  
they stay on your computer

<https://wakamaifondue.com/>



## Variable fonts

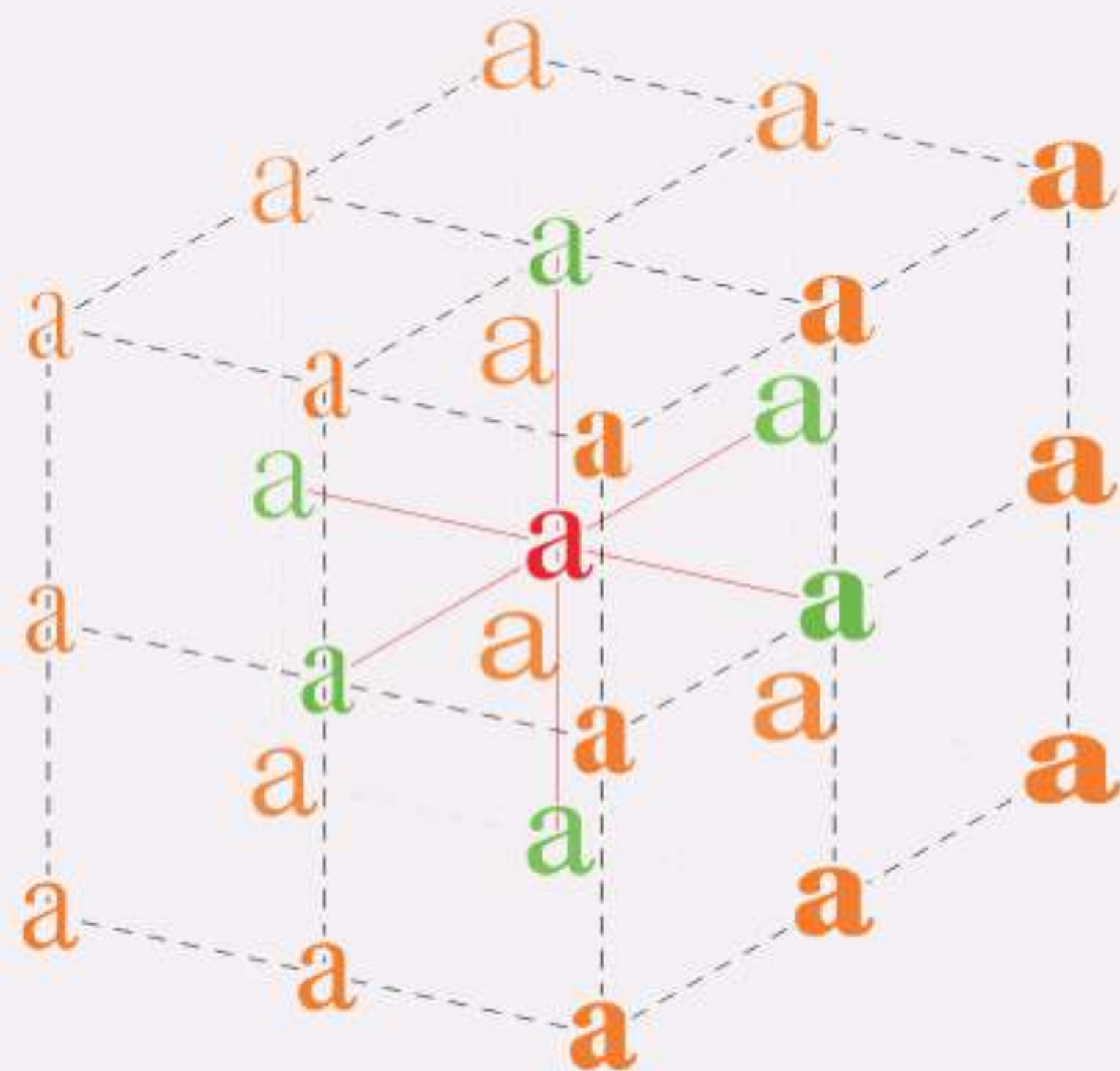


Image credit: John Hudson






# Variable Fonts Experiments

A collection of experiments with variable font text effects. Warning: These are really heavy on your computer.

Special credit to David Berlow for the fonts <https://twitter.com/dberlow>


Mandy Michael Follow






"Draw In" Text Effect with Decovar

Mandy Michael 579 0 6




80s "Draw In" Text with Variable Fonts

Mandy Michael 697 0 15




Variable fonts simple demo

Mandy Michael 1,848 0 35




Zycon Variable Font Experiment

Mandy Michael 1,399 0 30



Abstract Editable Layered Variable Font Effect - D...

Mandy Michael 2,930 0 70



CSS-only Variable font demo using Decovar Regular

Mandy Michael 5,465 0 153

Next >





# 犯罪と 小生不安を ふせぐバイブル

現代の“罪と罰”について  
あらゆる知識の集大成



警察庁鑑識課の秘蔵 本特異のため開かる  
犯罪現場特別写真集 76巻  
安全と鍵と戸締りの研究・新しい貞操帯と護身術  
10人の処女はなぜ殺されたか？  
小平義雄の手口と精神鑑定書

## 自由国民・別冊

あなたの一生涯の  
夜をまもるために！

自由国民社  
発行

## 幼年世界

三月一日発行

第三卷  
第三號



博文館



10  
YRS.

申時電訊社創立十周年紀念特刊

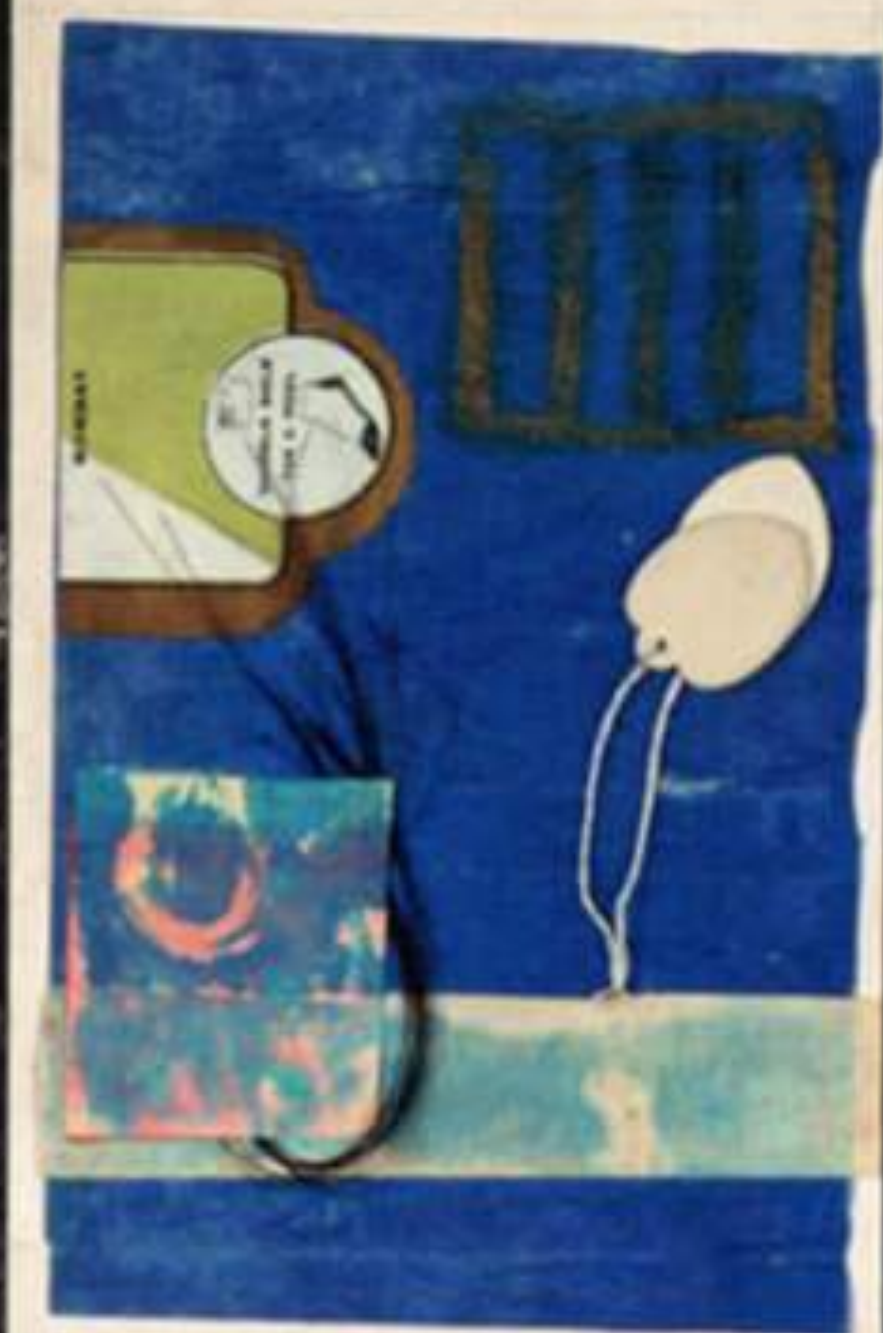
申時電訊社創立十周年紀念特刊

十年



第 10 卷  
第 10 號

電訊



電訊社創立十周年紀念特刊

電訊



Мі  
2  
3  
"Б  
Tea

СВЯТА-УММ

8го

ерела  
етверг  
уботи  
еділа

ПРЕМ'ЄРІ

ІМЛНІ

ТАРАС ШЕВЧЕНКО

ПОВІСТІ

М. Шевченку

ПОВІСТІ

ШКУРПІЙ

ГЕО

НОВЕЛІ

НАШОГО ЧАСУ

КСТЕЦТРО

ТВОРИ

ДНІПРОВА-ЧАЙКА

ЛЬГА КОБИЛЯНСЬКА • ЗЕМЛЯ

Бойківське

УД-ВІСІС-РО

АВВІВ 1027



## The magic of Writing Modes

CSS Writing Modes Level 3 defines CSS features to support for various international writing modes, such as **left-to-right** (e.g. Latin or Indic), **right-to-left** (e.g. Hebrew or Arabic), **bidirectional** (e.g. mixed Latin and Arabic) and **vertical** (e.g. Asian scripts).







is fun!  
Vertical text



Or make it read from right-to-left.



left-to-right.  
literally turn on its side from  
You can make your browser



## writing-mode property

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

Properties marked with \* have been deferred to Writing Modes Level 4.





## text-orientation property

从1987到现在

mixed

从1987到现在

upright

从1987到现在

sideways





## text-combine-upright property

民國107年5月25日

none

民國107年5月25日

all

民國107年5月25日

<

digits <integer>\*

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





古巴  
Cuba

白俄罗斯共和国  
Belarus

列支敦斯登  
Liechtenstein





## Typography suggestions

Use and declare the correct font-family

*zh-tw*

*zh-cn*

*ko*

*vi*

*ja*

次 次 次 次 次

Image credit: [Tetsuhiro Ueda](#)





Make sure the font-size is large enough

白俄罗斯 Belarus





Set larger line-height for sufficient breathing room

世界上的事就是怪，不想发生的事偏发生了。我把那位迟到的学生带到办公室了解情况。原来他家离学校有二十多里路，他如果要准时到校的话，早晨五点钟就得起床，还要摸黑走上十几里山路。



世界上的事就是怪，不想发生的事偏发生了。我把那位迟到的学生带到办公室了解情况。原来他家离学校有二十多里路，他如果要准时到校的话，早晨五点钟就得起床，还要摸黑走上十几里山路。





Set appropriate margins between paragraphs

我问他想不想走出大山。他说，想。我说，要走出大山就得好好读书。他抹着眼泪点点头。我说，相信老师，老师会帮你的。

这个冬天，每天早晨等上课铃响过后，我和另一位老师轮换着去查他的被褥。如果是湿的，我们就悄悄拿到自己的寝室里烘干。





Use text-align: justify

课外活动时，我尝试着给他们读一些脍炙人口的诗篇：风雨沉沉的夜里，前面一片荒郊，走尽荒郊，便是人们的道，呀！黑暗里歧路万千，教我怎样走好，上帝！快给我些光明吧，让我向前跑，上帝慌着说：光明，我没处给你找，你要光明，你自己去造。



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max-height: 25em

### MNBL女子决赛：昔加末攀高峰夺冠

(吉隆坡 29 日讯) 国手陈慧晶昨晚在第一届大马全国篮球联赛 (MNBL) 女子决赛中爆发，全场轰进 18 分 4 篮板，带领昔加末篮球公会以 60 比 51 击败吉隆坡高峰集团，以大热姿态在第一座 MNBL 奖杯上留名。

#### 陈慧晶夺生涯首个 MVP

陈慧晶在初赛与半决赛并不是特别抢眼，岂知来到决赛却成为了球队的致胜功臣。身高 170 公分的陈慧晶此役 14 投 8 中，命中率高达 57%，尤其最后一节更是独得 8 分，顶住了高峰队的反扑。凭藉决赛的精彩演出，陈慧晶也因此当选决赛 MVP (最有价值球员)，生涯首次获得这一项荣誉。

对于陈慧晶的表现，昔加末主帅戴正钧也赞不绝口，他说：「陈慧晶在这一场比赛的发挥是大家有目共睹的。而除了我们的 MVP (陈慧晶)，汪秀婷、邱嫻嫻也在关键时刻投进了几个三分球，我们才能够在紧要关头将比分扩大。」

#### 多次靠三分球扩大比分

昔加末靠三分球抛离对手的纠缠，本场比赛就出现了好多次，像第三节高峰队追至 20 比 26 时，邱嫻嫻就轰进三分球，然后在 22 比 31 时，汪秀婷也射出一记三分弹，来到比赛最后 5 分钟高峰以 45 比 53 咬紧比分时，邱嫻嫻又适时出手命中三分球，让高峰队多次努力无功而返。

除了陈慧晶，邱嫻嫻与彭燕燕在此役也各射下 8 分，汪秀婷和钟佩金各得 7 分，彭慧萍虽然只得 5 分，但却抢下全场最高的 10 个篮板。

高峰队的陈巧婷此役的发挥也极为出色，射下 23 分 8 篮板，但却无法带领球队取胜。此外叶佛仪取得 10 分 5 篮板，李秀雯 8 分 6 篮板，伊查蒂 7 分 6 篮板等。

#### 雷升龙：发挥输对手 5%

高峰队主帅雷升龙表示，高峰队其实在本场决赛发挥得不错，只是昔加末的表现更为出色，防守也比他们更为严谨。

雷升龙说：「我们和昔加末其实都属于同样水平的队伍，胜负关键就要看双方球员的临场表现，而在这一方面我们在决赛中输了 5%。」

马来西亚 2015 年 11 月 29 日

margin-bottom: auto

margin-top: auto



# Yayoi Kusama

A vital part of New York's avant-garde art scene from the late 1950s to the early 1970s, Yayoi Kusama developed a distinctive style utilizing approaches associated with Abstract

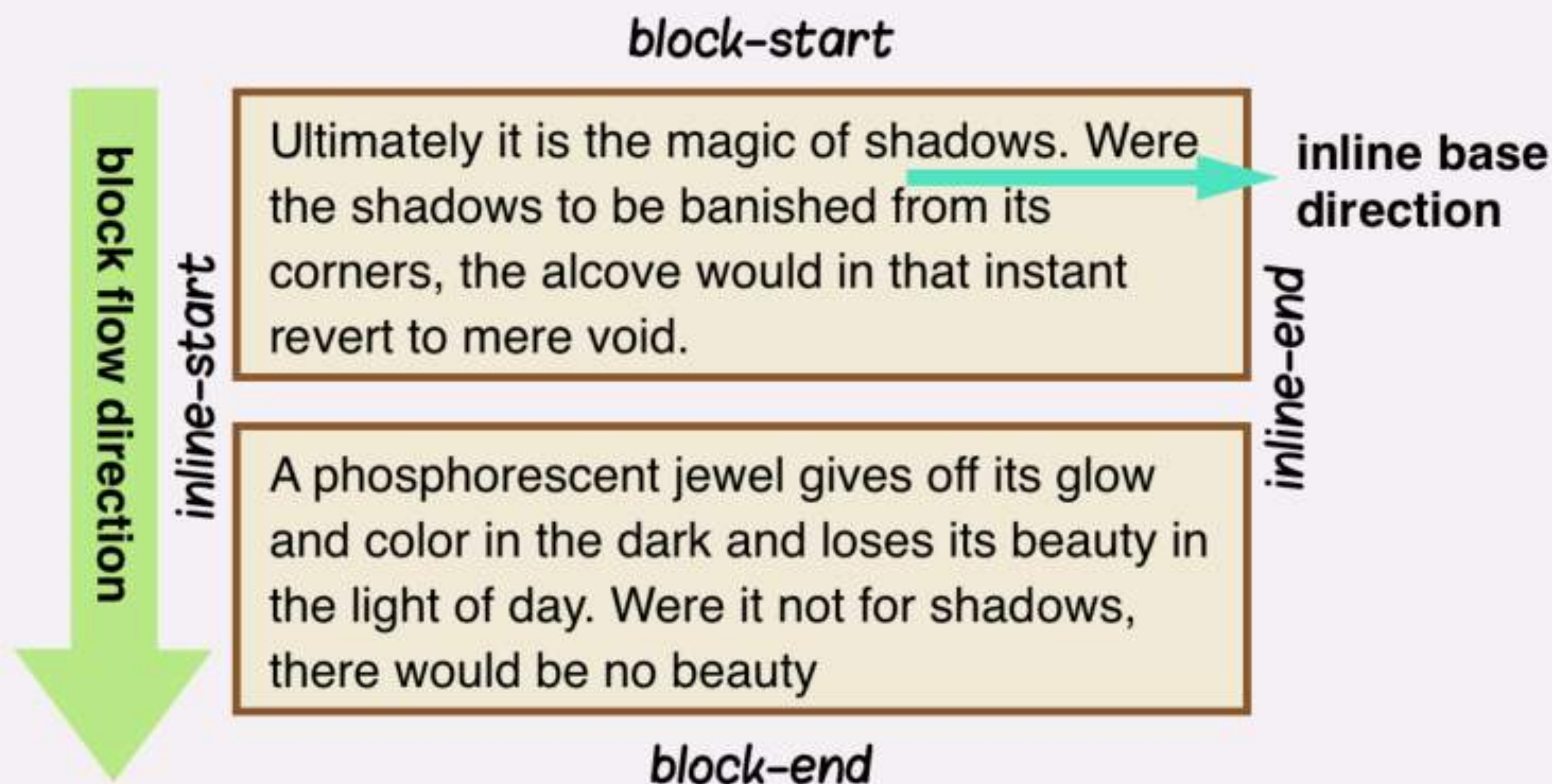
Expressionism, Minimalism, Pop art, Feminist art, and Institutional Critique—but she always defined herself in her own terms. “I am an obsessional artist,” she once said. “People may call me otherwise, but...I consider myself a heretic of the art world.”

Kusama was born in 1929 into a well-off but dysfunctional family in Nagano, Japan. Largely shielded from the horrors of World War II, she was, as she has claimed, nevertheless scarred by her mother's cruelty, her father's infidelities, and her family's discouragement of her interest in art making. She started painting at the age of 10 when she began experiencing the visual and aural hallucinations that would plague her, while also fueling her creativity, for the rest of her life. She has maintained that her “artwork is an expression of my life, particularly of my mental disease.”





## Logical directions





# CSS Logical Properties

## CSS Logical Properties

Use start/end properties that depend on LTR or RTL writing direction instead of left/right

IE	Edge	Firefox	Chrome	Safari	IOS Safari	Opera Mini	Chrome for Android	Android Browser	Samsung Internet
9	15	60	67	11	10.3			4.4	5
10	16	61	68	11.1	11.2			4.4.4	6.2
11	17	62	69	12	11.4	all	69	67	7.2
	18	63	70	TP	12				

✓ Partial support Prefixed

Global: 37.41% + 51.02% = 88.43%

Data from [caniuse.com](https://caniuse.com) | Embed from [caniuse.bitsofcode.de](https://caniuse.bitsofcode.de)

[Enable accessible colours](#)





陈慧品在初赛与半决赛并不是特别抢眼，谁知来到决赛却成为了球队的致胜功臣。身高177公分的陈慧品此役14投8中，命中率高达57%，尤其最后一节更是独得8分，顶住了高峰队的反扑。凭借决赛的精彩演出，陈慧品也因此当选决赛MVP（最有价值球员），生涯首次获得这一项荣誉。

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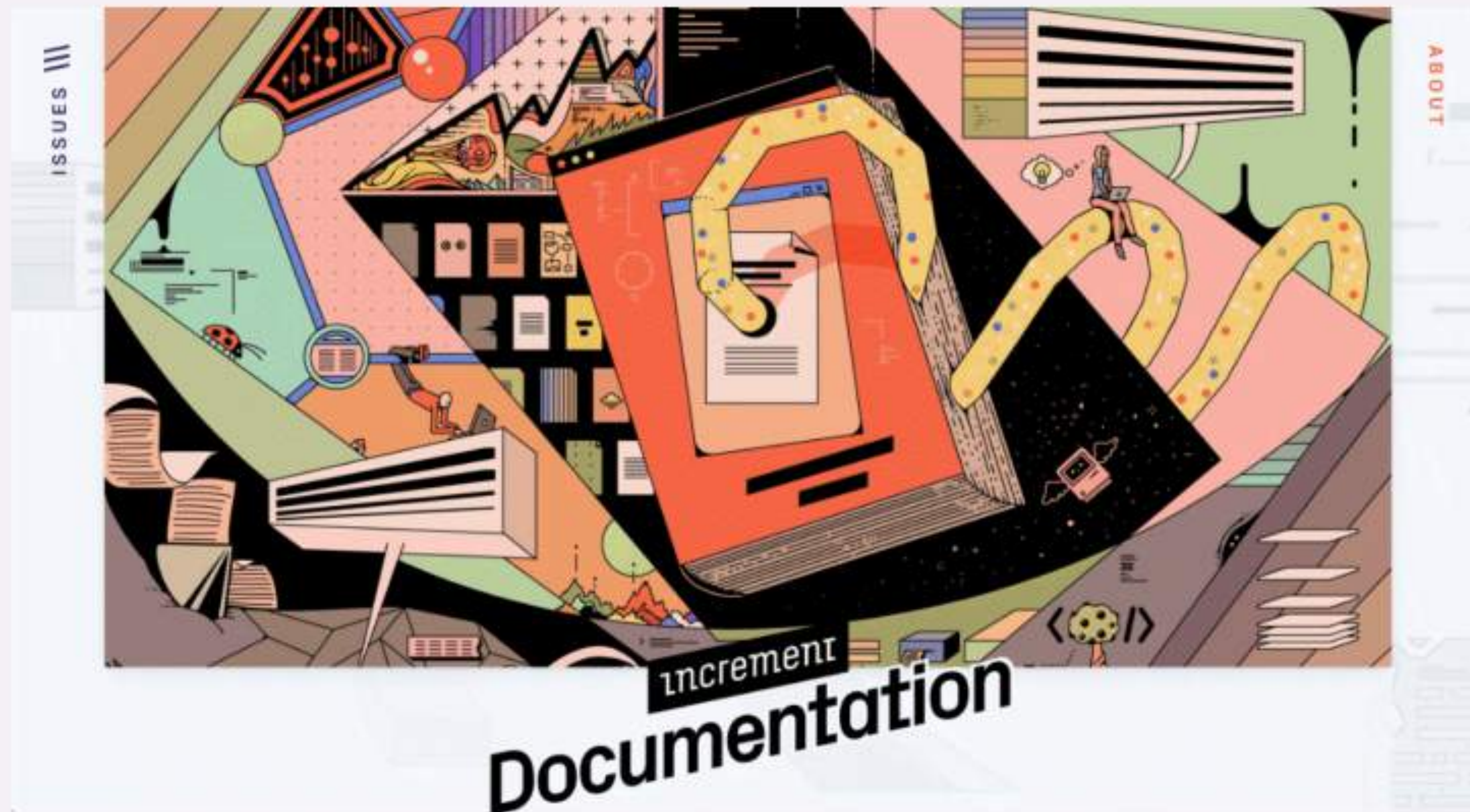
雷升龙说：「我们和昔加末其实都属于同样水平的队伍，胜负关键就要看双方球员的临场表现，而在这一方面我们在决赛中输了5%。」

### 盼队伍增多赛期拉长

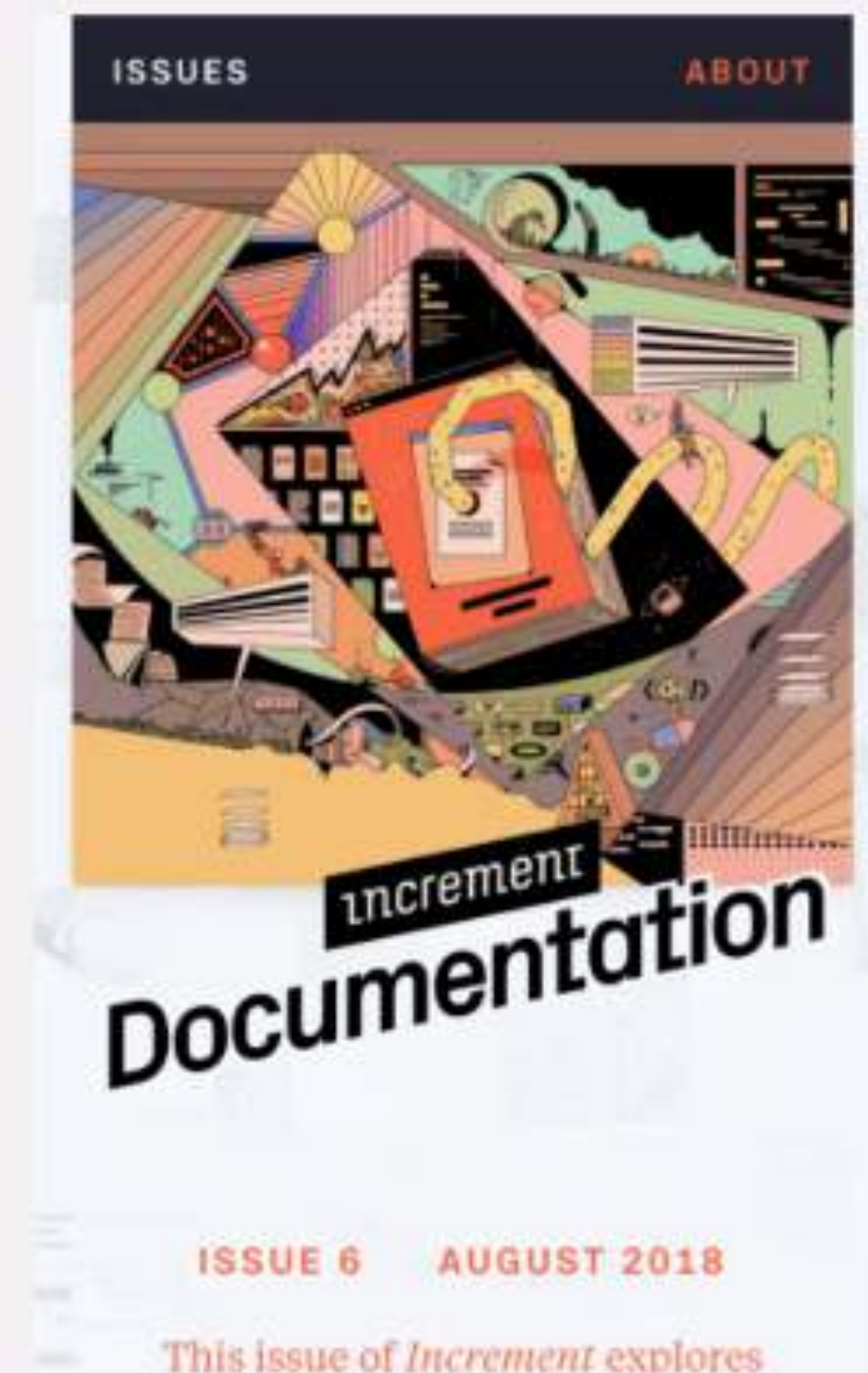
另一方面，戴正钧也谈到了MNL的崛起。戴教练认为MNL的主办对大马篮运来说是一个正面的发展，美中不足的是第一届的队伍少了些。他说：「但有了第一届就代



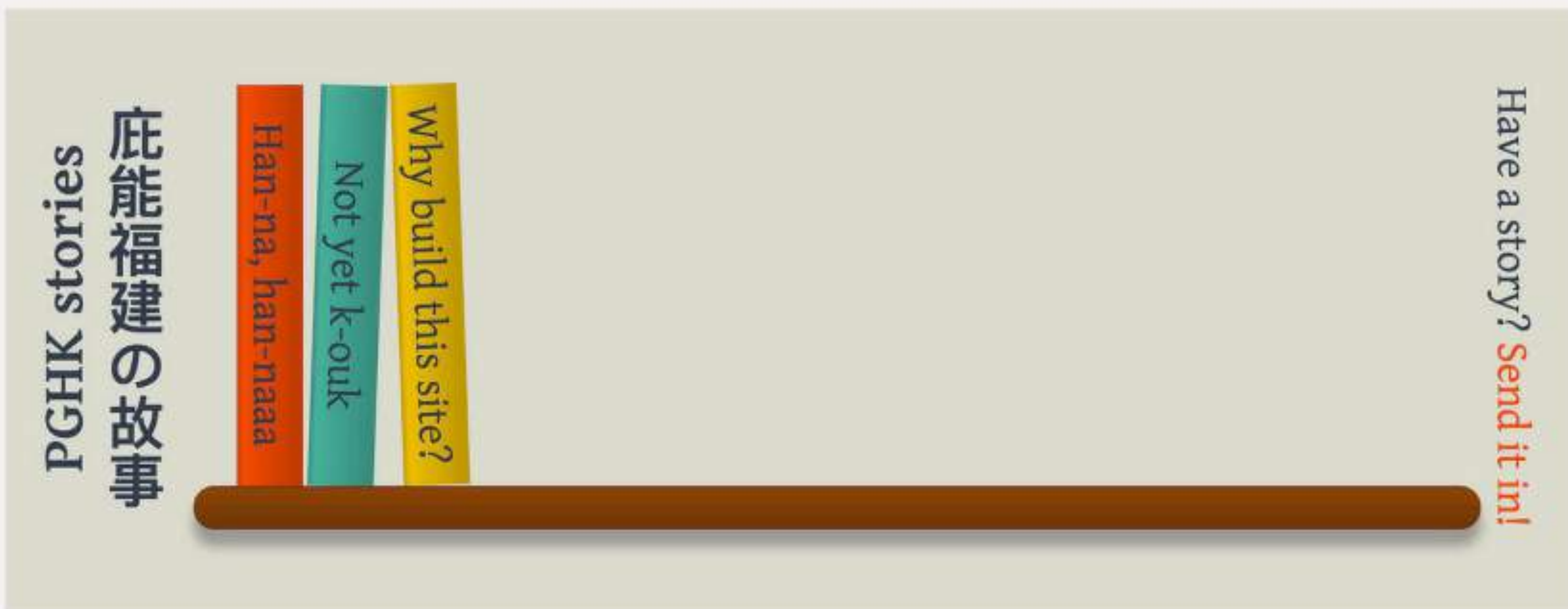




<https://increment.com> by Stripe







Bookshelf-style design with vertical text





[Capabilities](#)[Partners](#)[Blog](#)[Contact](#)

## Cognition

the Wismut Labs engineering blog

*posted on Apr 24, 2017*

# Building for cross-browser compatibility

Front-end

*This is the third post of a multi-part series about developing the brand identity for Wismut Labs.*

The [previous post](#) covered a number of design decisions made with regards to the overall style of the Wismut Labs brand. This post will focus on the actual building of the Wismut Labs website.

Vertical blog tags







Home

This is a website dedicated to Penang Hokkien, the language of my hometown. I talk about the inspiration for the content of this site in the [inaugural story post](#). But I am also a web developer, and so this site also serves as my CSS playground for experimenting with the concept of mixed writing-modes. If that sentence made sense to you, [technical details here](#).



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Responsive vertical to horizontal layout







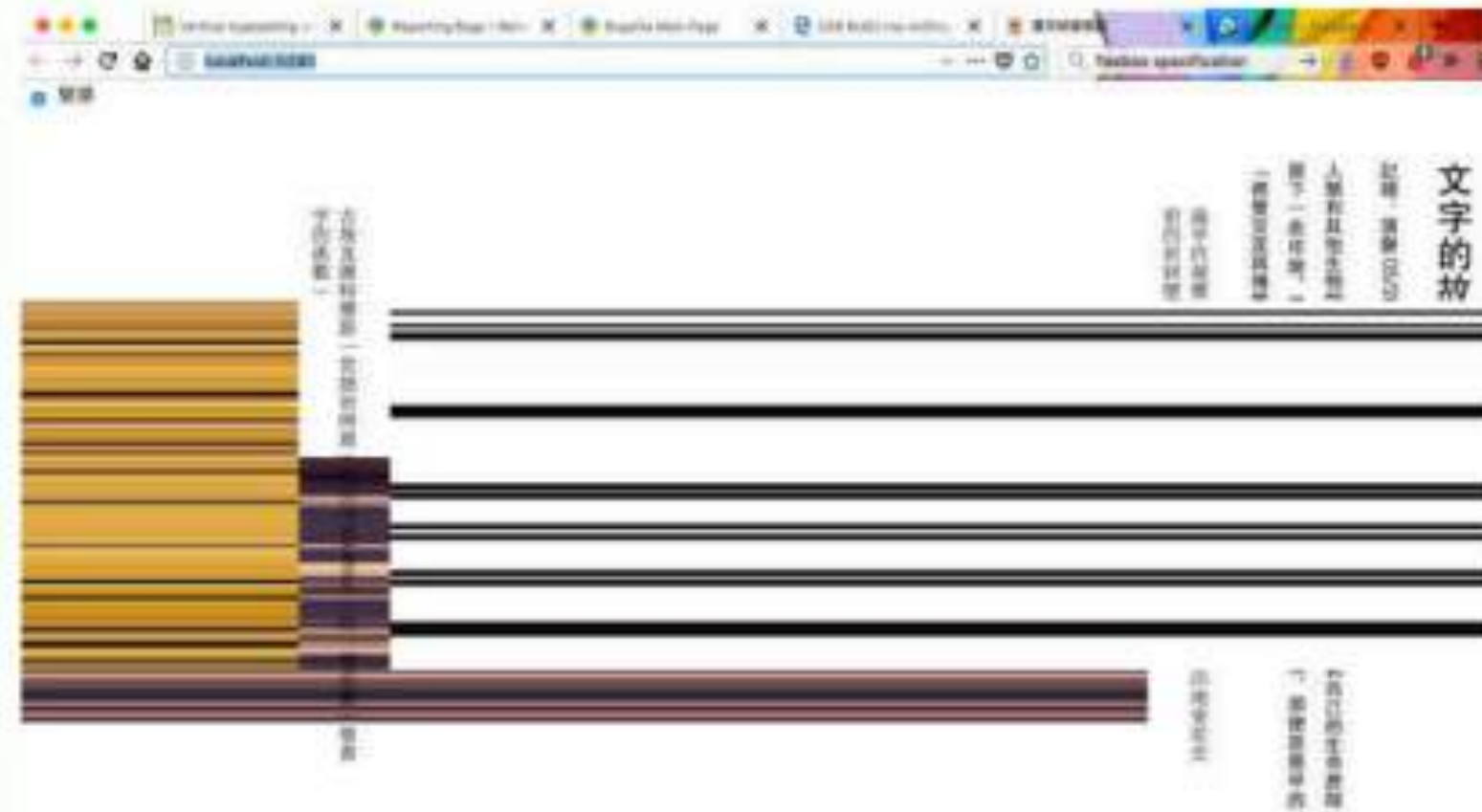
Vertical mobile navigation





I had wrapped the images that were supposed to do the stacking thing in a `div` that had `display: flex` applied, and this somehow messed up the rendering in Firefox while in vertical writing mode. I suspect this behaviour is related to the following bugs: [Bug 1189131](#), [Bug 1223180](#), [Bug 1332555](#), [Bug 1318825](#) and [Bug 1382867](#).

In the meantime, I'm kinda intrigued by this effect that images, which are flex children, have in vertical writing mode on Firefox. It's like the browser just went nope 🙄🙄🙄.



<https://www.chenhuijing.com/blog/vertical-typesetting-revisited>



## EdgeHTML issue tracker

Report or search EdgeHTML issues, such as problems with site rendering or standards compliance. To request web platform features, visit the [Microsoft Edge Platform Suggestion Box](#). If your issue is urgent, please contact [Microsoft Support](#).

### Issues (22)

For website details, visit [current build page](#).

writing-mode  [Sign in to file your participation](#) [Close](#)

#### CSS BFC (no-writing-mode: tb-rl)

URL: [Alpha Steps: Layout B-11: Issues in Microsoft EdgeHTML/WebKit/WebKit2](#)  
Expected Results: STOPS (1) not tested (0) display: inline-block; (no-writing-mode: tb-rl) Actual Results: [REPORT BUG](#)

#### <legend align=right> doesn't work in vertical writing-mode

See <https://github.com/microsoft/edgehtml/issues/1252> <legend align=right> in vertical works in WebKit/Chromium but not in Edge (border works in Edge) <DOCTYPE html> <html>

#### Baseline of web font moves to right in vertical writing mode

Visit <https://blacksnake.netlify.com/> to see the issue in vertical writing mode. Also, if you are on the right of the screen, the baseline of vertical writing mode does not align with the baseline of the text.

#### <legend align=right> doesn't work in vertical writing-mode

See <https://github.com/microsoft/edgehtml/issues/1252> <legend align=right> in vertical works in WebKit/Chromium but not in Edge (border works in Edge) <DOCTYPE html> <html>

#### CSS writing-mode doesn't apply to unknown element

Visit <https://blacksnake.netlify.com/> Expected: The text "vertical" is laid out vertically. Actual: The text "vertical" is laid out horizontally.

#### Incorrect placement of superscripts and marks in vertical writing mode

Summary: Edge doesn't place superscripts and marks (e.g. subscripts) correctly when the text is in vertical writing mode. The text is not aligned with the baseline of the text.

#### Direction mapping of CSS 'border' property in vertical writing mode

URL: <http://webcodelab.com/edgehtml/URL> Expected Results: Comparison with WebKit standard. Actual Results: [SEE DIFFERENCE](#)

#### Scrollbar is on the left when writing-mode: vertical-rl is applied to html or body element

Scrollbar is rendered on the left instead of the right when writing-mode: vertical-rl is applied to html or body element. Scrollbar rendering does not seem to be affected by the specification, as it is not a CSS property.

#### Baselines of inline-block and inline-table do not respect the text-align: left or the first row's 'writing-mode' is 'vertical-rl'

Steps: Run any of following tests: <http://webcodelab.com/edgehtml/URL> Expected Results: Comparison with WebKit standard. Actual Results: [SEE DIFFERENCE](#)

#### Absolutely positioned elements positioned incorrectly in vertical writing mode if it is over-constrained

Steps: Visit <http://webcodelab.com/edgehtml/URL> Expected Results: Comparison with WebKit standard. Actual Results: [SEE DIFFERENCE](#)

#### Setting element.style.writingMode sets style="" (no-writing-mode: tb-rl) instead of style="writing-mode: vertical-rl"

URL: [Alpha Steps: Layout B-11: Issues in Microsoft EdgeHTML/WebKit/WebKit2](#)  
Expected Results: STOPS (1) not tested (0) display: inline-block; (no-writing-mode: tb-rl) Actual Results: [REPORT BUG](#)

#### (writing-mode: CSS writing-mode Does Not Support) (Priority)

URL: [Alpha Steps: Layout B-11: Issues in Microsoft EdgeHTML/WebKit/WebKit2](#)  
Expected Results: Comparison with WebKit standard. Actual Results: [SEE DIFFERENCE](#)

#### Direction mapping of CSS 'border' property in vertical writing mode

URL: <http://webcodelab.com/edgehtml/URL> Expected Results: Comparison with WebKit standard. Actual Results: [SEE DIFFERENCE](#)

#### pageXOffset and pageYOffset are not physical dimensions in vertical layout

Visit <https://blacksnake.netlify.com/> and scroll to left. Expected: pageXOffset decreases. Actual: pageYOffset increases. pageXOffset refers to "x-coordinate" according to CSSOM View but it

The cursor of single line text editor from element is too small in writing

WebKit Bugzilla									
Bug 100									
Search	File	Owner	Status	Writing mode	Search	100	1000000	100	100

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bugs

Report a bug

Search

Open issue

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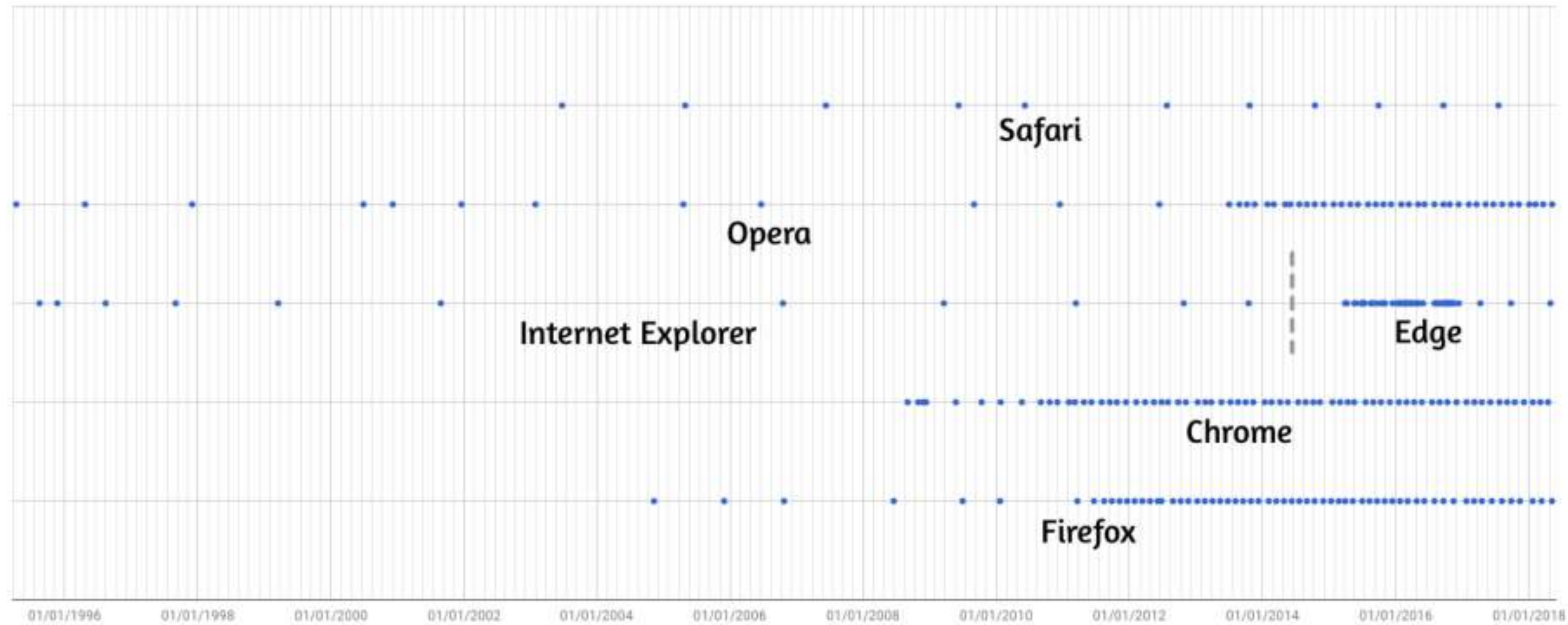
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# Frequency of major browser releases







Bugzilla@Mozilla



Webkit Bugzilla



Chromium Bugs



EdgeHTML issue tracker





## A long list of references

- [Internet World Stats](#)
- [Language Diversity Index Tracks Global Loss of Mother Tongues](#)
- [The Internet Is Killing Most Languages](#)
- [After decades of Russian dominance, Belarus begins to reclaim its language](#)
- [The Endangered Languages Project](#)
- [Source Han Serif / Noto Serif CJK History & Development](#)
- [Chinese Fonts & Related Issues](#)
- [Variable fonts, a new kind of font for flexible design](#)
- [Introducing OpenType Variable Fonts](#)
- [fvar — Font Variations Table](#)
- [Variable Fonts on the Web](#)
- [Getting started with variable fonts](#)
- [全球首款! 文鼎晶熙黑體支援可變式字體格式](#)
- [Creative text effects with CSS](#) by Mandy Michael (video)
- [W3C Internationalization & Text Layout Requirements](#)
- [Best Practices for Chinese Layout](#)
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<http://tategaki.github.io/awards/>



<http://labs.jensimmons.com/>



# Дзякуй



<https://www.chenhuijing.com>



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[@huijing](#)

Font used is [Farro](#), by [Grayscale](#)

