

On Keyboards and Things...

Jack Rosenthal

26 October 2015

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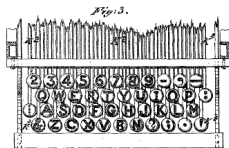
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The resulting layout looked like this:



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- Sholes died of tuberculosis

Issues with QWERTY

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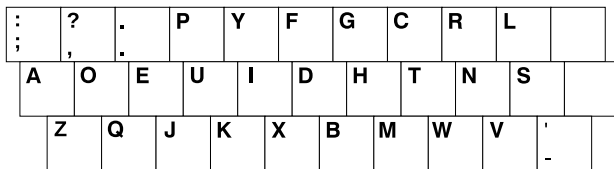
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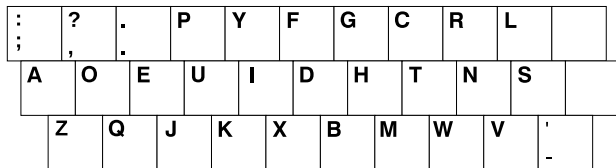
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- Most typing is done with the left hand, which for most people is not the dominant hand.
- About 16% of typing is done on the lower row, 52% on the top row and only 32% on the home row.

Dvorak to the Rescue!

In 1932, Dr. August Dvorak and Dr. William Dealey designed a keyboard layout based off the concept of a *home row*.



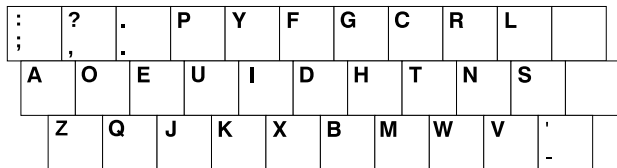
Dvorak to the Rescue!



Dvorak and Dealey's design principles:

- Letters should be typed by alternating between hands

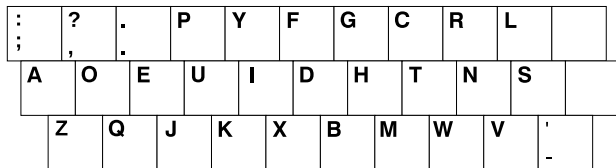
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:	?	.	P	Y	F	G	C	R	L	
;	,	‘								
A	O	E	U	I	D	H	T	N	S	
Z	Q	J	K	X	B	M	W	V	'	
									-	

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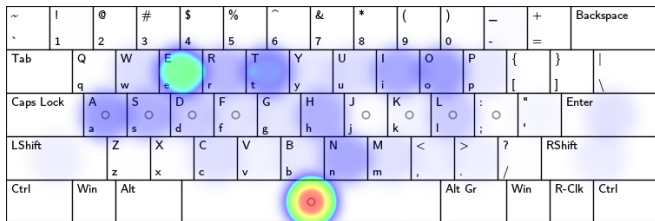
:	?	.	P	Y	F	G	C	R	L	
;	,	;								
A	O	E	U	I	D	H	T	N	S	
Z	Q	J	K	X	B	M	W	V	'	
									-	

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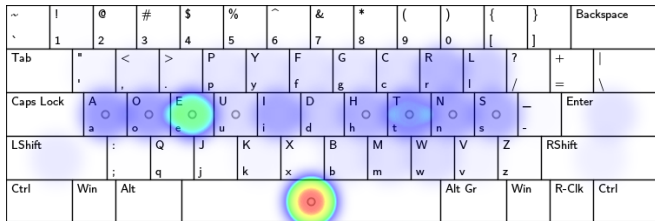
- Letters should be typed by alternating between hands
 - Vowels are on the left, consonants on the right
- The most common letters and bigrams should be the easiest to type.
- The least common letters should be on the bottom row which is the hardest row to reach.
- The right hand should do more of the typing because most people are right-handed.

Do your fingers hurt?

Typing *Nineteen eighty-four* by George Orwell



QWERTY: Distance fingers moved: 10.4 miles



Dvorak: Distance fingers moved: 6.2 miles

Why did I initially switch keyboard layouts?

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- Jesse Weaver is entirely responsible for this.

Why did I initially switch keyboard layouts?

- Jesse Weaver is entirely responsible for this.
- But he led me to do my own research.

Colemak

~ `	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9) 0	- _	+ =	← Backspace	
Tab ↔	Q	W	F	P	G	J	L	U	Y	:	{	}		
← Backspace	A	R	S	T	D	H	N	E	I	O	"	'	↵ Enter	
Shift ⬆	Z	X	C	V	B	K	M	<	>	?	Shift ⬆			
Ctrl	Win Key	Alt									Alt Gr	Win Key	Menu	Ctrl

~ `	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9) 0	- _	+ =	← Backspace
Tab ↔	Q	W	F	P	G	J	L	U	Y	:	{	}	
← Backspace	A	R	S	T	D	H	N	E	I	O	"	'	↵ Enter
Shift ⬆	Z	X	C	V	B	K	M	<	>	?	/	Shift ⬆	
Ctrl	Win Key	Alt							Alt Gr	Win Key	Menu	Ctrl	

Design principles:

- Change QWERTY as little as possible while bringing efficiency similar to Dvorak.
- Be easy to learn if you are already a good QWERTY typist.

~ `	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9) 0	- _	+ =	← Backspace
Tab ↔	Q	W	F	P	G	J	L	U	Y	:	{	}	
← Backspace	A	R	S	T	D	H	N	E	I	O	"	'	↵ Enter
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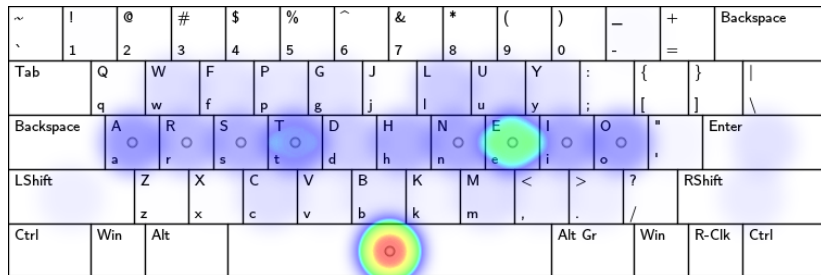
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- Be easy to learn if you are already a good QWERTY typist.

Why I abandoned it:

- It's no better at programming than QWERTY.
- It doesn't have enough hand alternation for my liking.
- Too much lateral motion while typing.

Colemak: Heat Map

Typing *Nineteen eighty-four* by George Orwell



Distance fingers moved: 5.9 miles

Antibracket

A keyboard layout designed to combine the ambition of Dvorak, practicality of Colemak, and the symbols of Neo.

`	1	2	3	4	5	6	7	8	9	0	-	=	BKSP
Comp	W	F	U	Y	Z	X	H	P	B	Q	Esc	L0	
Tab	L	O	E	A	I	N	R	T	D	S	Pnc	Enter	
Shift	,	G	M	J	;	V	K	C	.	Num	Shift		
Ctrl	Win	Alt	Space					Alt	Win	Menu	Ctrl		

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Comp	"	_	[]	^	!	<	>	=	&							
Tab	/	-	{	}	*	?	()	'	:					Enter		
Shift	#	\$		~	`	+	%	\	@						Shift		
Ctrl	Win	Alt	Space					Alt	Win	Menu	Ctrl						

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																	BKSP	
Comp	PD	BS	U	Del	PU		7	8	9									
Tab	Hm	L	D	R	End	.	4	5	6								Enter	
Shift		,		[]		0	1	2	3							Shift	
Ctrl	Win	Alt	Space						Alt	Win	Menu	Ctrl						

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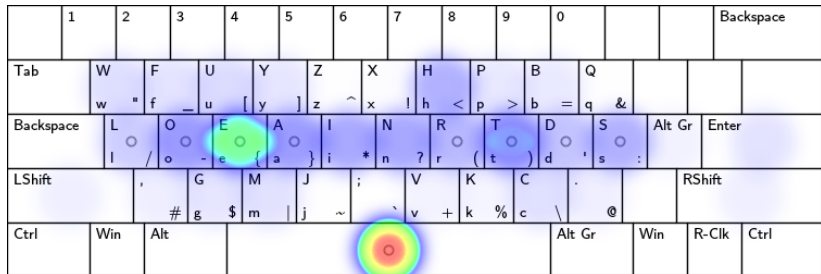
`	1	2	3	4	5	6	7	8	9	0	-	=	BKSP
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Shift	,	G	M	J	;	V	K	C	.	Num	Shift		
Ctrl	Win	Alt	Space					Alt	Win	Menu	Ctrl		

Why I abandoned it:

- I already knew how to type in Colemak and was lazy.

Antibracket: Heat Map

Typing *Nineteen eighty-four* by George Orwell



Distance fingers moved: 6.3 miles

The WULY Antimak

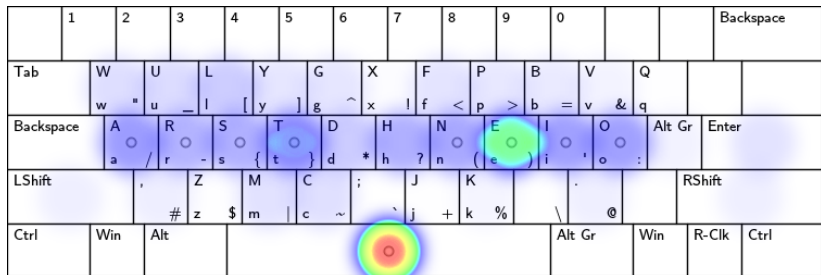
Me on 13 Feb 2015

An ergonomic modifier based keyboard layout with Antibracket's symbols and numbers and a home row practically stolen from Colemak. Also focuses around ease of vimming and still optimised for the English language... so basically it's crack for your keyboard.



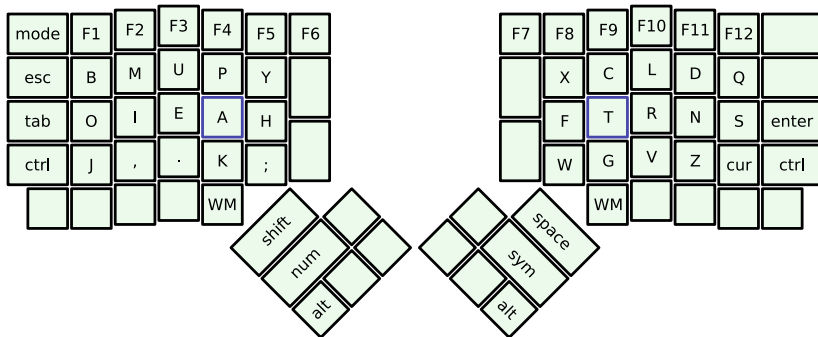
WULY: Heat Map

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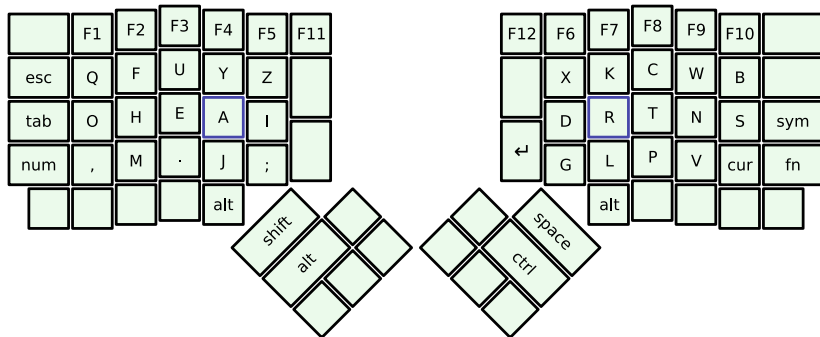


Distance fingers moved: 5.6 miles

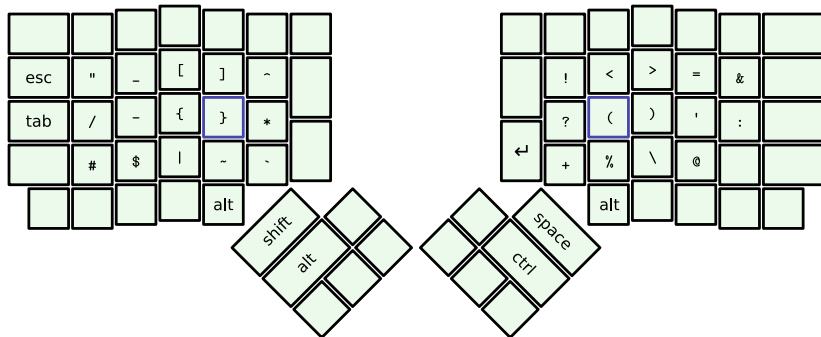
My BuTeck ADNW Variant



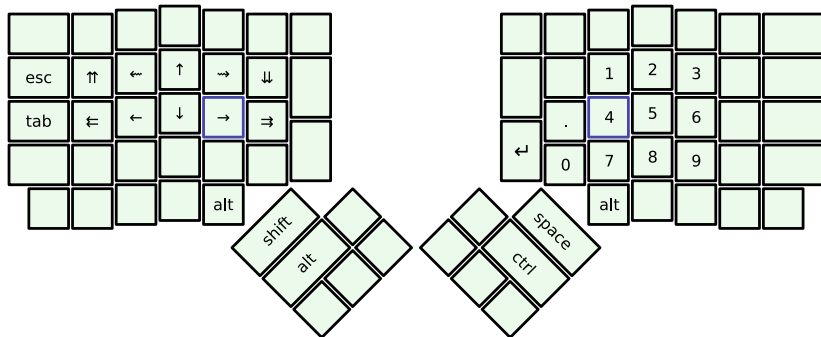
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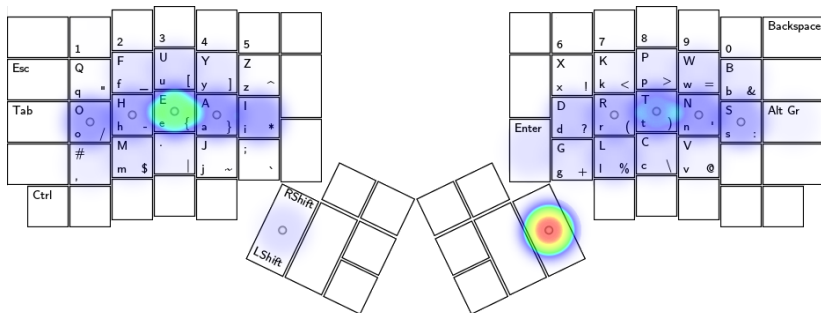


Jack's Third Layout: Three



Three: Heatmap

Typing *Nineteen eighty-four* by George Orwell



Distance fingers moved: 4.9 miles

Other notable keyboard layouts worth researching

- Programmers Dvorak

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- Workman

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- 7 Impress your friends.

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- You should do your own research and find a keyboard layout you like.
- There is no best keyboard layout, each layout has it's advantages.