## Keyboard secrets: To do

univac console red
visual
( images -p .341 simulate CRT better + also Lenore Fenton later arrowkeysgallery finalize
( remove the orange line
gaming modern same bk as next page
fujitsu oasys - yellowing of the keyboard + crease around the printer
( color reference http://museum.ipsj.or.jp/en/computer/word/0009.html
re-check enter collection
Red-electric ads to use orange instead of red of unify red dvorak touchstream clean up rotate a bit jesse's stuff
( and https://www.alamy.com/technician-repairing-an-old-manual-typewriter-
mumbai-maharashtra-india-asia-image330800361.html
update image cap
photo colors
(v) replace all the beige colour to f2d2bf
replace purple with 151122 ? 2 e293d
red b50c00
model mand teletype 28-are weird colors
Include Selectric composer fonts-or otherwise redothe page
victor two-orange-caleulators - make the-edges blurry-on the-one inteh-bk
international 2: japanese high res, p-944
aesthedes fake-screens
univacconsole reflections
univackeyboard fix slant
( and reflections
unimatic fix shadow
done a bit
( I on first page
v I on second page
(
Acknowledgements
v Do tasks
Check readers
$\checkmark$ Go through the rest of JSON quickly
redo all the stuff
Close the file
8.7613
9.0906 in
0.3293
re-test the endings of each chapter once more
v and test if the last footnote is here
finished at 243
( three lines mono is wrong p. 243
rerunning again
( test 46 and 199 and 585 spacing image caption

(test double spaces: test again "one canadian firm"
test 1055test 951 tenki horizontal
go through it quickly AGAIN and test "the key to the situation" vertical centering
check again after the whole book is assembled again for page numbers dropping properly
test for quality of images (right resolution) 200dpi
take a pass to see repeated words on subsequent lines and "I" at the end etc.
test for photo darkening158
$\checkmark$ 340 900ended vol 1
test for paragraph ending widows
, ended vol 1
test image captions vol 1
test for dual page numbers
test for block quotes at the bottom
voll done
vol2 done
write down manual fixes

## especially test excoptions from-logging

(actual size) add non breakable space in between - or just test - tested manually test inline soldiers etc.
re-check widows from warnings - tested manually
manually test for ," order - tested manually
two spaces!

test all again by hand
into anvil and shuttle - test after rerunning (fixed programmatically)
to comic sans in[ ]microsoft word - test after rerunning (fixed manually)
They have[ ]an obvious actuation point - test after rerunning (fixed manually) also add trimming to the bottom! (image cap) on all sides
the key to the situation move down a bit - write down the whole pass of this kind of stuff
done for vol 1
test 816 - the vertical numbers were different for some reason (worried about that)
typesetting details
more footnote symbol investigation
Page 264: A little tight at the footnote mark and paren: I would tighten to the left of footnote mark add track outward to its right
page number (new) slashed zero fix sizing is off
, not working - fix fix manually
"B thing - hair space - add programmatically
( p1196 I's add thin space
( incorporate in text
"lowercase I" manually similarly
chapter about punch cards - acronymitalic works, but italic doesn't have small caps! $9.5>8.75$
search for acronymitalic in general bake into step 1
vol 1


THINK
Clio and the economics of QWERTY
A novice constructs an IMSAI
vol 2

perhaps a whole QWERTY
colorful variants called ANSI, PETSCII
count all the numbers
100
200
300
400
500
600
700
813!
spreads file: update color profile of images

## 871 delta

IDKFA IDDQD AcronymItalic
add to list (manual so far)
©
finish spreadsheet visual to dos
v
fonts
triple arrows for endpapers etc.
(Vix repetition
(V) manual
key font
(V) Floating Shift
(V) Shift Freedom
(V) test: why is this shit not working

Later tasks:

Finalize orange: FF672F $\rightarrow$ FF742F G needs to be116
Swatch color
SVG
Backgrounds of all the images redo images to be transparent? (not sure)

Unify color space
orange chords $\sim 1026 p$
( ) jan typo
$\checkmark$ jan new typo
make 50/122 gray
dolph fix dots
fix typo
footnote symbol 2023.03

finish acknowledgements
small caps image cap
p 443 ibm mt/st
p $440 \mathrm{ibm} \mathrm{mt} / \mathrm{st}$ small caps image cap p 456 ibm mt/st small caps image cap p 458 ibm mc/st
bring back 4 spaces addedSpaces $=' \quad$ '
ready for vol2/09 above
test
tested vol1
( tested vol2
test
, p48 space in image caption at the beginning p201
p492
bar codes move up
typesetting details
p24 image cap spacing
now that we have variable output sans, add small caps to image captions

$\rightarrow$ use "Image caption Credit"
make slightly bigger
(
168 , e.g. p 168 "blickensderfer no. 6 with qwerty keyboard"182
page 556 - don't have to align to the bottom if there is nothing on the right page page 536 move up because it bottom aligns to nothing at all (8/12/24) - broken because it breaks the paragraph?

Find one that shouldn't be touched
??? same arrow keys penultimate with hartmut
add logging to exceptions

8 / last resort 8.76138 .76130 .15
12 yope
24 yope
6.4 font size

520
fonttools varLib.mutator ORIG-OutputSans2Beta-Regular.ttf wght=520 wdth=100
ttx ORIG-OutputSans2Beta-Regular-instance.ttf
edit ttx
ttx the-ttx-file
( table of contents
later

1.1154 in $\rightarrow 1.11$ in
move to main
chapter numbers in table of contents, for when we refer to "chapter 25 " etc.?

tabular lining
text chapter no
X: 7.4597 in / W: 5.5653

TOC hanging quotes right hand side broken - doesn't get replaced to TOC on the other side? (because it was out of screen)
update page numbers to be whatever index landson?
atari symbols broken in one chapter
p 1070
atari check monospace
add check to make sure comma gets italicized if after italicized word small caps: if starting a sentence, don't do it! "CBS studio fessed up later that night."
match angles (like canon cat and swintec)
unify visual patterns
unify all b\&w
unify colour tints/filters
colophon
Update paper and index presented in colophon
finish a note on typography
finish index
finish endnotes/bibliography
barcode
writing tasks
go through style guide and check
Go through computer spell check
italic titles verify capitalization
extra space when italics start, e.g. The game is called Leisure Suit Larry ln The Land Of The Lounge Lizards.

AcronymFoothoteBleckquoteltalic use 64 not 63
add photos to takeOverlaySpace shuttle also the one in indesign with heartsData generalWe might already have other photosnew stuff

76 spacing fucked up
one line - add one space more
index experiments
for indexing for jan
annotate images without captions
continue from chapter 20 onward
create a glossary between key symbols and keys

```
das keyboard on black
new enters Cursor stick
```

$\checkmark$ Page 52 / The No. 10 in upper-left seems a little like it's hanging in the wrong place (slightly too high) relative to the Helios to its right in the spread.
( (ibm?) 1052 top darken
darker grass on tinyhuge
fix how step 4 duplicates numbers?
enter
update enter coll + TK
eY -50
$Y b+50$58-vol4
94 volu
303 vol 1

## 1-800-cat-HOME fix

Page 1149: Looks like a spacing program around the $Y$ in KeYboard:
> It stood for DiSplay and KeYboard. May need some manual kerning before $Y$ and after Y
( better (fractional) arrows for NewSemiKeys
(v) ready in the font incorporate in the flowgorton


2 [57] kerning
[69] kerning
export againkey font - see the other file
find a good font for Japanese/Chinese letters
fix drop caps
make univac chart blue
ask about it
edits

## yet, check

## shift: add dates to-ads, or at least roughly-a-date-poriod

hungarian

update spreadsheet
v update captions - moved order on the page!
add image caption to pinsactual size
add "compare w/" "compare-speeds"
same on the other guy
edits
elwro 800 - extra row
, Typewriter teachers $\rightarrow$ touch typing teachers
"He kept thinking of the typists"
"Was the impresssion" $\rightarrow$ illusion
and Motor memory is a beautiful thing. It allows us to walk, ride a bike, catch a ball, play piano, and perform other, often incredibly complex tasks - and do so without consciously thinking about them - and its properties made us want to try to understand it for a long time

To those familiar with computers, the last paragraph relates a common occurrence even

Aling Kwai restoration?
page 104 "tableau" yellow center go lower 3.1392 in test
page 542 old byte photo
page $54 x$ specimen of type shift up arrow $x 2$
re-test
terminals page 395+
"Life on the Mississippi" check the hyphen
"Will admit" I. QWERTY chapter move down wrapping
arrow keys 96-97 needs work
re-test
( again
function keys 117 right spacing
re-test
shortcuts 131+
switches 141+
enter 244+
( retest
( 266-267 retest
$299+(-4) ?$
v 339 the whole chapter
( reduce amstrad to 3.725 in and redo
and iphone, too
v 393+ retest
516+ (-4) correcting
584+

588 is broken on the left
v 588 start redoing
v siri/microsoft fix left image cap width
fix the arrow encoding
orange bk redo
GamingArrowKeys

QWERTYEvolution
ModernKeyboardLayouts
ZXSpectrumDisassembled
Semigraphics4
Emoji
protoswitch
3278pc
tetris
vol 1 [needs to be 607]: 949899010716
scan text got moved!!!
test

122/50 fix z-index
check position of each column on all pages in PDF
vol1
25 broken (two portraits) - test
acknowledgements (x2) left and right
dvorak hands both sides
electromatic both sides
olympia reporter right
selectric terminal left
selectric bug 1 - test
selectric bug 2 - test
early adopter juxtaposition 2 (bambino)
vol2
zx82 right - test
model faccessories - test
four arrow keys at the top - might be funny
tron tk1 - test
orbitouch both sides - test
dejam key left
three shifts left
four shifts + double shot left - test
space cadet both sides
epson full business both sides - might be funny
remington portable both sides - test
cases left - might be funny
japanese ime left

## semi balls right

artisanal both sides
half spacing left
$\checkmark$ fix the position of the keys on chapter openers
ergologic replace (coming)


Darwin arrow keys
Darwin semi
darwin mouse
the new one (darwin)
( color reference https://twitter.com/PaintYourDragon/status/ 1629928447278731264
carriage return red
( carriage return from the guy (phillips)
( Garriage return receipt
$\checkmark$ Japanese kbd small return
( the enter from Model M that came?
( reflow
$\checkmark$ add image cap and spread title
v remove A
add to take photo of 65 WORDS
v and the other one
and the new one
review and obsolete "To do/distribute/contact/reach out"
add to spreadsheetspecimens of type / peter weil around + bk color $\checkmark$ decimal tab on the left make nicer
$\checkmark$ there is some error when doing italics if you run the whole book - maybe this is the same as above
dropping down page numbers
( even in p534, 584, 586, 673
not if it's too low, e.g. p714
maybe even p647 drop down
also update the key reference if on the left (or hide)
, maybe don't show keys then?
did it solve the problem?

## |||||||||||||||||||||||||

from test print \#2
make orange nicer
( calibrate first!
increase letter spacing in keycaps
move/clean-up the shadow mask?
bug: A Novice Constructs an IMSAI: An Attorney Builds his First Computer. - IMSAI stops italicization
actually italicize, too
( should work except Mercury Text G2 LINE HEIGHT / Italic doesn't show up in InDesign for some reason
try to export with a unique name instread
should be working already in the iPhone chapter, test it here, though

Is it possible for keys to be saved to PDF so that they are readable?
after actual printing prototype
add more toxtures and grain for backgrounds?
colour check
punch card: first card make sure start at the same place
(v) should be ok, test
v write a script
detect extra spaces left behind by things flowing do a detection of 1.5 widows at the top?
do a detection of a small word at the end of para?
howard check in if his images are shared on the page
go through the style guide (in Google Docs) and double check everything once more
writing tasks
update years from 2019 etc.
( search for all the dates like 2017, 2018, 2019, etc.
make sure to update "2017" to 2021
"Which is a lot. This book has 270,000 words." update
2021/2022 $\rightarrow 2023$
check for TK
japanese kbd arrow keys
japanese kbd semi
new lanier word processing kbd
The international prototype from the guy
clean up logitech/logicool - on the left in the upper right corner strange diagonal QWERTYEvolution fix top/bottom edges
test the other one, too, just in case
QWERTY QWER•TY etc. layouts visual spread vertically
modernsteno fix cable
redo remington (v. caligraph) side so that you can see the keys?

## SPREAD:Circle shadow looks dumb

rewrites - add shift keys endpapers?
finalize Keyboard secrets: 1/16 reduction
Unify layouts
make a pass for colour matching
Widows and orphans passpass so that the ending of chapters is on the last page always $\checkmark$ pass for weird empty space at the bottom of any page make sure every page has bleed unify padding between things add image captions to everything Unify light grays etc.

Images


P18-19 renders feel jagged
P42 low resSame p64Same p158P220234

P73 strange noise on edges
P82 contrast
P88 check coloring312313 same
444445 same

566880881

P128 low res276 too
take a pass to see widows
pins make tighter two columns

If bell icon, add to icon -standards

10 PRINT CHR\$ book title fix in semi chapter
VERIFY
endpaper captions, add Shift or Power Shift
review all chapters for widows based on script report
vol 1
vol again

Actor Rodney Allen Rippy admiring a Selectric's font ball, date unknown
in InDesign, TNWLMC is the same as Dvorak
dvorak: 401 FigmaPixels 4.7361 in InDesign 84.6688
GamingArrowKeys: 7098.1612 86.8744

## *((401/4.7361)/(709/8.1612))

0.97461
process glenn doc
edits
QWERTY 150
Williams typewriter booklet
1980s paper
rewrite qwerty
rewrite sholes
From num- bering pages (with a machine using ribbon inking)
The three models are very similar, with the exact same frame and large white keytops (actually painted drawer knobs or small door knobs).

## fairbank the strange keyboard

10u-spacebar or more
typesetting etc.
re-test intl 2 because I extended the footnote for dolph image caption contents
fix all TODOs
( check against the spreadsheet, too
Write down to update ricoh and burroughs once 1 am reunited with keyboards
IBMBeamSpring make the image cap longer, add descriptions of machines
$\square$ same with microcomputers in situ
vol 1 front:
IBM Selectric typewriter, 1961
Royal KHM typewriter, 1937
vol 1 back:
Smith Corona Sterling typewriter, 1938
Royal Quiet De Luxe typewriter, 1948
vol 2 front:
Bloomberg "Freeboard" keyboard, 2008
Commodore 64 computer, 1982
vol 2 back:
Olympia Olympiette typewriter, 1975
Clear2048 keycap, designed by Biip, 2022
changes
v early adopters
vol1 528 needs to add extra line at the bottom
vol1 312 not bottom aligned
same vol1 520
intl part 2
vol2 japanese 947 add a line
beginning/italian
done
foldable desks
( a huge hybrid
(v) i wasn't supposed \}
"found myself" repetition
reflow
italic numero
spacing in narrow column
sholes
$\checkmark$
36 footnote
reflow after editing
the machine you will
darker/closer building
image cap wrapping dart
columbia 2, odell, dart typewriter image caption: add dates
touch typing
left indent fix $0.3056-1.5$
once mechanical
$\checkmark$ letter perfect ad is in the middle of the split combined things
to type just type
just test reflow 886-887
shortcuts
The vertical white space at the bottom before the blockquote feels like a LOT - maybe already done
crimes
vol1 469 remove footnote (crimes)
international
vol1 347 remove footnote so it's not weird (chinese)
word processing

vol1 437 word processing maybe remove footnote to avoid this weirdness
if nothing happens (0.1556 in) then it works, fix systemically?
 harris viewwriter more
add image caption
zx spectrum
basic controller - move image cap to the left
, spectrum plus image cap align
:WA fix
backspace
(quote make smaller)
semigraphics
make the soldiers go wider
gender

## remove footnote on 562 and 564

how to be super secretary swap with gazing men, so it's juxtaposed with text chatting

614/615 repetition of page numbers779 too
784/785
838/839
865943
981991
999
1019
1039
11591177
review all chapters for hyphenation etc.
new footnote symbols
design
( fix arrow
put in font
randomize / 15don't put two similar ones in one goremember atarimake it deterministic block quote adjustments! switch top of divider from 0.1275 to 0.1075vol 2 p 50 opposite PC model f clones

273 vol 1 turkish taksi - make sure both page numbers are here
TNWMLC three layout visual move to the right
see "size reduction"
cover - grab the fixed angle keys from the prospectus
chapter 19/get green: things go wrong with white/black at the beginning
book obra feedback
P734 not laser optical
Rotate pcjr on spread
Tuft paper!
Send stuff to-obra
get rid of image spacing above caption: 24-25, 198-199, 310-311, 132-133, 106-107, 156-157
fix as object style
0.4 at least?
also spacing below stuff like teletype15 or 28

## backspace

12 spreads before laser eraser
16 after
[4 more]
mention schawlow on cover
consider adding a letter about laser from someone if room - or keep for volume 3!
resize to new size
do the new $1 / 3$ images
make sure every object is half/near half
make sure ever $A$ or $A N$ is aligned
redo spreads for smaller
20 step 2 (spreads) - 40 step 2 (spreads)
do a check to make sure prev pages is left and next pages is right
> In time, he adjusted his talents for peacetime. He married a woman who became his collaborator. He named the family's dog "Underwood." His idea of a holiday was visiting foreign typewriter plants.

Should this not include his wife's name, since she was knee-deep in the work, too? There's room in the paragraph.
fix the escape error

## Top level

Finalize spreadsheet
check sizes
check spreadsheet last stuf
Look below for feedback
redo word processing
redo page numbers
integrate
vol1 needs to be 607
vol2 needs to be 609 - done
, vol 1 mistakes
producing mt/st conflict

## flow - revisit after making more foundational changes

start/spain

## early years

the early years: p21 try removing footnote (not sure if still relevant)
24-25: I'm assuming you thought about oval wrapping. Too fussy? can't automate? I think it's perfectly fine to have a square wrap! But I think there's a little too much white space right of Sholes and left of Densmore.

## the shift wars

50-51: I see the challenge
56: the No. 10 seems a little too high on the page relative to the typewriter opposite
mechanical
145-146 ads - add image caption

## dvorak

make sure prev pages is left and next pages is rightp193 vol 1 reverse (end of dvorak)
the monster feels
200: having this last sentence at the top seems kind of awkward, one of the only times I feel this way in the entire layout

## pinball/linotype

249: Would love to have one more line at the top of 249 or to finish on 248
260-261, kind of an awkward flow of grafs and section breaks on 261, but not sure it can be reworked
( 262: same as 249: would be great to get one more line or back on previous page

## international pt 1

( 346: A little awkward end of graf at top
univac
368 (maybe) Univac bottom kbd - missing image cap?
make sure prev pages is left and next pages is right
( p370 univac on the right
selectric
$\checkmark$
414: because of narrow columns particularly, the two stray lines at the top of 414 stand way out. A little editing on 411 might bring them back.
word proc
438: this quote seems a little awkward dangling on the top of 438
power to the people
511: try to work with 510 and 511 to avoid awkward dangle at top of 511 and uneven page on bottom of 509-510 spread on 510

## get green

526-527: the split and lots of white space plus footnote makes this spread hard to read and really spaced out. Rethink?

528-529: suffers a bit less from 526-527 problems, and could probably stay as is; but still feels choppy and spacey
$\checkmark$ 530-531: same but even less so as previous two spreads; almost works, but two lines at bottom of 531 above footnotes...it seems hard for a reader.
crimes
make the selectric soviet bar smaller

## gender

how to be super secretary swap with gazing men, so it's juxtaposed with text

## olivetti

## mr kildall

645 \& 647: 1 1/2 lines at top of both, I wonder if you could tweak spreads to avoid in both cases?
mr kildall page 22 quotation isn't working - not sure what this means
model m
676-677: I sort of don't like have facing pages in a spread both with 1 1/2 lines at top, but may be unavoidable.

678: too widow-y at top
arrows
700: a little widow-y at top
705 leap to 708: that's a lot of breath holding for a few words. Might be good to pull some back to 705 or push forward some to 708.

## function keys

balance 740: Similar! Lot of things happening and a lack of balance that makes it hard to figure out flow
key switch
V 762: widow (try to remove?)
add image cap: 746-747 3x2 switch stuff

779: widow
801: I see the issue, but it's a LOT of space above the footnote balance 804: similar to 740

823: This widow needs some fixin'!
808: might tweak handle/photo/caption placement

## key caps

828-829: a pair of widows looks unharmonious
856: next pages captions on the version of the spread feels very dissonant
portable
862: try to kill widow
882: These two text lines seem awkward in rhythm because of section break and short facing text blocks
canon cat
898: awkward widow/section break
mavis
919: would avoid Quen-tin break across page with the long dash already in that line
hhkb
v 938: widow could be removed, but it's not that problematic.
intl pt 2
V 978: try to kill widow-the QWERTY makes it stand out
iPhone
1012-1013 - just need to end closer up
chorded
1033: top of text block seems a little awkward

1047: Previous pages captions here seem hard for the reader to connect

## semi

1081: bottom of page is very busy1075: would make me happy at the bottom of this page if it didn't feel like the numbers were in danger of being cut off - if figure were scootched up slightly higher on page, like a few points

1086: credit needed? It's public domain (having been published)? Unpublished letters can be a complicated matter for copyright
community


1108-1109: double widows1098 left adjust jelly key - don't drop down, or force!

## everywhere

1160: would be nice to excise widow1164: widow + break is awkward
1165: Hyphenated word end in graf starting "The second key" is odd! I don't think I spotted another in the book.

1181: lovely, but need to tweak justification to avoid waterfall of whitespace moon chapter: iopener overlaps
end
1194: I would love to have a less widow-y looking widow here, maybe by adding words on preceding page or here.
make sure prev pages is left and next pages is right ( cerebral palsy

Letter space the key font more!

Add to learnings from prospectus
add keys to font

```
( Rand Code
( Laser
```

start a company
marketing
summarize all stuff from master to do list (left over there)
there are some marketing things in todo/distribute/contact/reach out
also devon
look at joel franusic
look at notes from glenn
look at "To post on Twitter" in the old to do note
also "Merch idea" in the same
typing game
dolph large typewriter PH_DFOLPH TYPEWRITER_New Keyboard with 40 alphabets and 1160 keys_Fred Dolph portrait_PandA press photos_Peter Weiul Typewriter Archive_June15_1926 (1)
edits onscreen keyboards

For the shift space at the end, have a joke like "a combination $\mathrm{Tac}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}$
which is a fun callback to before, but also related since it's a chapter about backspace!
gray ass enter missing footnote that moves to the chapter after next
zx spectrum chapter footnotes on the left zx82

Knowing how much you expect to write could be crucial in choosing the machine.
olivetti poster or something

## REDO THE KEYS TO BE WIDER LETTER TRACKED

> reinstall
re-run
add new keys from... somewhere


Laser
Rand Code
letter spacing
kerning
(V) re
[[[8]]] Those were popular in France, as it was rumored to have many piano and harpsichord players.
edit: japanese: mention that wedges etc. took a different route

## add the large guy?

find room for the new photo
widows etc.
fix padding of japanese
move small to ergo
update PACE coloring
update spreadsheet
Microtron
update image cap
Dolph
ask for permission
colorize
alamy buy Maniac?
ERA 1103 too low res
alamy pegasus
getty besm-1

Computer-history legend says IBM became so jealous of VisiCalc as the Apple II "killer app" that they built their first PC specifically because of VisiCalc. Legends are cute - and yet, we have the perplexing [Scroll Lock] on the PC's original keyboard. ((((SPREAD:GUIKeyboards))))
\{IMAGECAPTION:SPREAD:GUIKeyboards\}Examples of a few rare keyboards that acknowledged the existence of graphical user interfaces:个A Sun keyboard with the [Front] key for window repositioning, [Open] to open the selected document, and [Props] to show its attributes $\leftarrow A n A T \& T$ terminal keyboard allowed light window control with two unique keys

Up until 2019, some French people despised that their keyboards were not standardized - but some in Japan wished their keyboard weren't, swearing at the subpar JIS standard that awkwardly grafted the Japanese writing system onto QWERTY. Poland and Sweden have toothless keyboard standards that are rarely used; the Dvorak layout itself was once an ANSI X4.22 standard, and look how well that went. ((((SPREAD:TeletypeModelMKeycaps))))
\{IMAGECAPTION:SPREAD:TeletypeModelMKeycaps\}入Official replacement keycaps for the Model M keyboard $\rightarrow$ Official replacement keycaps for the Teletype 28
update spreadsheet with above missing

## gender move up - test - test again

end of "all the fingers" footnote symbols run over
 fix the beginning - test
conflict fix - test
switch medal and FJ
remove - if alone
"once mechanical" is broken with the inline stuff - test
electric needs more stuff
teletype needs half a page
spreadsheet
image cap
fix beginning of punch cards - go up or down
terminals - A variety of IBM keyboards: try one line - test
homemade make calculator align with body (already done in step 3) - test
portable needs more! needs half a page

$\bigcirc$portable bug on page 22 - thinkpad - paragraph vert spacing adjustment tiny huge needs more
community is off because of the inline ascii art also
already fixed in Scrivener, needs rerunning? might need some padding assistive! needs half a page agenda actual size ( screen
tiny huge fix - test
vol1 615-611 - needs to be 607
needs one more spread?
actually 613609 owing to two pages
3 spreads

```
( chapter: shift wars too long - done - test
    ridges fix - test
    dvorak - test
```

vol2 617 - needs to be 609 - done
vol 1 extra spread

- TypewriterMaintenance repurpose to show keys:
the Getty photo
the woman with keys
vol2 squeeze in the typewriter designer + the jars of keys somehow?
remove spreads to fit in 608 after laser eraserGUI keyboards
health exercise + tone up - move to vol 3
model m teletype
zaisan
portable back ads
modern qwerty
yost automatic shift

4 spreads
ax spectrum is too long - test it - test again
key switches too long - test it - test again - try again
removed GUI keyboards - test it - test again
alphagrip - overlaid image caption - test
tinyhuge not on the last spread - test
portable add more?
gray stuff
either remove apple ii with a prototype
model m teletype removetest
tasks from the other note
lay out again
find out where to find other pages
redo cover etc.

Add image captions to covers
And endpapers
also vol2
move both to top
rewrites
Add endpapers
 also mention in "shift freedom" shift wars chapter
add mentions of covers
( A long-exposure photo used to study the motion of the operator of the IBM 24 key punch|Courtesy Computer History Museum|
if using photos for covers
( $)$ refer to them
(v) 1 RSI light streaks
v 2 Schawlow
v 3 CERN guy (if using GAMMA on cover, refer to it from the inside)
4-woman w/ many typewriters
$\checkmark$ do not repeat for chapter openings etc.
also shift keys endpapers

## Book typo-https:Hon.m.wikipedia.org/wiki/Mount_Erobus_disastor

ZX spectrum has caps shift and symbol shift kind of like shift wars globe key mac - any updates?

## V also it has a million options

Book: Pc Convertible Ctrl Fn delete
book "why a keyboard and not a button board"
RANDCODE keybard

## dvorak ios 16

## Kocienda remove name

plug in laser eraser
update from 2021 Following St. Louis. Cincinnati was overall the 8th biggest city in the U.S. in that year. It would never again be that close to the top of the list. In 2021, it was in the 65th position.

## Book: social network software add to the list of software

move prospectus shift wars edits back to main
copy
but make sure to test since some footnotes change etc.
and Prospectus spreads
"the solution was" join the previous paragraph
"the Smith Premier ads were right" were actually right
verify delta
appleiic spread [Keyboard] toggle
laser eraser
, Add to photos?
excel-championship-same-as-excelesports video-saved-quickly-review_httpsith

## CPT Corporation - Wikipedia

CPT Corporation: Difference between revisions - Wikipedia
also Cosmic latte https://twitter.com/depthsofwiki/status/ 1505607376279375873?s=21

-
why is space cadet keyboard called that?
Update key etymology
when I was at the prelinger library, I noticed that "bell laboratories record" and "bell telephone magazine" - both should be only on Internet Archive - mentioned that all digit dialing promised no need for letters on keys anymore. How does it relate to vanity numbers?

2022 > 2023

Save file name in log
new lines at the top of chapters are not interpreted correctly
image: the four old ones, the white ones could be smaller
make closed match better
add to do in sheets
add laser eraser chapter quickly
v add to do rewrites
add title to colophon
, add haslinger
replicate prospectus fixes

```
"and an" box resize as per Joel
```

( fix in orig 4.1914 in
, Infamous keyboards
( fix in copy
remington/caligraph facing each other - move remington shift left
( fix in orig
"B thingfix in orig - hair space
[Shift] wars - maybe remove Shift
( fix in orig: "a version of the Shift Wars in the calculator universe" variable font fix / 560 / 100 / 10
$\checkmark$ fix in orig: Image caption Credit
review top text word repetition
( $)$ fix in orig
page numbers redo to start from 1?
grade g4 on black
fix in orig RGB 6522473
interesting photos for test print - one of the dithered photos like mavis beacon chapter opener (lenore fenton)

## Gorton 1 from QSL book

$\checkmark$ add covers to spreadsheet of visuals if necessary
AutoTypist: wrong background colour?

## dutch photos

new data entry HCM DSC03889three spacebars?
HCM: maybe the new Lisa kbed phote
HCM: maybe the new Mac photo?
rubber DEC overlay add to the list
( ) maybe VT52 overlay
maybe the PF1/2/3/4 from Concept HDS APL for function keys DSC4028 dutch wordstar burroughs
zwolle shift handwritten
mariner 1 - see "typos with profound consequences"

also the russian one-https://nitter.net/Skrepo_history/status/ 1471693249245028358\#m
"At least he didn't fall asleep on the "9" key." footnote harken back to therac

## eommunist vs. Communist

```
https:|/www.farah.cl/Keyboardery/Why-Do-Keycap-Sets-have-so-many-Copies-of-the-Backstash-Pipe-Keyt
```

read this https://if50.substack.com/p/business-wargames, especially the end
(v) strachey

5,000-WPM ELEGTRONIG TYPEWRITER

## tambda-sentience

## tie Eliza with autocorrect in the previous chapters

review all these for autocorrect/ai
Dalle/GPT-3

$\square$
$\square$

## by the time you read this



## "prompt programming,"

https://clivethompson.medium.com/i-got-an-ai-to-autocomplete-famous-novels-2460fe89bd4f

## https://www.technologyreview.com/2022/07/15/1056042/chinese-novel-

 censored-before-shared/https://www.theverge.com/c/23194235/ai-fiction-writing-amazon-kindle-sudowrite-jasper
amazon / Following the meeting, an "auto bad word monitor" was devised, constituting a blacklist that would flag and automatically block employees from sending a message that contains any profane or inappropriate keywords. In addition to profanities, however, the terms include many relevant to organized labor, including "union," "grievance," "pay raise," and "compensation." Other banned keywords include terms like "ethics," "unfair," "slave," "master," "freedom," "diversity," "injustice," and "fairness."

Even some phrases like "This is concerning" will be banned.
in the last chapter, add a mention of text therapy (1 have a tab open or saved, the one with a long text on the cover)

Ken Kocienda: see "Keyboard secrets: Ken Kocienda" note
add this 1:40:00-1:43:00 the software keyboard from fingerworks wasn't coming together, Ken Kocienda
add this 1:48:00 bakeoff
( double check the kocienda footnote later
In the semigraphics chapter, do I mention this is the opposite of a map of a spectrum keyboard?
search for arrow / cursor
mac stuff
"What's a keyboard for? Typing. Words and numbers. That's it. You don't have to learn to type long strings of computery phrases for the Macintosh: you choose all the commands with the pointer. The keyboard's mainly for typing your information into-a document."

1. You can't hurt the Macintosh by pressing the mouse button or typing on the keyboard.
"field-motion" "Four keys on the numeric koypad_arelaboled with "fiold-motion" symbols: small rectangles with arrows exiting them in various directions. Some applications may use these keys to move an object or indicator orthogonally around the screen, and require the user to use the SHIFT key to obtain the four characters (+ * / ) normally available on those keys."

## \&QWERTY for plain/bold/italic/outline/underline/shadow as per The currently defined command keys

( similar to "typewriter" zxcvb
smith-corona-ASK 1776-logo-maybe incorporate?
Mention ruf electric bolt in copy
good news you can blame iPhone autocorrect for pretty much anything $\leftarrow$ reversal from pen to typewriter grammar

IBM's 1980s price guides mentioned they would require charging banking customers a
minimum of about US\$ 100 per year (not adjusted for inflation) for each original Model F keyboard in maintenance costs as part of a service contract.
incorporate Selectric ads "are you using all 18 of your typewriters?" Are you using all 18 of your typewriters?
ben werd "I literally learned to write on a Sinclair ZX81, writing stories that incorporated the BASIC shortcuts on its keyboard. Characters would GOTO places a lot; they would RUN; THEN they would do something else."

TIE Enter is the opposite of BAE (Big Ass Enter) - what does it mean?
add to red esc connection to red switches
Beam springs vol 2 refer back to vol 1 if using the photos (beam spring chapter)
add ngl (not gonna lie)
remove manual spaces (279 manual, 28 inside words)
Add garage door openers and bank pin entry devices and label makers
add to the list that pgdn and pgup have little to do with pages
olympia green turkish 0.67in
princess 0.6988
russian 0.695
belgian 0.72
return visual
add the new selectric ii
add the new word processing keyboard x 2

Before computer key-boards were used for word - check for non-hyphen stuff crypto museum ask about selectric bug photo
typewriter mystery upload
checked springfield leader and press 28 aug 1960, sunday
look at "royal typewriter in "springfield leader and press" around 1960
saerch for royal mcbee

Richard Crabtree via Jean McCreary Gardner

Okay, I found this.

It's Springfield Leader and Press, November 15, 1959, page D3 "staff photos by Betty Love"

Even in a modern, machine-operated plant like that of Royal McBee, hand craftsmanship is essential and personal interest in the job is encouraged. Her eis Mrs. Nita Ball of Highlandville, who builds by hand the keyboards of Royal "specials" - portable typewriters which require a special arrangement of keys. In her hand, for example, is the pattern for a Russian keyboard, and her files contain arrangements for many other foreign countries including Spain and France, along with those requires by specialists in such fields as mathematics and accounting. The key faces for all these machines are contained in the case at left, from which Mrs. Ball selects the proper ones and attaches them by hand to the key levers.

The piano telegraph bt archive
update spreadsheet

94 (8) / p123 / drop cap is broken
testing: yoffset moving from 0 to -0.6875 in fixes it for some reason solution was adding text wrap to the outer frame
test in vol 1

701 gui keyboards: but indentation "examples of a few rare keyboards" - switch from Indented to regular

275: caption at top should be indented? The outhang seems odd test
selectric in situ too soon overlap
( Iater again
test
test the new arrows
test quote distance
p205, 468, 562, 368, 448, 542, 1022, 1154, 1165
test chapter numbers
broken conflictetaoincomposer
test quote distance
test chapter numbers
add GAMMA CERN to InSitu add the dance dance revolution keyboard to arrow keys
( glenn: two papers, etc.
send obra info about paper also
missing page number on the left
78 vol 1 index needs to be manual
117 vol 1 fj needs to be manual right
326 vol 1 tele keyboard needs to be manual
AN
26 vol 1 (piano)
203 vol 1 right (forgotten) mercedes elektra
253 vol 1 right (composing stick)
273 vol 1 turkish taksi
( ) test
599 vol 1 olivetti computers

## vol p143 wrapping is weird

exploration: look at all the pages and think of how to connect spread descriptions better at the very least, move them to the right facing page
book
enter collection
19
26
41
add image captions to missing things

$$
506 \text { (maybe) C64 }
$$

654-655 PCjr both versions spread
80-81 TypewriterStores
84-85 TypewriterCa
86-87 TypewriterSales
590-591 Praxis48
328 Teletype 15
566-567 MenHovering
686 DEC four arrow keys spread FourDECTerminals
738-739 C64 JiffyDos and IBM Lotus Function key overlay FunctionOverlays
788 maltron atop
1002 add iPhone on the side
1168 i-opener on the side
ring $n$ key left
\{IMAGECAPTION:SPREAD:VT220\}A particularly well-loved DEC VT-220 keyboard (also known by its model number, LK-201) with word processing stickers and an overlay

A custom ZX81 case made by Dave Bolton|Photo courtesy Matthew Bolton|

## dutch photos

VT220 tableau
HCM: Spectrum clones
also zwolle zx spectrum case! beta basic 3/4
zwolle displaywriter replace one of them with dutch legends?
international: HCM/Zwolle accents a la Polish typewriter keyboard maybe move the japanese keyboard one page as the opener and do the typewriter and accents as a one pager in its place
arrows
dutch VT220
v Concept HDS APL
Japanese arrows
v HCM: the weird box MSX
HCM: the four long ones MSX
HCM: the blue diamond MSX
HCM: philips
(v) and the other one
zwolle: philips
zwolle: olivetti blue
book enter: replace american with non american for VT420 maybe
HCM: Tulip keyboard
HCM: two earlier
HCM: Eindhoven
zwolle x million
electric key from hermes/ruf ambassador - either in the fun keys at the end, or in the power/ electric chapter

HCM: maybe 5110
HCM: check various semigraphics angle closeups
 same zwolle

HCM: Aesthedes?
$\checkmark$ with the keyboard added

## list of things done

add new stuff gray return on the right is a bit too big the japanese brown return in the upper right seems slanted

134-135: Should ^ 1928 -> 1929 be in orange?
275: caption at top should be indented? The outhang seems odd 353: photo seems dark

723: caption arrow points up, but it should be to the upper-left?
724: in captions, shouldn't <- be ${ }^{\wedge}$
760: does caption need downward-pointing arrow?

93 type changes
text
change word spacing settings
Word spacing: 80/95/115
Letter spacing: -3\%/0\%/0\%
( move all to spread
( make sure things are descending from Story paragraph
( ) hyphenation, too
divider add align to grid (first line only), move top spacing from 0.1875 to 0.1275 move to spread
make image caption smaller? 8/11 $\rightarrow$ 7.5/9.5
(v) move to all
( move to "like" beta, weight $\rightarrow 560$ move all to spread
and arrows $3 \rightarrow 2.9$
( $)$ arrow lower
and keys (no change necessary)
x6: image cap adjust spacing from 0.5 to 0.4

Captions invisible:
66: caption lost. May need to do a little white shadowing or it will be illegible / machine assembly room

540-541: hard to read the caption
308: clever captioning, but very hard to spot
\{IMAGECAPTION:SPREAD:RussianBeige\}A 1990s 102-key German keyboard retrofitted to support Bulgarian
\{IMAGECAPTION:SPREAD:RussianComp\}入The Pravetz 8D home computer $\downarrow$ The Elektronika BK0010 computer|Computer courtesy Computer History Museum, catalog \#102766424|
saved a spread to fill with aesthedes!!!
italian > swiss
toshiba tighter height 5.555 in
move international mosaic up by one spread
retrofitted replace???

## electric chapter

switch order electromatic with elektra
add ruf electric as intro
need to find one more: remington electric 1925 https://typewriterdatabase.com/1925-remington-electric.11556.typewriter
remove the big hansen ball?
update spreadsheet
mention electric symbol
\{IMAGECAPTION:Cover image for chapter 12.\}An electric Smith-Corona Coronet Automatic 12 from 1972
displaywriter
v) resize $\times 3$
rotate to 0.40
swap to dutch keys
shadow
replace
the arrows change
image cap
https://commons.wikimedia.org/wiki/Category:Adding_machines
$\checkmark$ the typewriter book
( early typewriter
the other photos
progin find somewhere or ask anna
heinz nixdorf ask about burt typographer
ask the milan museum about cembalo scrivano higher res
info@sputnikimages.com ask about the photo

Key guy
ask LOC about the Powers photo
took at "small publishers for distribution"
v send to kate lee
replace culler fried with any key
any key from the remote and the keyboardio or screenshots

## After Scout

scout 26-27 she did older, needs newer
x's, T's, Is - test all this
do the comparison of everything before and after Scout, and see bigger changes and maybe send back
spell check
after scout
typed in/type in/types in - open q compare with the original type in typed in
( typing in
revisit "and yet" "yet"
space cadet and space-cadet
revisit "versus" "vs."
"key press" vs "keypress" (chapter 14_sf.pdf)
keycap
"re-create" fix
( also colophon
re-type
italic for software titles clarify (already changed)
Review Word chapters
touchbar
check chapter shift wars about 20th century
co-exist/coexist
add "inverted t"
"chiclet" vs "Chiclet"
just check for double spaces afterwards
"western" $\rightarrow$ "Western"
on-screen or onscreen?
list below
acknowledgements read
20th century
list all the western/Western stuff
Web vs web - check via \&F
finish TODO for footnotes, at least those I can

## vaio notice protrusion

girlless
qwertyoldandnew
LATER: microcomputersinsitu
LATER: wordprocessingads
tabkey
LATER: olympiareporter
selectricinsitu
big image of iopener needs the bk redone
find amstrad french photo instead of grundy newbrain?
new stuffvol1 one spread too long?
twentieth and so on
western
scout email from March 6 incorporate
ARPANET small caps
adjustable move image cap to the left
1-2-3 1 on
various kbd overlays should be orange
footnote symbols
check every page
alternative path
model f later
13th century
(a copy
[[[5]]] The biggest [Code] belongs to IBM Electronic typewriters from the late 1970s, with a surface area even larger than their [Return]s.
[[[13]]] So much so that when I arrived at a Computer History Museum storage facility with a list of eight specific keyboards I wanted to see, the team brought out the space-cadet keyboard just in case, even though I never mentioned it.
$\checkmark$ compare old paper to new paper
investigate stochastic with a loupe
semigraphic chapter
verify electrical symbols
frowney verify
25.pdf

SHOW ESSAY.TXT test
check 4978's keyboard in chapter 15 reference
inverted/inverse T
incorporate scout first
check differences
26.pdf
27.pdf
incorporate scout first
check differences
revisit italics for software
Lotus 1-2-3, Word, Multiplan, dBase, vi, Emacs, wordstar, visicalc, wordperfect, starcraft, mavis beacon, the typing
(V) For vi, I'd italicize it the first time you mention it, and then it can be roman thereafter. That should take care of any weirdness.

MS-DOS, Windows, Mac OS
fix image cap for bottomsixty to be full width
add :-( semigraphic in the font
added to font acute font exported
( install font
add to processing
add to text
verify

Magic cap add simulated screen
print prototype
prepare interior
join interior

prepare cover


1
W2
order
order actually after approving
signature match
$1-578=578576$
579-1190 = 612
remove from vol1 - figueres at the beginning? DONE big magazyn with typewriters (but mismatch with bus later)? in situ?
remove from vol2 - DONE shift improvements + keycaps model and teletype + DONE applewriter stuff
w
\{IMAGECAPTION:SPREAD:MachineAssemblyRoom\}Machine Assembly Room, Remington Typewriter Works, Ilion, NY, 1911|New York State Archives|
\{IMAGECAPTION:SPREAD:ModernShiftInventions\}\{PREVIOUSPAGE\}More recent attempts at [Shift] reinventions:КA keyboard for a titling device showing both lowercase and uppercase letters入TODO ShapeWriter's [Case] key, meant to be pressed after a finished word only if autocompleting/ autocapitalization didn't capture it properly $\searrow A$ Japanese thumb shift keyboard $\measuredangle$ TODO A joint [Shift] +[Space] combination from the Big Keys keyboard
in INDD
in copy
in spreadsheet
semiballs fighting for space
because footnotes overflow from before because iphone doesn't output last footnotes because we added (simulated screen) to alias 2 and it pushed things can be solved by making the image cap wider to 5.5083 in incorporate glenn feedback if it comes back
compare ending with last one, since Logitech was changed
v redo it
( add to step 2/spreads
reinsert!
v test
Apple Extended also has overlays, not just model m check for widows etc. compare with the previous edition
scout: also redo japanese international
( check for widows etc.
( fixed, try again
 test send writing to Glenn
so the -image grab his stuff email him brain-https://www.nature.com/articles/s41586-021-03506-2
move yekaterinburg to last chapter?
image cap to eliza
add logitech keyboard
 caption: modifier keys + function keys spacebar caption space on the left again KPH image caption can move outside
typeset again

(
(
V
$\square$widows etc. footnote on the last page avoid nice distribution of shit recreate easter eggs
[[[8]]] A recent study showed that it is possible to predict rudimentary emotions such as joy, fear, and anger by analyzing the way someone types - their keystroke dynamics - but chat programs don't make use of those. On the other hand, advertising code that appears on webpages, Google
search pages, and other web apps capture an enormous amount of information about mouse movement and typing behavior to understand attention - and to other ends that must violate privacy, but haven't been fully disclosed.

## v Weekend

Ping obra
Glenn send delta
Finish all TODOs first run the image cap script
v ads for word processing update image cap write spreadsheet
( add colorize + demoire micro pro find better
[[[11]]] Function keys at the top also made it easier to squeeze them in on laptop keyboards.
feedback incorporate
V Chap 39: Minor thing, we call the keyboard you're writing about the Keyboardio Model 01 or the Model 01. "Keyboardio" is the name of the company.
"MTRON TK1" - I think it was just the TRON TK1"
"you can program by using a command line interface that exists in the keyboard itself,
although friendlier" - strictly true, but that serial interface isn't intended for humans. You can upload new firmware with Arduino, talk to it over serial or use the GUI"

The keyboard you show as 'Final' was actually the kickstarter protitype
"by someone they thought worked at the factory they hired." - When we hired the factory, she was absolutely their Director of Overseas Sales. She quit somewhere along the way and was working on commission keeping us as a customer.
daniel kottke
"those keyboards are known in jargon as space savers" - find space savers see if there's continuity
"keyboard shortcut" clarify not everything is a shortcut
read "she has young ideas" brochure in the scanner
Re read shortcuts

## Multiple springs amstrad

add this "In the 1980s, you could look up from your Commodore 64, hours after purchasing it, with a glossy feeling of empowerment, achieved by the pattern of notes spewing from the speaker grille in an endless loop," he wrote. "You were part of the movement to help machines sing! You were a programmer!" https://github.com/readme/featured/why-the-lucky-stiff vs https://viewsourcecode.org/why/hacking/theLittleCodersPredicament.html

Power button https://www.laptopmag.com/news/laptops-still-have-this-annoying-power-button-problem-it-needs-to-stop
put in backspace chapter? - refer to [esc] chapter and apple ii stuff everything old is new again

With asr 33 foreshadow @
read "Would you be willing to read my chapter about QWERTY?"

Double check etcetera typewriter row
these don't feel great
community: no great opening etc.
connect apple i to apple ii last chapter
maybe in transition, maybe not
all told, chat is now the second-most-common computer activity, after email, according to RescueTime, productivity software that tracks users' soreen time in-https: If ww.theatlantic.com/magazine/arehive/2021/11/stack office trouble/6201731

Thomas ran feedback
$\checkmark$ sent to him

Add Jacob Alexander feedback
, Thomas ran two small fixes
touch bar discontinued?
( Search
Mac top row photo - image cap
Undid all the things
Space shuttles verify in title
Apple Watch keyboard https://www.theverge.com/platform/amp/2021/9/16/22676706/apple-watch-swipe-keyboard-flicktype-lawsuit-kosta-eleftheriou

Add smart watch
add apple watch ("ditto")
send stuff to J.A.

Writing: Every chapter should have a nice turn of phrase or something

Fix spreadsheet divide
Add quotes verified
Add Easter eggs
keep finding photos etc.
find an illustrator
reach out to printers to get samples
Send chapters of people interviewed to people
interlibrary when opened
Howard, in Typewriter Topics, 3:8:
he worked out the four-bank key board, and in the spring of 1871, he laid his completed model before Messrs. Sholes and Glidden
quoted in "The original typewriter enterprise 1867-1873" which I have
R. F, Howard, "Typewriter History Previously Untold," Typewriter Topics, 3:7-10 (May, 1906).another one
incorporating Glenn＇s stuff late September 2021
bold $=$ done with Glenn＇s stuff

## 012345678910111213141516171819202122232425

## 26272829303132333435363738394041

Sinclair died

## ＂Touch typing in－4 hours＂ebay

```
    "Touch typing in 90-minutes" screenshot iPhone sept 12
    p oven fastor
letra por letra }->\mathrm{ add to index as a footnote- no-overlaps
```

update the beginning of Olivetti after photos arrive answers appear on the next page？together

Alyx wondered to me about when people typed all day．They type＂all day，＂but they don＇t type continuously all day，and we had to explain typing pools and re－typing things．
chinese：構（compose）

## 撳

add to the chapter text or image caption
$\uparrow$ not the main key！！！mention two keys？
add two keys in glyphs：直 and 撳
the big（graphic）key
chapters．js and so on
removed images \｛IMAGECAPTION：SPREAD：TypitZXROM\}个An advertisement for Typit, a typewriter extension mechanism that allowed adding new characters on demand $\pi$ An advertisement for the DK Graphic module，which added over 400 new semigraphics to the ZX81 computer

This was lost in another file:
The contours of keys help here; your finger will sometimes reach out for b before you even spot the typo, in an instinctive gesture that appears almost magical once you start studying it. You can also observe a similar behavior when your fingers autocomplete a common word for you, for example automatically finishing Marcin, even though you really wanted to type Martha. A 2013 study also showed that experienced touch typists slow down instinctively when they are about to make a typo, before the error even shows up on the screen, to give their fingers a bit more precision and chance to recover.((((FOOTNOTE:51))))
photos add
V "Not the last keyboard with comic sans" / Easter egg
stenophile use - looks great? https://www.antiquetypewriters.com/typewriter/ stenophile-shorthand-machine/
fazer ces 2018-big keyboard
( make sure I don't say this never happened again google japan joke in the book image caption: "in a-sad refrain to Chinese jokes"

Gover/Endpaper idea: just shift symbols

## rename-chapters

## for the love of keyboards $\rightarrow$ the next big thing, a constituency of one

olivetti: Via?
add to the chapter text or image caption
underwood: see [Rib'n] as above

Another ThinkPad model line, the iSeries S30 $\rightarrow$ combine with a footnote make sure Hansen becomes Malling-Hansen throughout

The Story of the Typewriter, 1873-1923, comma
followed by [W], then [E], then [R], then [T], and eventually [Y] - make sure it matches at the end

Alps $\rightarrow$ ALPS
1.5 pounds $\rightarrow$ vulgar (search for .5)
the icon alternative $\rightarrow$ iconic
the nerdier PC users $\rightarrow$ nerdier
powerbook duo subnotebook $\rightarrow$ "a"
Ran's videos spend a lot of time $\rightarrow$ Thomas later
"also making" $\rightarrow$ "creating" QYX image caption
"typed on a typewriter" $\rightarrow$ "used a typewriter"
lenore fenton golf footnote
thirteen with an intermission - change (pause) to pause
The method was used before in a few other computers, including Wang and Olivetti. ((((FOOTNOTE:18)))) - as seen in previous chapter
ending of teletype chapter
P314 "for flexibility" elucidate
P325 needs a better ending
ask about comic sans typewriter
ask google japan joke kbd

Glenn rewrites from the thread "A few questions."
paean
han?
woodrow wilson: I guess I'd ask if you want to include a recommendation from him of the typewriter - he was widely respected at the time, so it makes sense in context. It's not quite like saying, "Hitler loved this typewriter." But it's also not like saying, "Jonas Salk typed out his declaration of forswearing royalties from the polio vaccine on this typewriter." Maybe I'm too sensitive!

It would all start with a typographer drawing a typeface, and a punch cutter realizing it in metal by meticulously shaving off thousandths of an inch at a time to form perfect mirrored letters. That typeface was eventually replicated into a font, and cast as many little blocks of lead alloy - one for each character - then distributed across printing offices throughout the world, and put into drawers or cases.[[[1]]] A single case of type might weigh 50 pounds or more, and a printer might have hundreds of cases across dozens of cabinets.
redo: It would all start with a type designer drawing a typeface, and a punch cutter realizing it in metal rods (punches) by meticulously shaving off thousandths of an inch at a time at one end to form perfect mirrored letters that could be hammered into a softer metal to make a mold. Once each character for the face was finished, the molds would be cast in little blocks of lead alloy to make a font, a complete set of letters, with more frequently used ones in the thousands (like an "e" or "t") and less common in the hundreds ("q," anyone?). A type foundry would sell their fonts to printing offices, which would sort them into drawers or cases.[[[1]]] A single case of type might weigh 50 pounds or more, and a printer might have hundreds of cases across dozens of cabinets.

The orientation of the text was unusual, making this even more difficult: the letters were upside down and every line would go above the previous one."

A compositor had to think not just backwards, but upside down: lines of the mirrored type are built upside down from the bottom of the stick a line at a time upward: each line of text is added above the previous one.
make sure to check for any unresolved comments
move back to Scrivener
changes to re-incorporate after glenn is back
just compare this! gave up writing
remove: [[[1]]] In the mid-twentieth century alone, Japan and China underwent different simplification schemes.
fix quote: world's smooth operation
add ((((SPREAD:ShiftHappensTitle:AFTER)))) at the end of first chapter, but before Figueres2:AFTER
update MTSTPanel image caption
, add ProducingMTST image caption just below
none of its advanced typesetting features. ((((SPREAD:ProducingMTST))))
removed EarlyPortableTypewriters + imagecaption
prototypemosaic remove
olivetticomputers remove
frogdesign $\rightarrow$ frog design
ICO MP1 $\rightarrow$ Ico MP1
add spread and caption
( dvorakhands
semikeys
olivettielea
olivettinewcomputers
prototypemosaicone
(v) two
correctionkeys
update positions of spreads
MachineAssemblyRoom

## Ridges

TypewriterCompose2
RoyalWorking
Heatmaps
Piggie
SelectricTerminalCHM
HissTrial2
CoinOperated
$\qquad$
CalculatorTesting
vogueletterperfect
circle
selectricback
pencilletters
dutchbus
alternatelinotype
hisstrial1
MTSTPanel
Composer
DanRather
woodstock
KeyloggingSelf
typewriterrowbuildings
remingtonandunderwood
underwoodcrate

## SelectricTPWR

( remove \{IMAGECAPTION:SPREAD:MachineAssemblyRoom\}Machine Assembly Room, Remington Typewriter Works, Ilion, NY, 1911|New York State Archives| add ColophonVol1
image caption update
, linotypemachine
newerkitchencomputers

## ApplellGiacomo

rotaryexample
hansenright
hansencloseup1
vogueletterperfect
v typingofthedead
semigraphics4
ByteAndZaks
beautifultypewriters
cover image for chapter 55

Take photos?
book side key
Enters

Shift x2 (japanese and titling machine)
Shift pedal
Spacebar (power on)
Arrow keys (new Japanese)Plug in
And other orange (four key replacements)
122 with keys etc.
Type balls
Model $m$ with Comanche overlay
Something with accessories?
Erasing set
Medals etc.
WordPerfect tips and Grover
or https://www.vitac.com/wp-content/uploads/2018/10/steno-and-control-room.jpg
backup: https://www.otr.report/2016/11/09/stenography-vs-voice-reporting/backup: https://www.ebay.com/itm/1988-Press-Photo-Laura-Ashbrook-Federal-Court-Reporter-Albany-New-York/372781682585? hash=item56cb850f99:g:howAAOSwyyJdidWJ
green one: already there
1873.0 model already there (b\&w)
first key working model
E46514 - asked MPM
is there a backup here?
look at the collector's book
ask peter weil

## SOLUTION: ASK THE ILLUSTRATOR!!!

1873.x 249
ask THF
$\uparrow$ backup Paul Roberts / Peter Weil / Typewriter page 24
black model with pedal
H34385 - asked MPM
black model backup Paul Roberts / Peter Weil / Typewriter page 27

SHOLES BABY_
credit Image courtesy of the Milwaukee Public Museum - MPM
is there a backup here?
the photo of "the abortion" him sitting by it
piano model 1868.3
E41755 - MPM

Mitch Teich
1873.2 model

E43076 - MPM
patent model (backup)
small prototype: Paul Roberts / Peter Weil / Typewriter page 23
THF
anti key chop
1874.0

THF new new new
has 1873.x
and 1874
and a patent model

Baby Sholes: Paul Roberts / Peter Weil / Typewriter / page 28

Perfected, maybe: Paul Roberts / Peter Weil / Typewriter page 37

## SFO thing

## SFO thing

Pg 11-sholes from top
pg 34 franklin maybe
pg 64 corona standard with animals
pg 103 selectric
pg-110 valentine in a trashean
pg-129 japanesecloseupintroduction to bibliography 1974

$\bigcirc$
system source
https://museum.syssrc.com/artifact/106/.
https://museum.syssrc.com/artifact/115/
https://museum.syssrc.com/artifact/105/
https://museum.syssrc.com/artifact/126/ maybe backup Apple I
https://museum.syssrc.com/artifact/128/
( https://vintagecpu.files.wordpress.com

- https://vintagecpu.files.wordpress.com/2011/02/tk95.jpg
- https://vintagecpu.files.wordpress.com/2012/03/dsc04639.jpg
- https://vintagecpu.files.wordpress.com/2012/08/pasopia7.jpgcheck reply https://vintagecpu.wordpress.com/2012/08/20/new-japanese-machinesthis guy
http://www.vcfed.org/forum/showthread.php?59259-what-is-the-weirdest-piece-of-hardware-software-in-your-possession/page6\&styleid=3this guy
http://antibugstore.synology.me/wordpress/wp-content/uploads/2017/03/IMG_5158.jpg


# - thomson mos https://2.bp.blogspot.com/--EPo5AaLCiY/W46qjDg24gl/AAAAAAAAOpQ/ qZmhX6Ddm74vRZqIP8B3nOy4eK1c_FP5wCLcBGAs/s2400/mo5\%2Bnr\%2BS.jpg 

$\bigcirc$check this message http://vintage-laptops.com/?page_id=1099\&lang=ru ^ written down in the database
aesthedes
$6 * 2+5 * 2+7+13+8 * 3+6+8+6 * 4+2+12+4+2+3 * 4+16+8+12+7 * 4+7 * 4+64+10 * 4+2+3+4+9+6+8+11+3+$ $11+10+4 * 6+19+7+3 * 4+3 * 4+41$
514 keysEugenia cable car keyboard
enc
next to try: wall control: this video: https://www.youtube.com/watch?v=Zb6vTPbgACs next to try: sales osai that are not US
search for used multiax
emailed info@multiax.com and edg@multiaxamerica.com with a new email with just permission to ask -tried info@multiaxamerica.com with the same

Audrey
Suggest u contact used CNC equipment sales companies.


CR Onsrud 3 confirmed

http://www.controlsales.net/
http://www.cronsrud.com
http://www.multiaxamerica.com/.

https://www.wallcontrolservices.com/ DONE

https://www.practicalmachinist.com/vb/cnc-machining/

Re your mail to ordcamp: Have you considered calling up OSAI and asking if they can recommend a shop in the bay area with one of those machines? / Or heck, asking if they'll sell you a replacement keyboard for one of them ;) Or one sent back for replacement. / Telling them that you're doing a book on the history of keyboards, that they made something unique and distinctive and that you'd like to include it in the book will go a long way. / You could even ask if they'd be willing to send you one for you to photograph and return ;)
finish tasks in "To do/distribute/contact/reach out" [there are some good ideas there, but took a look in March 2021, and we can forget about it]
finish tasks in "Editing 2020"
finish editing towards fourth manuscript
finish "Editing after 4th draft"

Chinese
Japanese
chorded (again)
QWERTY/RSI/touch typing guy
see others in the spreadsheet

Indhi to talk about paper etc.
reach out to Jez Burrows about the cover
also the Chicago guy alinea
Robin Sloan can help with printing and marketing

## book: add applenew-omojikey

ask Glenn about ethical quandary
plug in planck etc.
rewrite arrow keys

Print the next prototype
( Lay out current
Fix problems with spreads etc.
, Fill all image captions
(v) Finish style guide and checker from the other file

Fix spine with key
Lay out future spreads
Order the book
investigate missing keys
Ctrl+Alt+Del
Electric Return

BS
Boss Key
talk to Glenn about visuals
Book table of contents
Kangaroo paw and undo claw too similar
Accidental $=$ meh
How to break a Difference Engine
QWERTY strikes back Something Polish? Maszynistki i programiści
( Beacon quote
The last of typewriters
get a prototype book
process files for HTML/ID again
prepare new keys in the font
Prepare some visuals
tisse send manuscript etc.
find allen hemberger notes
send whole manuscript to agent
( do MD/DOC output
ask for type council
order prototype \#4
ask about interesting office places
ask Obra about taking photos
ask Jacob Alexander about photos
ask CHM about photos
reach out to Cassidoo
move "make sure we have" from below to editing 2020
unify with feedback

## Make sure we have... (decided not to, 2020)

O
although I am now finding forum threads of mechanical keyboard geeks buying them on ebay to rip apart for the classic keyswitches and LET'S NOT GET ANGRY AT THEM TODAY, I ALREADY DID THIS EARLIER THIS WEEK $\boldsymbol{\|}$ a lot of mech keyboard community is all about switches, it's so reductive
mitterhofer

## trypophobia

fairlight mi iii has three types of keyboards!
footnote font size is *width*
read notes from the Stanford guy (theory)
Bespoke keyboard sounds album on vinyl https://www.instagram.com/p/B5fs8genlOI/? igshid=v99beof7r7pz

Is it just a folk etymology or is it true that the term "computer architecture" comes from the actual layout of furniture-sized computer components (hard drive, CPU, RAM) on a floor

Ryan Norbauer conversation
Turret phone keyboard traders would throw them
joke here is one that parodies the braggadocio of Soviet propaganda: "Soviet
microprocessors are the biggest in the world!"
movie keyboard keys (as per the guy from Twitter)
research printype more

## To do older

[IRRELEVANT] have tricolon somewhere in the middle to sustain (space cadet?) pizza key in the last chapter?
look at my books, see which can help
( look at articles from Mischa
( https://goinswriter.com/how-to-write-a-book/
$\checkmark$ https://fictionary.co/seven-drafts-editor-allison-k-williams/
chronicle books store
read http://www.underdown.org/packaging.htm
redo numbers that say REDO NUMBERS
send the publishing document to more people?
review all the folders (particularly not-touched folders)and new items there
clean stuff up
, finish Inbox in Devon
"to distribute elsewhere" list in the other Noteclear gmail inbox
look at Pocket
Facebook SavedProcess scans include "Make sure we have..."
go through uncategorized notes to add "Make sure we have..." etc.
pay attention to "simply" for grammar
send specific chapters to specific people (with the UI)

Themes after reading the first draft:
doesn't feel too long!
kind of disconnected
the beginning is bad
the ending is good, but does it harken back to the beginning?
took $\sim 40$ hours? an hour a chapter, roughly

## Make sure we have... (done while doing third draft)

Specialized keys: printing but then doing
hot key
collectors reconnect?

## SGI prototype notebook 1996

$\square$ ergo also: https://twitter.com/mwichary/status/1040511295089389568?s=21
alphabetic reappears
, speak \& spell include
National cash register futurama big keyboard
15 seconds of fuel left
draw the line (last chapter?): S\&G » Remington No. 2 » Underwood No. 5 » Selectric » IBM Model M » iPhone????
typewriter-like fonts
linotype on iPhone "I can take this into the bathroom with me. Could never do that with my 'real' linecaster."
hellschreiber rhythm
Twitter has a bell
"fat fingering"
my trip to Milwaukee (visual)
Japan!
$\checkmark$
read "understanding japanese information processing" read "A computer science reader ABACUS" book chapter

Kantere and kantele / The fact that there are two names
typing in BASIC stuff / speedscript etc. / copying basic from / kind of like woz toggling the switches, but via keyboard
typing in computer games (data aaa,bbb,ccc,ddd like toggling switches / Checksum / last instance of re-typing / kind of like typing mysteries)
hilariously, one of them was typing a typing trainer, but after 3 pages of that do you need it any more? Analog_Computing_06_1982-05_Maniac_Pirating
killer poke

## Make sure we have... (decided not to)

early salesman crimes
foldable/folding/flexible: in portable?
cats on keyboards
"czeski blad"
detachable - remote keyboard remote_keyboard
street typists (istanbul, etc.)

Macros, mentioning things like SuperKey?
we don't talk about washing keyboards in the dishwasher + keyboard covers/roofs + etc.
add SAGE somewhere (cigarette lighter and ashtray)
Displaywriter keyboard is called "white whale"
talking to modern companies
theory (Carr)
those little holes to write in instead of overlays
minitel (read the book about Minitel)
...and something I've never seen before: A keyboard obituary. (Steve Jobs), NY store music keyboards/pianos and stylophone

## Update before publishing

word count in chapter 34
all mentions of 2019
French keyboard! ACNOR

## Before third draft

Process Devon Inbox

## Pocket

extract/rename metadata
unify visuals
clean ILL from gail inbox
Go through Glenn's notes
Thomas ran videos
add new version of command+shift+l
clean up Notes \# master to do list
Incorporate "distribute" stuff
clean up promotion + podcasts
Look at printed books
Look at new folders
Look at "to add" list
Prepare sticky wall
go through each chapter and write down lessons learned

Make sure we have... (done)
keyboards for videogame consoles (as visual)
very old typewriters? (Mill)
safetype with mirrors
"ortholinear"
[SORT OF] apple dust gate "butterfly" (tie with Esc?) travel distance / sound / DUST
( [SORT OF] apple arrow keys + touch id + dust gate
keyboards with stuff built-in
index/circular typewriter
toys + speak \& spell!!! (maybe somewhere next to touch typing games?)
Make sure we talk about the delay after a keystroke, maybe in surveillance chapter? We do a bit somewhere.
"Office" itself comes from the Latin for "duty."
[NOPE] speedruns?
[NOPE] 1201/1202 errors during Apollo landing QWERTY colonialism (phrase)

New folders... [updated Dec 2018]

Accounting/Magnetic ledger machines
Airlines + Airplanes
Animals and typewriters
Anime typing
Apple dustgate
Book-like keyboard UI
Christmas theme
Circular keyboards
Color-related keys
Commodore 64 Aldi (beige)
CW (Morse) keyboards
Diatype device
FasTap
Ferranti Sirius computer
Functions masquerading as keys
Hunter Thompson shooting a Selectric
IBM 4700 computer
IBM 702/705/7080 computers

Japanese printing keyboards
Japanese word processors
Keyboards built into desks
Keyboard on the back
Keys as pixels art
Kill, Murder, Execute keys
Korean stenotyping
Military keyboards
Motion studies
New Standard Keyboard
Novelty phone keypads
Office furniture
One-handed gaming keyboards (speedpads)
Phototypesetting keyboards
Plotter keyboards
PolType typesetting keyboard
Printer-at-the-top word processors
Robot keyboards
Royal Digital calculator [royal digital is sad because royals were so nice to type on!]
Serif key cap fonts
Shortcut-S keyboard project
Signed keyboard photos [UNNEEDED]
Speedruns
Tellatouch
Typewriter cushion keys
Typewriter poets

Typing in programs from magazines
Virtual reality keyboards
Voder

## Done after first draft (moved here)

clean up all the TKs and so on (yellow stars)
re-read changed chapters: 10, 42, last one (tricolon)
read the first draft
unify these two files
transfer notes to digital
combine together with the previous ones
unify from above
read Glenn's and the other person's feedback
respond to Glenn
$\checkmark$ respond to the new person edit of font chapter (Sara again)
re-order chapters
$\checkmark$ in Scrivener already
, sticky notes
fill out the list from Brianna's (see "Book themes" below)
fill out "firsts"
what do I want this book to be revisit etc.
read the book(s) about editing
clean up "To do editing" below
look at Publishing
look at Friends of the project
reach out to more editors
print a copy for me

## Done writing (moved here)

get rid of all the TK
rewrite beginning of calculating machines
rewrite beginning altogether
redo tricolon story
"after reading first draft" notes
rewrite i-opener with more answers
intro
add pizza?
, actual ordering pizzas
foreshadow tricolon
foreshadow battles (shift vs. caps lock)
outro
come back to pizza (next to the spacebar)
sprinkle tricolon around, and end here that it still holds mystery
foreshadow tricolon in opening chapter
, "Children generally just sit down and start hitting keys.": chapter 20
10 somewhere hide the rest of "- - tricolon leftover"
09 brief mention of : in the 1889 patent of QWERTY
28 brief mention of S\&G in Model M chapter
review all the mentions of :
move this list elsewhere

- ch07a page 131 nineteen fifty five. About a decade after Courier, Italian etaoinnnnnnnnn"

153: "promised a "100\% noiseless"

- ch08 p252: above "weren't meant to be read" - "The Linotype, instead, supercharged etaoin


263 "Those powers were also fast. In the etaoin shrdlu uuuuuuuuuuu"

- ch11 p-297 above "as they're being punched" - "as they are bei ETAONSHRDLU"
p299 "in November 1891, and just a year after tha ETAOINSHRDLU"
- p 1104 p 1137 "preloaded fixes. You did notetaoin shrdlu etaoin"
add to easter eggs: why is the key switch chapter [ n ]?
remove missing characters? in step-4-or 5
consider swapping UDAC with microfiche visual?
give Figueres credit for all the photos?
for some images, add "compare with" XXX
maybe redo chapter photo keys
CORR chapter opening key make green? just for fun?
and LEAP make red or red Esc? or the word processing one make light add to easter eggs And arrow keys use esslinger
index: keys? keyboards? names of people? all the proper nouns?
more text on intro?
not super important underwood no. 5 page 95 pull down
after step 3 test whether chapters 10, 20, 30, 40 have their numbers proper (not 1,2,3,4)

Reduce size in text
Page numbers
Reduce size in spreads
0.3261
$6.6875+0.3261=7.0136$
resize
image cap horizontal position 7.3125 in / 4.5 in / 9.1739
$\mathrm{M} 122+50$

## small fixes

( output sans from 8 to 7.5
( self logging
( done?
force curve?
v install
systemic
tenki IME could be higher even

Is there a way to check for empty lines that were created by avoiding widows etc. in chapter opener, the patron saint key shift up twice (see prospectus)
key switches

## hyphen in title

move up split diacomo to align w/ text
open switches more padding $0.4 \rightarrow 0.45$
update curve charts
photos mostly / image cap mostly
line height / widows / wrapping more tightly / letter spacing (like the booklet)

## End paper finish

endpaper: add a random icon
add to easter eggs

## find a place for Dvorak Lock somewhere

test first chapter?
test MOTHER-
THE LARGEST PINBALL MACHINE IN THE WORLD - break before IN
maybe unnecessary??? story paragraph: single word justification: align left
vol 1
623 total output in indesign, meaning 624
624-2-2-2-2-2-2-2-2-2
606 total?
v new cover etc.
cover
( Back? Keyboard without legends
if doing keys in the cover, add easter egg key in there

EngelbartCodes fix
all the Compose ones
( move break shortcuts to the right move PLATO compressed to the right
$\checkmark$ make PLATO smaller?
standard icons
 align left at the bottom v) fix the tip
( rename "Operating system key" or drop
( ) esclist
 add the portable
( distribute vertical spread


SelectricBugChart skipped
kangaroo paworbit padding
data hand bottom padding
semigraphics

```
ball move
```

diagram move (and scale?)
and mazeand soldiers
for the lovekey cap art increase padding
model mpadding
shortcutsside by side overlays: a bit more room (w/ book)
\{IMAGECAPTION:SPREAD:RoyalDigital\}A Royal Digital III, a 1972 budget calculator that had just a four-digit readout and a "keyboard" with no switches or membranes - effectively, an exposed circuit board

0

Light gray background for cropped photos: e4e3e8
Light orange background for cropped photos: f2d8c0 THIS ONE maybe switch to this dirty orange: d4c7bf / ffefe6 NOT THIS ONE Violet background for screenshots: 2e293d $\rightarrow$ maybe consider \#151122
Light blue overlay for b\&w: c7c6ca
Bright orange: ff672f
Beige bk for old ads etc: fcefe2 ffefe6 f2d8c0 f2d2bf - new one

Spacer width: 0.1733 in
3.4133 in $\times 5.038335$ in (1/4)
big typewriter height: 6.4694 in
keyboard atop height: 4.75in
$\uparrow$ bigger (exception): 5.705 in
Corner 0.625 in
Space above/below photo: 0.6 in if big, 0.4 if small on the side small side $=3.5$ width max +0.5 space from text ( h )
0.4 space (vert)
for side and corner things:
left align: 0.3861 in
right align: 13.6139 in (like page number)
top align: 0.3861in
bottom: 9.6139in

Order: $\mathbb{K} \backslash \searrow$
Common symbols: $P$ :

## backspace

open selectric curve padding
liquid paper can more padding on both sides

## last

using the wrong smiley thing!
caption
last image cap: add previous page symbol
signature move / paragraph left align
add chicago
toprow image cap length
standards footnotes
remington portable stuff
susie image cap
semi balls image cap bottom left
selectric bug
plug new photos
credit
update spreadsheet
\{IMAGECAPTION:SPREAD:HissTrial1\}\&An example of a Woodstock typewriter|Courtesy Bukowskis|

## mavis beacon

$\sqrt{ }$ move touch typing screenshots to the other side
smith premier no 10 in rowtypewriters - clean up the orange keys add the M1 narration key? last chapter?
acknowledgements
eonsider Bulldozer typewriters
consider Mathieu
add a footnote symbol for electric lightning
( redo footnotes in general - even more symbols
$\checkmark$ in the file
(
**Copyright page role formatting:**
images
P129 clean up
196 electromatic pull up
232 sharpen
244 too similar - replace with monotype
( spreadsheet
251 piggie left align
279 move ticket down
371 colder
430 white image cap
597 clean up atari 2600
651 top four replace by Apple arrows from esslingers keyboard
704705 add dividers
967 add dividers
orig scout PDF 577 and 609
signatures should be 576 and 608
vol1: 20 / 593pp plus 1 for final result $=594$
spreads 5 more spreads
vol2: 23 / 609pp minus 1 for final result $=608$
vol1 29 / 597pp plus 1 for final result $=598$
vol2 32 / 609pp
spain
vol1 41 / 607pp plus 1 for final result $=608$ but also an empty spread! so 606 ?
vol1 55 / 613pp plus 1 for final result $=614!\quad$ empty spread so 612 need to remove 2
spreads!!!
vol1 55 / 611pp plus 1 for final result $=612!$ no empty spread need to remove 2 spreads!!!
[REDO]
vol1 61 / 609pp plus 1 for final result = 610! empty spread so 608 [OK]
vol2 58 / 609pp minus 1 for final result $=608$
figure out what to do with baseline grid
script
support many one by one
support paragraphs starting before or after
on multiple pages
align to bottom connect to the entire step! currently in step 4 TEMP exploration: big black bars

- done
conflict
(V) ZXSpectrumDisassembled
(v) Tetris
() SpectrumCloseup
() MouseExplorations
(V) RingBasic
(VeyCushions
(V) NewRussianComp
(V) EngelbartCodes

Glenn disagree:
70: feels like figure needs caption even though it's explained in text
374: lowercase in this line? "UNIVAC PREDICTS -- with 3,398, votes in--"
454-455: the one color photo does leap out; I understand the choices here, but I wonder if it hits the right effect that you want
614: the ZX bumping against the top seems very tight
796: caption should point ${ }^{\wedge}$ ?
42-43: Awkward page balancing
teletype15 etc image-cap-on the -side? rotated 90 degrees?univac?
maybe not
move image caption onto the image
teletype 37
teletype telex
5150 green
fix step 3 - this was broken because sometimes A-Master would have an empty text frame and we assumed text inside every main frame
change above/below to not text wrap an entire row
big divider: divide by three $=0.0578$ in

> p442-443 (arrows)
p892
p896
p1320
p1392
p1395
p1397
p1401
otherwise done
$\checkmark$ in situ four broken position
teletypeinuse style not applied? (0.5)
terminals overlap with beamsprings
test
p134 image cap (compose2) needs to be wider

94 / p66 / machine assembly room is orange - and others test
move teletype15 / 28 etc. so two lines below are even teletype in situ image cap width 5.6039 in
integrate image caption p136 royal factory
chinese - pigeon make sure the image caption is wide
finney width image cap 4.5316 in
praxis image cap black
ibmbeamspring not one line
image finney adjust outside so it aligns with new columns
look at spreads where page numbers are missing from too long of a section automatic
$\checkmark$ don't go above what it is
v move key
( unify with manual
only half a page or above
the early years
the shift wars

51 caligraph remington top
the machine

$\checkmark$
76 correct houses
78 index
84 car
87 sales
94-95 correct auto
touch typing
( 106-107 finger arrangements
( 117 animals
once mechanical
( 124 regular - test
127-128 dec tab
131 left compose2
143 right changeable
149 right noiseless ads
156-157 exploded adler
, 159 right royal dvorak my
primitive
, 167 blick 5 on the right
( 189 circle right
the monster electric


199 right electric ball
211 right olympia reporter
operated by keys

## 233 correct auto

241 right calculator testing
linotype


253 right composing stick
257 right linotype/monotype photos
261 right spurts
intl
( 271 right turkish poster
275 left russian typewriter [nope]
(v) 276 right auto

281 right thai
282 left camel
285 right olivetti ico [nope]
286 left hcesar [nope]
290 left turkish green mine
punch cards
( 296-297 move down on first card
310-311 move down on my card
314 left ibm 026
316 left punch card storage
telegraph


322 left first telegraph
324 left piano - by hand
328-329 move down teletype 15
chinese
349 move down chinese pigeon
356 chinese in use left
video killed teletype
, 368 left correct auto univac kbd bottom
374 left correct auto
377 right missing autopoint
selectric
( 406 selectric diagonal left
423 selectric stretch right
424 selectric ads left manual
427 selectric dora right
word processor

## 442 mt/st diagonal

445 mt/st testing right
( 446 varityper left
448 exxon two sides
450860 two sides
452 harris viewwriter both sides
betrayer


469 right identification
475 right trial hand up

595 right olivetti computers
zx spectrum
614-615 move down (auto?)
621-622 zx spectrum keyboard ads
(v) 626 zx spectrum+ left auto

629 right atari 2600
mr kildall638-639 ibm 5251
646 left model f x2
651 right ibm pcjr sams move downpage 22 quotation isn't working
model m
(v) 666 left sapper
( ) also width of the image cap
673 right auto
674-5 model m black and dark
arrow keys
$\square$ 694-5 top arrow keys 4x layouts
also unrelated, but indentation "examples of a few rare keyboards" switch from Indented to regular

## 704 left tetris

shortcuts
v 714 perfected left
716 unimatic left
719 ibm blue right
722-3 lisa mac below
730 space cadet lower
$740 \mathrm{ctrl}+\mathrm{F}$
motherfucking
764 royal digital left
rsi
( 778 typewriter split
782-3 apple adjustable + microsoft top
788-9 maltron lower
791 safetype right
792 datahand left
796-7 ergologic
799 sens 810 right
800-1 kinesis
804 blue mac left
esc
813 right mac top row
816 difference engine left
layout

## 828 3278/f left

842-3 space cadet flat lower both sides
849 schematic din 2111 right
850-1 powerbook gray and black german
854 lower auto
856-7 changing layouts epson
portable863 right standard folding
866 right corona 3
870-1 cases
872 left 5120/5140
( 875 right portable compaq
882-3 two thinkpads lower
mavis beacon
913 classic missing
922-3 typing of the dead
227 boss key right
v
932-3 gaming keyboards

949 medium right 953 japanese typewriter right 959 ime right 960-1 logitech/cool 962 oasys lower left 967 lower amstrad french 969 pravetz/elektronika 977 old polish elwro right 979 waapuro right iphone 982-3 optimus spread 988-9 touchstream lower 998-9 lower iphone lower 1006-7 iphone keyboards lower 1011 udac right
( 1012 evans \& sutherland left chording
(V) 1019 nls right 1022-3 shorthand strokes

1026-1027 adjust vertical
1033 microwriter right 1034-1035 microwriter chords 1037 velotype right

1056-7 fenner move down
1064 artyping examples left
1069 montserrat right manual
1072 plato left
1074 snoopy left
1078-9 sholes/ascii games
( 1085 semi balls

## community

( 1091 meetups right
( 1097 jelly key diagonal right 1098 left adjust jelly keydon't drop down or force!

1102 ergodox left
1111 maybe move down
1114 left auto
1120 left auto
backspace
1140 left spellcheck screenshots
everywhere/moon
1154-5 remington 3b/hammond
(v) 1158 left auto weird keys

1161 teleregister right
( 1165 any key right
, 1170 pizza iopener closeup
1177 right comic sans cnc
power to the people

$\checkmark$
$(\checkmark)$503 manual 508 redo as auto
even in p534, 584, 586, 673
not if it's too low, e.g. p714
maybe even p647 drop down
also update the key reference if on the left (or hide)maybe don't show keys then?
did it solve the problem? check again after the whole book is assembled again

Upload the new loc photo
Zoom in?
add this photo https://www.alamy.com/a-japanese-teletype-writer-operates-a-teletype-machine-archive-picture-from-27-november-1963-usage-worldwide-image243660389.html
( ) teletype teaser or insitu teaser
if yes, call back
and foreshadow
how many shifts: image cap
update spreadsheet

Bring back Soviet explain layout spreadsheet image cap v update text

Spectrum switch back to gray bk
burt typographer add
add a mention that typo in my name happened already \{chapter 11\} swap liquid computer with the other one

For first punch card also show the card
$\checkmark$ image cap or this? https://www.loc.gov/resource/mcc.023/?sp=9\&st=image

$\uparrow$ actually add the plate! replace russian stuff
, spreadsheet
 remove sovietkeypad remove the other one ( new one add image
 real size write down to verify it write down to clean up bk write down to make warmer
\{IMAGECAPTION:SPREAD:SovietKeypad\}个An IBM 001 purely manual card punch keypad with custom keys, at the Computer History Museum 7 An electronic Soviet data entry keypad| Keyboard courtesy Jacob Alexander|
\{IMAGECAPTION:SPREAD:TypewriterPunchedCard\}A punch card used to record the purchase of a Smith-Corona typewriter (actual size)
micro pro wordstar include (scanned already in situ)
progin insert
image cap about pulling

963 keyboard rotate: iBoard
bremerton get higher res!also a few others that are marked
$\checkmark$ circular one and the other one (CircularOld)

## Before sending

[glenn info] misaligned footnote symbols
$\checkmark$ move inline densmore down a bit

V QWERTY's second coming chapter number is wrong. they all probably are?
fix locally
fix systemically
qwerty's second coming: instead of 10 it's 1 (also, 20, 30, 40)
176177 remove bold: dvorak hands
240 darker

500 bambino red
1148 (monument) lighter

AT\&T stuff
Ncsf or something
Buy

Powers add credit
Find that photo
Find info

Change the card from the scan
verify contents w/ text
12345678 ?
compare with pantograph
negro vs. black
14 rows rather than 12 rows
redo s\&g with tricolon: look at the typewriter book p30
. also the smaller s\&g clean up
change the big photo of S\&G to be tricolon?
on the left of the sgi laptop photo-some artifacts p. 766
sens 810 remove footnote if we get the image
sens 810
add photo
image cap
spreadsheet
( add notice of better photo footnote later
replace image and cap with glenn
make sure all the cross layouts have the center line at 3.5 or 10.5 , not 10.625 (e.g. weird keys) semi: mazes, soldiers, etc. - adjust vertical stuff vertically
footnote symbols are not mono?
( footnote symbols are not aligned, see p238 (calculators) p635 p639 it seems the boxes are off!
, duplicate

CaligraphRemington: right hand extension
hebrew 3000: background, edges, clean keys and surfaces fix top right replace in Glenn
cover 14: adler 30 background
ibm 2260 clean up below hand - remove
ShiftAppleWriter clean up bk
WangErrors - remove boring
BeautifulTypewriters - crandal remove warmer
SpectrumClones: zx81 white bk
ModelFClones: all three clean up
ModelM101Visual: cleaned up
NewModelMGallery: "update styles to match" remove
Perfected: cleaned up
ortho: added filter
JapaneseHueg: mark as done
MediumScreenshot: shadow
FrenchKeyboard: made even
CommunityMosaic: dasher: front cleaned up
CommunityMosaic: keeblade: remove
iOpenerKeyboard remove
CalculatorCollage HP background match
replace in Glenn
CalculatorCollage Model M remove fix hue
atari 2600 overlay clean up
atari $800 x$ x opener
swap
replace in Glenn
sf 1923 corona on a car
franklin 5 front
add signature to spreadsheet
acknowledgements
scout incorporate
"I appreciated the time all of you spent on reading parts of the book, and providing valuable feedback." acknowledgements, change to colon?
acknowledgements add
( Add Figueres people:
, Anna
( guy
( woman
also Eric Furst
v regen

update old
check chapter number in "end of typewriters" (Scout feedback)
v test, should be the arrow chapter
add my signature at the end re-create in the old one
two spaces!
into anvil and shuttle
( fix programmatically
$\checkmark$ test after rerunning
to comic sans in[ ]microsoft word
, test after rerunning
They have[ ]an obvious actuation point
$\checkmark$ test after rerunning
also add trimming to the bottom! (image cap) on all sides
dividers in teletype in use

How many photos? 1413
Add "not final" to some photos
restore print/font

Gorton numero
, Create in font

Use as a joke 966? / "the classic and beautiful numero" check if not present undo the DEBUG
(WI) tighter - the new I
also check if there are any notes to update Gorton from the marketing site file numero as per above

First chapter opening move down or something
"Finger assignments from various typing manuals" bottom spacing is off
moving from 3 to 4
install Keyboard Secrets Footnote Symbols Atari Regular
v test
overset text 368 and 374
( needs ignore text wrap
for "power to the people" switch kitchen computer front to the left, so that the block quote doesn't get cut
vol 2 p132 move image caption below (shortcut mosaic)
test
double check page 366 ą space
double check 46A
double check 112 and later
first figueres spread correct top right skew
power to the people / 499 try no footnotes so block quote can stay same
remove two spreads!
( olivetti store
$\checkmark$ typewriter maintenance?
((((SPREAD:OlivettiStores))))
\{IMAGECAPTION:SPREAD:OlivettiStores\}个TODO入TODO
((((SPREAD:TypewriterMaintenance))))
\{IMAGECAPTION:SPREAD:TypewriterMaintenance\}Typewriter maintenance and supplies in the first half of the twentieth century
v vol1 check for widows etc.
finished
vol2 check for widows etc.
fix shortcut mosaic ruining things
page 132 so far

Kay download and process image
image cap Division of Medicine and Science, National Museum of American History, Smithsonian Institution
other image caps
credit
( dates
research history of beam springs!
finish "Keyboard secrets: Spain trip photos"
"initially out of technical necessity" what
Vol1 388 overlap done - test
$12^{\prime \prime}$ is broken again!
international vol1 bug: "(usually $\nmid$ and $\dot{z}$ )" has an extra space
( test
add actual size to punch cards (OldPunchCard and TypewriterPunchedCard) 9.5 cm should be $16.8 \times 8.3 \mathrm{~cm} 18.73 \times 8.3 \mathrm{~cm}$ CORRECT $27.375 \mathrm{~mm} / 9=3.04 \mathrm{~mm}$ per char
resize card
move ticket
card dimensions
( v) verifv 5/8 glyph
reflow text
printout
caption
alctual sizr 18 mm width 7 characters $=2.57 \mathrm{~mm}$ per char
any key install

```
caption
spreadsheet
```

sony pcg image
update cap
top/bottom image align check everything
vol1 not done
vol2 done
update spreadsheet
( guess
( shortcuts: shift up + up x4
symbols: shift up x3
v and add another one
add one or two to PLATO
combined 2 big 4 small
the QWERTY layouts
v and the arrow key layouts
fix the photo with borders
one line image cap under it
text below figure out
backspace p523 is strange on the right
univac image cap overlapping
test this again
p102 pull down
also second page of touch typing covers is off
double check "a little abortion" is wrapped!!!
"A later drawing that recreated the fateful meeting at Remington" image cap wrap earlier
74 footnotes check
first chapter: "demonstrated" repetition
check for definition of platen
( repeated in stapenell
47A chapter 74 time from ignition newline bug
verify perfect components on pg-4
verify $£ 40$
verify constant space $\pi$
in the "final stretch" spreadsheet verify the red things
remove don norman
review new stuff
word processor too long!
"far into the twentieth" in shift overflow
look at "twentieth"
look at widows etc.
computers/univac
add the early keyboards
add teletype print
spreadsheet
check widows etc.
and stuff overlaps
remove culler fried from later
add $1 / 2$ more examples to system icons
match remington colours between vol1 and 2
four backspace photos! not two! to mirror shifts earlier!!!
flag italic in image cap
update raquel meyers photo whenever it appears
figure out monospace footnote stuff
table of contents: what if the keys are in their own column? rather than left aligned with text
finish new spreadsheet vertical alignment of spreads
remington portable shadow bottom left left side
the new photo of Sony small
ergo is off $p 174$
din 2111 is off
mavis
chinese etc.
japanese is still broken
verify them all again
why the discrepancy in sizing

P17 widow
P26 widow
P95 pullup
P130 bottom left ends early

## Same 262

P183 pull up
515 needs to end a bit lower
549 higher end

Layout
P33-image caplonger
321 flip to the other side
408 and 409 get closer
( check widows etc.
449 flip with the one before: woodstock
668 prevent footnote?
672 shows key on the left
694 also

- 990


## 686 pulldown

## 731 pull down

836837 messy

## 966 image cap-anger

## 1015 pull down

## 1089 a little long

fun stuff:cool ligature
something old in the older chapters?like per symbol?

AFNOR small caps
update photo from martin howard
update chinese woman photo from getty
update spreadsheets
step 5
doesn't insert the middle in the right place
the vol 2 numbers are off by 2
word processing add a spread for 4 types of printing
new typewriter/computer idea [Ortho]franklin + ergonomic triangular
typematrix + automatic typewriter

Splayed keyboard
Something else typewriterpage typewriter
Thurey?
ETC111 blank Bates Corey Williamsfontana baby
something else keyboard
remove loren
left is not aligned to bottom: space after 1.2404
( update in step 1
verify it looks good otherwise
TOC gets inserted before colophon
verify page numbers of TOC
add half a page to the end
add opening spread, but don't change page numbers
remove dark green one at the end of first volume
remove debug
grammar/style
revisit "tell-" stylization
( italicize vi/emacs or not? (yes)o's for plural or not? (search for 's)
C also go through all the quotes (search for opening quotation mark), maybe find titles of

## italicization

books italicized
periodicals not
italicize video games (Space Invaders, Pac-Man, Tetris)
$\uparrow$ actually don't, because we don't italicize software titles like VisiCalc?
italicize lotus 123 and excel and wordperfect and vp planner and word $\uparrow$ or yes, but also then vi and emacs
italicize papers and article titles (rather than quotes)
update style guide
de facto
vice versa
quasi
via
de luxe
tour de force
lingua franca
ad nauseam
sans
en route
faux pas
rendezvous
passé
sans
non sequitur
ad hoc
letra por letra
$\uparrow$ currently (somewhat at least) italicized
a.k.a. (not italicized)
e.g. (not)
portmanteau not italicize
( darken under image captions if necessary (take a pass)
shift wars chapter intro
typewriter row intro
big cash reg
dvorak intro
linotype intro
punch card hands intro
hollerith tab machine (my hollerith)
(v) relink
telegraph intro
crime intro
( relink
chinese typewriter intro
pcjr intro
univac (portable) intro
the mother of all demos
sweater stuff
( $)$ relink
cathedral art montserrat
( relink
visual stuff
teletype15 fix bottom edge to be even, pull up a teensy bit from text
Micro writer simulate screen
Agenda simulate screen

OC kerning
KE (LIKE) a bit looser
OWN)
CERT(AI)N
(WI )CHARY
M(AV) IS
volt: 22 then 26 then 27 then 33 then $35 \rightarrow$ new dimensions $\rightarrow 37$ (halted) $\rightarrow 39$ (halted) $\rightarrow 40 \rightarrow 44$
$\rightarrow 45 \rightarrow$ new hyphenation $\rightarrow 51 \rightarrow 53(1-4) \rightarrow 54(5-18) \rightarrow 56(19-21) \rightarrow 61$
vole: 23 then 25 then 28 then 31 then $36 \rightarrow$ new dimensions $\rightarrow 38$ (halted) $\rightarrow 42 \rightarrow 46 \rightarrow 47 \rightarrow 48 \rightarrow$ $49 \rightarrow 55 \rightarrow 59 \rightarrow 60 \rightarrow 65$look at the good typewriter book to look at the photos againbeautiful^ randall p48hammonia p76sholes visible p167lambert p196

[^0]Swap chapter opener of backspace to a different shot of correcting Selectric Try a column for keys for toc
stupid 43-46 footnote problem

Step 4 on vol 1
Step 4 on vol 2
Update title hyphenation
Join both
Step 5
( test both
Inside jokes add
split PDFs
send to Scout
add easter eggs
use two spaces on one page in the last chapter


For the shift space at the end, have a joke like "a combination $\mathrm{Tac}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}$ add to joke list
( actually smarter!
switch 19 (gender) and 20 (early adopters) - because the last one mentions gender
( ) test / FIGURE OUT THE BROKEN CHAPTER swap chapter opening photos

ANITA small caps
with italic and 1bold, chapter mechanical
( $)$ and $\dot{z}$. international
add easter eggs above again
retest gaming arrow keys
retest spectrum: p24 left
last chapter: Marcin Wichary distance
[Case] seems broken (Backspace chapter) - because [a] is not in the font, creating a hollow a works
fix this community: qglmwy needs to be a bit later
move HHBK charcoal to the same as das
( update footnotes
add HHKB
, image caption
(v) full size
incorporate
update spreadsheet
conflicts
semi maze overflows
intl part 2 overflows
leak of footnotes from iPhone
also overlap
rewrite "Making the beam less powerful" add smartphone pinkie https://twitter.com/washingtonpost/status/1454110596463529991
, blackberry thumb
acknowledgements finish
frames around people who died?
scout
prepare PDF with both tables of contents
write down

Would be good to highlight for Scout if you want her to deal with this to check for consistency and write a little guide about I versus We uses?

Some issues here with capitalizing The. I think another thing to highlight for Scout: in which cases are you taking the The as capitalized as part of the name and which not? It's a style thing and also tricky! It happens with publications all the time as I noted in the style guide. It's "the New York Times" but other publication are, say, "The Atlantic." So are these "the Improved Type-Writer" or is "The" integral to the name instead of an article? Worth sorting out to apply consistently, regardless of what decision you make.
review footnote articles
[[[44]]] "It makes me want to cry," wrote one fan of the TouchStream, sharing his feelings about a lack of a true successor to that famed keyboard. However, he eventually agreed that Apple's acquisition was perhaps for the best. "I prefer a multitouch computer in my pocket over a multitouch keyboard in my laptop," he said to me.
switches overflows
switch1 - h 5.308
, rubber dome H 5.94 from the top
esc needs more text
( red buttons double frame
reintroduce cyanide
update TODO image caps

(V)Report TODO in image captions
two conflicts keycapprinting + semiballs
add easter eggs
and document
02 hyphenate weirdly for a paragraph or two - forgot where it was (there is a production note)
(V) add to copy
( add to easter eggs
etaoin shrldu as a joke somewhere earlier in actual print, one before this chapter, one here, one after
( 05 page 131 "in nineteen fifty-five. About a decade after Courier, etaoinnnnnnnnnnnnn"

08 left room on p 252: above "weren't meant to be read" - "The Linotype, instead, supercharged etaoin shrdlu uuuuuuuuuu"

11 p 297 above "as they're being punched" - "as they are bei ETAOINSHRDLU"
finish copy/writing
verify
typography: 4"33' is wrong quotes
"eventual-ly" and "me-chanical" - but you have to accommodate "motherfucking" which doesn't fit
any missing small caps?
check in the list below
already done, but verify
full bleed images - consistent padding below (0.6? 0.7?)
for the 90-degree rotated keyboard, make sure it's always on the right side
after assembly, go through everything and make sure there aren't any double boxes (or, text in box that starts at $\mathrm{y}: 5$ and not a bit higher and skips one line owing to alignment with the grid)
copy code to generate acknowledgements fromthe other computer

## $\sqrt{ }$ <br> again

move boxes via script
move masters in spreads and grid
move masters in text
mechanical is broken! too much (becaused of tab image cap)
wide h 5.095 - wait
foreign shift up
my royal shift up
test 07a again later
qwerty hands left one is broken (two frames)
circle, too
, test again later
TEST underwood: visible spread move further try this
TEST univac: last page on the left has too much space above test the orphans once more test the black bk again step 3
test TOC
incorporate glenn writing
add caption to tab keys
check inline atop padding
add more to four chapters
international
crimes
PCs
Olivetti
check the new spreadsheet
run the image caption script
add fake image captions for missing ones
update microcomputer in situcaptions
vol1
03 Shift need to debug what's going on with footnotes exactly q missing from the first page (to the right) the footnote from gender leaks into early adopters/zinssner and blows it up gender write down a new image
and caption
teletype 28 caption: WRU $\rightarrow$ Who Are You
red one up and more bottom
new stuff no footnotes
step2 on 01 key is lopsided
add to spreadsheet
turkish a bit more
left check
slashed zero too often
chapter title soft break

# THE EARLY|YEARS|OF MINGLED|TRIUMPH|AND DISASTER 

and others review
vol 1
first chapter just remove number, don't leave space
( move up key
see how it affects bastards etc.
re-add $Q$ as a key in the first one
"get green" page number seems misaligned! nope
fix chapter keys - 0.1 manually rather than programmatically
something wrong atop black zinssner
after step 3, something funny happens in first page after word processing black opening page - this was 15 pt to 14 pt change

## 1.1 from the left 0.8239 from the top

GOOD 1.39448 .1
write a script to locate 8.2 and corresponding
0.8861 from the top / 0.8239 from the bottom ( 0.0622 delta) > swap
1.2 from the left / 1.3 from the right -> 1.1 from the left, 1.4 from the right move horiz
move vert page number
table of c
update in spreads file
swap this or unify vertically
fix colophon
( and SHIFT HAPPENS opening
adjust page number to match
Adjust vertically centered items
adjust horizontal image captions etc.


$$
8.2<8.1
$$

$$
1.2944>1.3944
$$

once done with line height etc.

make sure all the pieces with rectangles (like in gender or in touch typing manuals) align top and bottom
ctrl+c twofer spread - top align with text?
 others?fine-tune line wrapping of chapter titles
vol1 fixes
v) 108-109 double frames

248-249 weird (linotype-examples)
252-253-same
linotypererun: test it
many are twice, many are missing
review 39 after page 144
double frame
figueres - fixed itself?
vol1 fixes

627 repeated a bunch of times (page number duplicated)
a few image cap adjustments
fix initial shift key placement
first line grid placement
do these again
wang word processor image caption green
Vol 1 p 227 weird calculator right add a bit more padding top vol2 - maybe not needed, checkokia ( bottomsixty image cap on the left shift inventions image cap full width nokia move up
v make it so it alone controls the wrap, not footnote

03 shift fix footnote symbols
tony! small caps
Vol 1 p 227 weird calculator right add a bit more padding top
P485 dual box still other kitchen comp

## v Test

Swap two last typing pools
Wang word processor image caption green
bottomsixty image cap on the left shift inventions image cap full width
nokia move up
make it so it alone controls the wrap, not footnote
small open selectric has cable sticking out steno tape on gray bk

Want to find a way to get semi balls in there
raquel myers, too?
add to spread
alt footnote symbol left padding decrease (done, test!)
all the fingers or none opening - "ca. 1940" is split
"The Jews footnote - hanging quote?
move all the keyboards to face left
update rules
if there is a key and then ) or ( and then a key, add hair space - check "typewriter makers sold extra symbols"key tronic + sovietf122 with extra keys need to redo this weekend
 FJ?


Atari 2600

smiley ball
leave room for

medals xp
medals x2
image caption
do final positioning of stuff
chapters end bottom right
start with chapters that will be sent to people to buy myself time between Oct 15 and 31
make line height decisions: 10/14 9/12.5
update everything for new line height
grid
paragraphs
divider/section break

0.1975 in
0.1875
$\checkmark$ check in practice
(V) block quote + footnote

13 maybe? 12.5?
check again
dot matrix
quote alone: space after 0.12in
page number on the side

drop cap match height
( first from: $0.8365 \rightarrow$ resize to $0.8112 \rightarrow$ crop to 0.7706
 check
$\checkmark$ second!
$\checkmark$ fix the letter twain (BlameMyCats)
add BlindCorrection
add to notes
two victor calculators: image caption on the same page
still to do
large run around on objects - could be tighter - no box
running head at the top or...
add spreads
, add shift happens opening spread
add colophon at the end

- add vol 2
add another spread with people
个 update to do after glenn
swap all the image captions to go clockwiseadd a check
semi
drop cap adjust $0.3628>0.375$
( ) the other drop cap, too
personal maze tighter vertically
soldier top
make ascii art book backgrounded
v same with robotron
ascii image cap wider
\{IMAGECAPTION:SPREAD:DontTextAndDie\}A 2019 anti-texting-while-driving campaign, San Francisco
$\uparrow$ update spreadsheetvol 1
07A beginning doesn't fit because of the drop cap and it ruined things
conflict: SGPedal
( SGGreenPage
p74 image cap conflict
test
test again
electromatic image caption below
p487 weird indent? (duplication of text frames)

POSM put caption on the same page, bottom left, w 5.48 in function key mosaic: narrower image cap 5.4083

EnterCollection caption on the right
Corona Folded a bit further away
"popular with journalists" is repeated
littlefingers caption figure out p438 - move alphagrip prev page - move littlefingers prev page
test
small caps QGMLV
small closed selectric: 3.0856 in $\mathrm{H}+$ clean up crop
spell check program: double frame fix and top pos
( autocorrect same
remove don't text and drive
lunar module nouns add space
( $)$ fix again test
to verify: keys touching
to verify: chinese keys
add a nice bk
warmer hue to match olympia
update image capt
[[[22]]] I asked Govert Schilling, a Dutch writer and astronomer, what prompted him to suggest that name. "Asteroid names give a nice view of the richness of current human culture," he responded. "As a writer, I've always loved :qwerty: as a phrase, so I suggested the name. The then-director of the minor planet center liked it a lot, too."
welfare center \$303
ming kwai patent with both photos add both to spreadsheet patentmingkwai and ChineseTypist write down: ridges unify 3D
last one


## two spaces later

move natural to the left

```
cortical \(\times 2\) ? -stupid
```

or emojixt
or emoji make widersounder?
(an activity more commonly known as dictation[[[10]]])
[[[10]]] As we've learned, for most of 20th century company executives didn't touch typewriters, but dictated their letters for assistants or typing pools to type up.
mechanical
dvorak typewriter
(v) write down shadow uncolorize
height 4.3809 in
tab image cap shorter
mechanical devices image cap wider
(v) 5.4083 in
noiseless above/below $0.75 \rightarrow .5$
wide carraige h 4.765 in
factory 5.225 in

## chorded

microwriter left 6.7189 in H and adjust
( grandleajn 4.5383 in
fix order
2.625 in
fix overlaps of image caps
add medals
update image cap
update spreadsheet
touch typing
( left manual standing 3.8283 in

right 3.9117 in
and adjust
move big class photo below so it connects - test
touch typing manuals last one disconnected
if you switch the medal to full height, 2.7361 in, it works
 update image caption
international
fix image cap on mosaic: top + w 6.1539 in
, move thai image cap to bottom right
something new from thngs?
turkish "patent"?
hcesar
model m
remove turkish footnote?
$\checkmark$
put 50 key in its own spread - this will give us enough text and it will be enough put in the spreadsheet add to reshoot

## international pt 2

move image cap to the other side for the largest japanese
make japanese typewriter bigger
move up tenki ime a bit top padding
 try negative
below logitech on the left too much space
elwro 800jr arrow
microtron separately, and add another one to the mosaic?

add image cap
add arabic
(v) write down to clean up
( ) update image cap
(v) add "arabic mode" key
update spreadsheet with both
add diff engine to second guess
move red / molly guards before
add dejam
red buttons: add fake bleed
move molly so it's not on the same page as the therac accident redbuttons
( $)$ remove cyanide from spreadsheet
layouts
no footnotes on keycapprinting ortho image cap wider 5.4083 in ( rewrite
 image cap on apple iic wider add the blue keyboard schematic to juxtapose?
( add to spreadsheet add to make blue
( 19mmdiagrams spreadsheet
gray powerbook move later
key cap printing make full page
add a spread with teletype and model m
( add to spreadsheet and photos listTeletypeModelMKeycaps
move numpad layouts to its own thing update image caption add to update bk
epson not as white!
ming kwai \$303 https://www.gettyimages.com/detail/news-photo/vue-de-la-machine-\�\�-\�\�crire-en-caract\�\�res-chinois-aux-etats-news-photo/834338630?adppopup=true
qyx - 1978
xerox 860-1980
harris - 1986

## \{IMAGECAPTION:SPREAD:NeXT\}

portable
standard keyboard ad top left 0.5 / bottom left 0.48
add remingtonportable to the spreadsheet
add compaq or something
( image cap
acounterpart to osborne?
add big thinkpad (meh)
weird computer keypads no footnotes on the right and left add image caption atop sweaters
v add harris
add image caption
ح add dates to all
remove writing from spreadsheet
write down for harris to colour match the rest
\{IMAGECAPTION:SPREAD:MonospaceProportional\}个Monospace fonts Imperial Elite (Olivetti Studio 46 typewriter) and Pica Cubic (Olivetti Pluma 22) $\downarrow$ Proportional fonts Reiner and Cassandre (Olivetti Graphika typewriter)

If adding the small ibm card mention it was like blu ray to dvd
backspace
allow footnotes on half-spacing
I curse the day it was ever invented. To me it is worse than paint, and can only be erased with vigorous rubbing using non-smearing Shellite.
data processing
rochester > rename to generic
put all pecularities on first page
orig card 4.8633 in
cards move later (test)
add a keyboard for the soviet one

add to spreadsheet
crime
identifont: left padding $0.3+$ move image caption to the right
chambers left bottom padding image cap 0.2
poisoned pen height 5.37
ultimate end $\rightarrow$ end
the typewriters left behind $\rightarrow$ machines the hard and embarrassing way

Mark the Canada one as paid
v early adopters
put twain on the other side
( revert image caption of microcomputersinsitu displaywriter on the left less above mark twain struggling: move up BlameMyCats
selectric
selectric big keyboard earlier
dura right 4.195 in $>4$ in
besk 4.6667 in > 4.4
move up BESK
original terminals no footnotes
mach 103.3333 in
ibm 1052 image cap top left white
remove selectric back
update spreadsheet
calculator
make juxtaposed calculators larger
friden footnote
smallcompto more vert padding
AT\&T move to the left
right of old calculator height 4.525 in
0.6 on the rotary on the right later

SemiBalls update in spreadsheet (removed)
clean up the royal typist
v
community
first collage top image cap
(v) top padding
scrabble lighter

3278 no footnotes left
revert 198 and 200 opening typewriter
move form to left
rsi
footnotes are broken! 12345678911121444551516172018211923
( turns out if you find backwards in InDesign, it just remembers that - no way to override?
overlap of image caps
make TK1 bigger
too many footnote symbols
alexander piece next to ran's hands
bold, uppercase "OA." ((((FOOTNOTE:15))))
vol1
fix conflicts
ergologic image cap put on the right
try to fix chorded ordering
cushion left padding reduce by 0.1 , right padding reduce by 0.2 , left caption bottom padding reduce to 0.2
juxtapose odds ends with games
update spreadsheet
\{IMAGECAPTION:SPREAD:ASCIIGames\}\{ONELINE\}Games with graphics based on ASCII characters:KNetHack (1987) டASCIICKER (2019) ЛZZT (1991) УRogue (1980)
vol2
resolve conflicts
small caps PEEK POKE RND RAND
zx82 bring closer
pcjr left tighter
fix evans missing text frame
check lunar nouns
comic sans kbd move to left
valentine footnote 7.625 in weird keys rotate a bit
hammondper footnote
vol1
golden touch text wrap
( make caption narrower
remove BigNumericKeypad image caption
teletype 28 no footnotes left
SelectricInSitu: previous page
switch ELEA and P6040
ELEA REMOVE PAGE NUMBER
ELEA switch up/down
redo conflicts
"modern approaches" try on the right
remove half of evans
a little more space around folded x2
Ring on the right less left/bottom padding
Mavis Beacon little cut out for floppy
make the three dots half a page
(v) and add the balls
( ) add to-spreadsheet
\{IMAGECAPTION:SPREAD:BigNumericKeypad\}Professional telecommunications equipment that uses a combination of early numerical entry approaches
fix conflicts
add my hollerith
electric 0.6 page more
move buildings one page further
28 no footnote
update new image
( ) update in spreadsheet olympia reporter wider image caption
index no footnotes
other kitchen computers
$\checkmark$ move footnote to the left width 2.3222 in color change footnote

50 chapter opener two image captions!?
swap Esc to be full page? swap with last spread?
soviet colorize + reposition
"used that knowledge"
4978 no footnotes on the right
selectric diagonal no footnotes
circle no footnote on the right
how to be super adjust vertically
( no footnotes on the right
displaywriter diagonal from 0.75 to 0.2
beautifultypewriters image caption atop
olivetti computers auto layout bottom instead of top
p55 remington "the key to situation" make tighter? compare with backspace much later өn
vertically adjust
, man standing
( ) olivetti
( look of approval
details vol 2
( zx82 vertically
basic vertically
move up ZX80/81 5 times up
unimatic extra image cap
no footnote on right side of airlines
no footnote therac + no footnote mac top
no footnote $3278+5150$
new brain less space above
modern revert caption to go after, not before
revert mystery games and the next one
image cap for bremerton
game chats image cap move above
image cap for last spread
Move weird creature before
fix conflicts
fix qwerty image caption missing
eastern no footnotes
add stuff to model m
move semigraphic spread after
elwro 800jr move down
korean bottom left less padding above
p24 image caption too long
p27 zx82 reduce width on the right to 4.4203, and then also crop
redo frame so that grid-aligned bottom line aligns: from 8.25 to 8.29
( move to spreads!

```
                paragraph 10/14
                grid 1.005 in / 14
                frames Y: 0.8861 H: 8.29
        test
```

p322 and p362 are skipping the line at the top. why?
create mercury text g2 with line height and change acronym for it update in step 1 / 11 auto
ascender $800 \rightarrow 637$
test
magic cap figure out this whole thing
magic cap
toughbook
PCG-U1

0
reinstall output sans
check for fractions
image caption: add "courtesy" not "courtesy of" to style guide
robin rendle conversation
Go back to 3 lines for section break
Marginally longer en dash / horizontal scale 130\%
761 moire alive after alive
Gorton key next to chapter number
38 T drop cap change letter
coverBack? Keyboard without legendsCover: all black and small, back now is more prominent

## Different keyboard shapes with shift highlighted

if doing keys in the cover, add easter egg key in there
use wider I for everything [Chapter Title]
$\checkmark$ test the opener after ch 1
spread:datahandorbitouch is missing?
my name and location at the end
update switch chapter opener photo
shift knee and so on - top and bottom, particularly on the left
$\checkmark$ alive after five bottom left less
install a reset switch bottom left
cerebral palsy bottom left less
early backspace keys three shifts less left padding wireless + space cadet less padding below paradata a bit wider image caption
cases from four typewriters: image caption below
keyboardio wider image caption
orao etc. wider image caption
bottom sixty also
spell check software also
game chats also
kph also
spectrum in poland also
newqwerty previous page
update drop cap
robotron 300 put atop
a dsky keyboard in use - move to the bottom right
unimatic and the other one reverse horizontally
iopener top padding less
[ctrl] [alt] [del] shortcut misses +?
style guide
, one key after another: [a] [b]
( ) combo: [shift][ctrl][c]
"courtesy of" $\rightarrow$ "courtesy"
smith-corona, but "smith premier"
add style guide

Look at the last word and see if there are any uncommitted changes. If so, they might have broken into scrivener funny

02 step 2 (vol 1)
, "various patents of "qwerty killers"" image caption bottom alignment too high p179 dvorak photo no top padding p 35 mention carriage return in image cap? p 53 shift ads no footnotes on the right was masterly [,] needs to not be a key p 60 floating shift ad - bottom align with text, less padding above?
p 82 left - a bit more space above
p 112 cassette on the right go around
p 188 charts top and horizontal padding closer
ten key touch typing less padding below left bottom
chinese jokes one line
move calculator testing to later
( change image caption
p280 image caption unnecessary indent early on - shorten?
mtst colorized (colorized photo)
( ) add to style guide
woodstock on the right - shift right twice inside
p 518 how to be a super secretary text leaks inside
red valentine image caption too far right
typefaces $\rightarrow$ fonts
fix image caption chapter 88
wider image caption
( $\sqrt{ }$ shift 3-4 rows collage: wider image caption 5.4083 in ridges
olympia power keys
rotary collection 1
coin op wider
opener to chapter 5 "all the fingers" image cap a bit wider
machine assembly room a bit - "Image caption Black" remove balance ragged lines
( linotype opener: 3.825 in
apple ii giacomo - too wide!
( olivetti beautiful $4 x$
two tapes - move the right tape to the right so it fits below the image?
calculators in situ need to be next page

(same with word processing
same selectric
"latger"
new computers fix
from before
scrivener
machine assembly room doesn't have a caption
undo the nice image from inside hermes
(v) p 137 wrong image bottom left
image caption
undoes
fun stuff
typeset one chapter funny (maybe white on black?)
move from typewriter keys to computer keys
prepare a list of cool stuff/easter egg for people $\rightarrow$ in a different Note
finish "editing 2020" note
finish "editing 2020.1" note
finish "editing 2020.5" note
finish "5th prototype fixes" note
finish "footnote engine"
finish "editing after 4th draft"

Make sholes and meeting the same style?
$\checkmark$
after glenn is done
incorporate his stuff
reincorporate stuff from Word (Scrivener) as I was doing in his absence
(
twenty-two new keys that printed syllables - micro (mu) sign is conflated test
unify parade and-coin-operated? ne
format: https://gallica.bnf.fr/iiif/ark:/12148/btv1b53054177j/f1/0,0,9000,6000/9000,6000/0/native.jpg
all the production notes
move here
make wwww uneven

## Q3 reproduce quotes from-Galigraph documentation as scans, not text?

[DONE] !!!1oneone somewhere in text
41 add braille letters where we're talking about them
Book add a-smiley-somewhere
30
update insitu1/2/3 captions
previous pageS
allow three captions to be on one page
"next page" $\rightarrow$ "next pages"
add new GUI keyboards
add olivetti x2
redo international

update image caption and spreadsheet
$\checkmark$ add to clean up
add thai
( spreadsheet
, imagecaption
v connect
add to list of resources https://gallica.bnf.fr/ and fortepan.hu and dp.la
add calculator spread?
unify b\&w
the new photo that is coming
the gender from later or from that site
add to spreadsheet
include
remove the one I had with typewriter and calculator from the museum add the new french one in situ 2 / or the NASA one
allen rippy? also this https://catalog.archives.gov/id/6442593

Selectric a lot of photos?
( the new ordered
the boy
add to spreadsheet
connect
( add image caption in copy
add the three auto typewriters photo
update word processing captions
update calculator captions
order print
fix LEAP
finish steps
( unify both
change table of contents to use right indent
make sure Q is included

In in keys broken
In in first title broken
export
combine with endpapers
( update endpapers
prepare cover and spine
 add the new shift photo update keys
$\checkmark$ space them out properly
update Gorton
fix the stupid shift button transparency issue (not fixed, really, keeping fingers crossed)
submit for approval
upload again
actually order
better chapter opener for chinese typewriter
japanese typewriter move to in use later
swap closeup for opening TypewriterChinaCloseup
remove TypewriterChinaCloseup from spreadsheet and text add propaganda poster?
flip terminals in use black guy and insitutwo woman by terminal $\uparrow$ swap image captions
home computer gallery
hungarian x1 or even x2 https://fortepan.hu/hu/photos/?id=126088
$\uparrow$ maybe dutch bus goes in here?
drop caps make second paragraph not intended (they use "First"). para.contents = para.contents.substr(1) had to be changed to para.characters[1].remove()
later stages updates
easter egg: use zero with dot or slash in one chapter (Gorton)

$\square$
$(\square)$maybe first computer? page numbers? add to step 1 write down in easter egg list undo the orange thing [????]

Story paragraph Dot Matrix Bottom BR + Bottom
bottom $21 \rightarrow 11$
all the others i step 1
dot matrix 031 S tabular
change in copy
\{ALLOW TABS\}
0.75 / 1 / 1.3472 / 1.5972
save in step 1
dot matrix middle BR dot matrix bottom br dot matrix bottom dot matrix top add in copy step 1 quote middle br quote bottom br quote top quote bottom
eonsider finding alternate font for inside the keys:typography.com ( and-image-captions
gorton finish
send to Arrow Type
photo
V "install a reset switch" photo bottom right corner is not white interoffice memo apple gray bk scrabble make lighter and colder
fireball background solid gray
VICTOR calculator in the upper right corner also gray bk small i-Opener make colder word and sentence spacing clean up gray bk like we did with etaoin hp-background to match power glove (colder)
print screen icon in a set a bit higher
esclist2 update image caption size
and shorten first line
$\uparrow$ and left align properly
and others (7 to 8)
, electric + noiseless + mechanical side view (automatic)
esclist2
typewritercompose2
standardsicons2
platocomposez
JapaneseWriting2
keyloggingself (already good)
keypadmedley
forcecurves
v Chart (force curve) font size should be similar to image caption dvorakhands
stenochords maybe
stenotapeexample (automatic?)

Colophon add a mention of index and stuff etc.
Canon Cat: LeapSwitches/Beethoven: TK
chinese: 構 (compose)
olivetti: Via?
underwood: see [Rib'n] as above
add FJ to-d
insert delete $>$ ins deltry for Only one chapter keyatari key spread the three partsupdate in chapters
Prototype 6:
Font size 10pt
Leading 15pt
Grid 15pt / start 0.38in (1.005in)
Divider: Before 0.1875 in After 0.1092 in
Prototype 7 Try \#1 [48 step 1]
Font size 10pt
Leading in Story Paragraph: 14pt
Grid 14pt / start 1.005inDivider: Before 0.0875 in After 0.05 in Align to grid: None
Prototype 8:
Font size 10pt
Leading in Story Paragraph: 13.5pt
Grid 13.5pt / start 1.005in
Divider: Before 0.1875 in After 0.05 in Align to grid: None
table of contents nuances
add keys? / [Enter]? key font
make sure in the script, table of contents digits are all-odd (not even)
vol1 review (90 step 2)
caligraph vs. remington facing: move up (twice shift up) and put image caption below review chapter keys on the left
three/three QWERTY touch typing pages russian typewriter moskva adler favorit disassembled unsplash
, move image caption to the bottom
factory on the left - show page number
[a] woman's nervous system - becomes a key swap homing keys and smith corona animals

VisibleExperiments: change bk to brown
, waverley add to do
facsimile letters at the beginning of word processing - narrower horizontal autopoint height reduce 4.5528 in
combining part 1 puzzle narrower image caption
writing ball in the corner: staggered text outline
xerox 860 image caption shift down arrow
kenbak-1 rotate counter clock wise $3.25^{\circ}$
olympia inspection card image inside shift down arrow
last spread in first volume (amelita)
and last spread in second volume allow image caption to go after, onto colophon
smith corona animals image caption wider
( looks of approval
( decimal tabulator
turkish wider 5.5939 in
royal spread 5.8339 in
ibm selectric composer + varityper
typewriter coin
exxon
remington drawing bottom padding under image cap 0.3
typewriting medal on the left the same
early telegraph keyboards also right padding is off
( early zuse (niko)
 also image caption disconnected whittaker chambers / hiss spread ( ) also top/bottom reduce
teletype 33 top spacing box

reduce to 4.84 in
fix right edge
prototype 7 observations
"no tocar" a bit lower
10/13?
section break (3 lines)
undo changes from last


## image caption make smaller again

( Or update the things that use the font
a bit more space above footnotes $0.3 \mathrm{in} \rightarrow 0.4$ in (originally was 0.5 in )
footnotes symbol breaks when " is on the left

## p. 341 simulate-CRT better

( also Lenore Fenton later
p. 22 tighter text wrap
p. 119
, 276 tighter around
p. 123 second paragraph not indented
maybe related to colour correction
p. 391 and others: darker ble
p. 461 weird

458 image caption wrong place
( And image pull left
p 15 gorton S feels smaller
v $4 x$ basic image caption too wide
below ibm 2250 smaller padding below image capt
copy 1 u highlight from the other one
bluish bk
black background!!!
see "Keyboard secrets: Photos" for later tasks
plug this in
, plug real stuff in

1u: Q [different Q] W M N J E Z elear 0 chinese-compose apple-logo slash windows-logo \| ~
1u x2: F11+F12
1u x3: WGT
1ux4: UIOP arrow keys WASD
1.5u: FN butterfly TAB END VIA ESC ALT SK
1.5u x2INS+DEL

2u RIB'N CORR CTRL LEAP .COM PIZZA AltGR ENTER RETURN
3u ZAPORNICA BACKSPACE
6u SPACE
shift: shift
lock: shiftlock

Add at least some chapter opening keys

Write down that enter is an inside joke (section break)
"Not the last keyboard with comic sans" / Easter egg
no tocar si us plau - add quotation marks
Write down Easter egg/symmetry of quotation marks across all titles
gorton
$S$ needs to be taller
feedback from Hoefler
see file
q with down tail
send to Jeff Kellem
incorporate feedback
fix caption to correction
"wedges"
keys on the side
Model M has weird stuff
p526 (backspace) is wrong, too
what if for arrow keys we do two lines?
( same with UIOP?
same with WASD

Split into two!!!!
node convert 01-55 / vol1
node convert 50-47 / vol2
switch from KEYS: in titles to getting it from the JS file its own betrayerGT still broken

Tab and esc yellow orange make smaller
portable juxtaposition war + swimming pool width 5.6539 in open switches AN

The imbecile - [The] becomes a key
[And]
next keyboard image caption width
gray powerbook image caption width
$\checkmark$ changing layouts image caption width (epson + datadesk)
cushion keys image caption is stupidly wide
tk1 no footnotes on the right but yes on the left
Chess master diagonal line below
mac top row
image caption lower right change arrows
no footnotes on the right
curve gauge

Royal photo https://www.etsy.com/listing/1084108521/restored-vintage-typewriter-royalsafari?ref=rss
( and update other royals
golden touch add https://www.etsy.com/listing/1070124682/restored-vintage-typewriterunderwood?ref=rss
gorton
[30]6 kerning too lose
$\mathrm{P}[\mathrm{AW}]$ kerning too tight
key font
$\checkmark$ why is [W][A] different kerning than [S][D] - had to remove kerning
conflicts
conflicts
export/rerun
chapter no is 32 should be 28
swap TROUBLE key
POSM next page
and FILL THIS OUT IS there p 446
add space opposite nokia
add to spreadsheet
p260 folding corona - try to go diagonal
also page later
same 232 shift key double-shot
portable juxtaposition 1 make marginally wider p264
crayola/keyx etc. too wide image caption
ring n key lower below image caption
smaller left padding of right thing
half spacing - smaller left padding of right thing p524and smaller bottom, too
p532 liquid paper move up
p564 i-Opener below smaller
chessmaster slightly smaller padding below below
modelmcolors wider image caption
new model m gallery upper right
conflicts
model $m$ better
connect
(V) remove old 1 ModelMSSKAndIndustrial
( remove old 2 ModelM15
image caption text
image caption frame
update spreadsheet
check image caption of model f
write down to unify style of model $m$ photos more
make black OLD the old stuff in indesign
add model m dark and black
Find new photos of model m
http://www.zwettler.net/en/keyboards/ibm-model-m.html ansi! european legends or blank keycaps
or black kbd
"how to put a slash chapter" - move first photo (with unimatic) to the spread after where it is maybe done - test
shortcut medley (harris, avid) make wider image cap
alive after five smaller padding below
mac touch bar wider image cap
DM M etc. no footnote on the right
Change the vertical centering to be centered
remove keys from generation
tocorrectatypingmistake
spectrum additions uneven spacing
spectrum + image caption grows the wrong way
PCjrleft less space
uprighttypewriter less space
extended hartmut below space
p 111 make sure the caption symbol is not indented with hanging quote
8.1641 in vs 8.2075 in
maccharlie fix bottom space
hp250 fix width
ibm portable fix spacing and move
chessmaster 2000 space
shortcutmosaic make shorter and longer
openswitches no footnotes on both sides
swintec on the right wider
scantext top padding
tinyhuge bottom padding
move cortical
portablejuxtaposition width image cap
tocorrectatypingmistake image caption top padding less
stenochords width image capt
ultratec spacing
atariball and atarimaze top spacing
gorton
PROGRAMI[SC]I kerning
39 closer kerning
p 47210 PRINT - same spacing as the section break next door dot matrix alone: 13.5-space before/after 0.1
align to grid remove
page number vert. position on opener fix $4.4842 \rightarrow 4.4822$
p 531 half spacing no footnotes a few standalone spell check programs - remove dates/simplify comic sans CNC remove page number
logitech two keyboards wider image caption
robotron 300 wider image caption
p 362 oasys - align top with text + less space below
p 364 french cherry align top with text top
vertical nokia - tighter
"as another letter presented in chapter 21" (recreated digitally) add earlier
protoswitch wider image caption
"example shorthand strokes" wider image caption
"court reporters rita" one line
"a sampling of microwriter chords"
v one line
( less space below image above
blackberry image caption on top
iphone + blackberry a little higher (shift up arrow)
p 456 little ball less space around
semigraphics stuff disappear p 458 (because locked?)
( p 613 "Amstrad CPC Danish"
optimus white wide - less space below
pravetz
( clean up bleeding at the top
$\checkmark$
top line align with text
image caption wider mavis move to the left
( ( everything should follow? (maybe not because of an angle) safetype image caption fix
alive after five closer boundaries
( ctrl+c and other combinations: closer boundary from 0.8 to 0.5
( others, too?
three shifts no footnote
orange and yellow fix (less wide)
, make orange not orange
boss key image caption too wide
hp250 move image caption top of page
v harris viewwriter same
( POSM image caption: next page
communitymosaic prev page rather than next page
move the sgi laptop to be one page later
"an accessory to improve your shifting" move date ahead
2915 add simulated screen to image caption
lisa/maccharlie move caption below
royal digital 3 image caption wider
four numeric sets above - something wrong on the left (p. 256 in 79 step 2)
p. 282 something wrong with thinkpad four
colophon
redo export
salter standard too long (tried to fix! test)
move the key below (send to back)

## Gorton

make $S$ et al. bigger
( SGŚ done
2 up/down
around flat 1
SHIFT letter spacing around I
ALL

TH closer
N/G/L
(v) G a bit more

YEA(RS)
DISA $\quad$ S<>A

ALT between L and T
TU tighter
( TR too (too much on the right T?)
( TA tighter
update buttons in figma
WA tighter

Try to reduce size for chapter title $68 / 75 \quad 32$ pt to 28 pt line height 40 to 34
v and line height
make a system to grab the keys from figma
 move to right position
(v) space out text wrap
( ) fix width
type 3 problem?
correct one
page number vertical position
( keys make orange?
change line height of notes etc.
( Footnote leading $13 \rightarrow 12$
Story paragraph Quote *.* $13 \rightarrow 12$
swap mercedes with olympia
image caption
ico mp1: add "olivetti" to image caption
add to notes
valentine move to the right
olivetti
plug both
, image caption

Semigraphics close up Einstein tatung
add second set of prototypes
add in copy
( add to notes
add image caption
( before/after
update spreadsheets
update from one
from spreadsheet
from text
v from INDD
fix conflicts
tangora clean up
byte microcomputing
( $)$ remove EarlyPortableTypewriters
( Tinney remove courtesy
overlapping left and middle
proper sizing
add beautiful typewriters spread again
( olympia sm3
mercedes
$\checkmark$ smith corona sterling
olympia model 8
hermes baby
add to copy
( ) export
add to notes
add to spreadsheet
add image caption
fix SHIFT HAPPENS opening
(
Underwood key?
from oliver Left/Right
Salter: [Rib'n] key - half-visible typewriting
from Underwood

## visualideas:

split the-keyboard on-one page-and then the second onegrayscale photos, but with orange cover of parts of it
prototype 8 10/13
( leading 13
grid 13
( divider: $3+$ fix [space before: 0.1875 in ]
, take photos
die hard!
intellikeys
Numeric montage
Tellatouch
Popular computing
new mainspring
palm keyboard coming
intellikeys redo
enters incl.


PowerBook tiny
(v) bigkeys
typeright also
new numeric keypad side for the 4-keyboard montage
big keys
prototype 7
add "Like image caption White" to step 1
476 move to the left ApplellBig
424 page number
230 image caption arrow missing
199 reverse image caption and update arrows
add new royal typewriters to the spread
p. 378 move the whole thing up a bit [16x royal]

## colour correction

p. 24 colour - changed from ProPhoto to sRGB

78 and 80 no violet tint
( Also 490
wider image caption

p. 168
p. 444
p. 281
opening chapter 7 "the monster" image caption one line
p. 140 one line
p. 445 fix bottom alignment ThreeFonts
grayscale sholes + glidden
v and moire
p. 399 et al. - don't optically match width
p. 405
p. 35
p. 220 image caption two lines
p. 308 image caption two lines
p. 259 unify colours etaoin
match red

p. 554p. 562
earlier kitchen computer
p. 406 left side bleed
p. 479 later edition of Apple II image caption! moire
p. 78 moire typewriterstore
p. 82 moire typewritercar
p. 84 TypewriterSales
( also straighten!
p. 114 moire TypingMedal
p. 142 RoyalWorking
p. 490 emancipation [DONE; SWAP]

TypewriterChorded
IBM model F siteline
p. 84 more space above a bit
p. 151 move to the top? Noiseless
where else to do this as well? 442?
and ArtypingExample
p. 186 tighter vertically QWERTY graphs
p. 232 et al. image captions at the bottom a bit lower so they are in the corner precisely Y: 9.5 > 9.6139 in
and p. 376 et al. need to be higher up Y: $0.5>0.3861$
Colophon: designed and typeset and edited
p. 154 years at least 19281929
, and moire
p. 363 no footnotes

(
tighter text wrap
p. 110 brighter on the right
p. 136 uneven spacing
p. 188 swap
p. 108 fix vertically TouchTypingCovers
, and one later
redo endpapers with the new icons!
printing
( Printer/Kickstarter consultant conversation
manual fixes

## victor page has a footnote and it's the wrong colour <br> Victor page has a longer paragraph and it flows to the next page and it's still white there <br> "in the land of the lounge lizards" photo-gets moved one spread too-far - maybe because the prior one-gets compacted weirdly <br> ( ean be fixed tactically by adding a few enters to the chapter before last QWERTY gets halved in a weird way

from mike list
( make a list of layouts (minimal)
( unify types of layouts
Chapter title align page number to the last line?
Paragraph mark shouldn't start a page, because makes the top lopsided
Ghapter numbers on both sides
V Image caption: Make it closer to block quote (in size)
printingpaper
binding
cover
add typing of the dead
spreadsheet
imagecaption add place image caption add name

Add hand visual to Dvorak!!!
( add to spreadsheet
connect
add image caption
add semigraphics to be spread
$\checkmark$ plus image captions below
( update main image caption
add semi keys to doc
to spreadsheet
image caption
thurey
replace
earlyjuxtaposition3: image caption + add credit (team breker)
Fujitsu oasys add fake screen
Book remove usb From finger works

## as designed

0.94 in to x height from top
0.5 in to baseline from bottom

## as printed

2.45 cm to x height from top 0.96 in ( 0.02 more)
0.85 cm to baseline from bottom $\quad 0.33 \mathrm{in} \quad$ ( 0.17 in less)
$\rightarrow$ height: 9.88 inch instead of 10 inch ( $0.12^{\prime \prime}$ missing)
new ideas after seeing prototype \#6 printed
image captions needs to be realigned closer vertically when normal left aligned to page number ( bottom aligned further away consistently also for on-spreads
make all black and white little warm?
front back matter hidden in the little symbols
UNITYPER small caps
glenn feedback
v line height reduce image captions larger
my feedback
dot matrix larger
button font larger try?
fix micro symbol to be substituted properly
big changes
Change line height to 14 for one volume [48 step 1]
Include grid +hr
on the right hand side, align with left hand side of text: 8.2
but 7.625 if full bleed
outdent footnotes
font size of footnotes and pull quotes maybe
( image caption $7 / 10$ image caption credit 5.5 footnote $8 / 13$, pull quote $8 / 13$, body 10
$\rightarrow$ image caption $8 / 11$, image caption credit 6.2 , footnote $9 / 13$, pull quote $9 / 13$, update image caption position of symbols
too much space above/below pull quotes
before 0.21 /after 0.19
$\rightarrow$ before 0.15/after 0.14
dot matrix larger: $8 / 13 \rightarrow 9 / 13$
en dash not full space, but thin space
small caps letter space less: from 25 to 10
reduce space above footnotes $0.5 \rightarrow 0.3$
after running
( it crashes my computer
( fix the width of olivetti p6040 one?
update page number position: 1.762 in > 1.696in
chapter number
( chapter moniker?
v process
update step 1: font size 10/12.7

```
add to T.O.C.
```

space out (insert delete) / widen
fix the arrow keys that are aligned with credits only (page 596): image caption arrow lower baseline $2.2>2.6$
fix conflicts

## BURROUGHS TEN KEY SIMPLIFY ATTRIBUTION

fix conflicts again
fix: every typewriter its own betrayerGT
fix

## conflicts

add second linotype keyboard
v update in spreadsheet
( add to re-center ibm international with [1] on the wrong side
ibm mt/st testing image caption too long
$8 \times 10 ?$
remove number from first chapter (in step 3 or 4)
$\checkmark$ when typesetting, make sure si us plau is on the second line p 52 p 60 p 104108110112 left side left: $0.6061 \quad 0.625$ should be? also on the left side when 0.6061 or $0.625-9.4495$ in instead of 9.5 ?
run remaining steps
fix by hand
( ibmelectric4
etaoin
pull up manually a few chapters

```
v) end of 4
    \checkmark ~ u n d e r w o o d ~ c r a t e ~ m o v e ~ t o ~ t h e ~ l e f t
    \checkmark crate swap with the comparison so it's at the end
        v) end of 5
        end of 6
        end of 20
        the one with extra space
        double check the page after black (get green on the screen)
        make endpapers on black
        order!
```

small caps: FLOW-MATIC
Footnotes hanging quotes eg qwerty page 171: Footnote Paragraph Style $\rightarrow$ uncheck Ignore Optical Margin
remove the good-looking typewriter spread
two typewriter buildings on the spread after the big spread, so the rhyming is uninterrupted twin calculators closer padding opening chapter 9 (bonus bureau) image caption wider
mercedes elektra image caption wider
image captions on the right side larger width
newer kitchen computers on the other side add ipad globe key create appleiigiacomo reduce space
redo these actions from prototype 6 to incorporate with text flow step 1 chapter title number green: base on chapter title number, remove next page chapter title green: base on chapter title image caption Green change title of thing to Chapter Title TOC update style Chapter title TOC
( space after 1.0624 in
( right frame adjust size
acronym TOC move
Songi TC $\rightarrow$ Songit TC MODIFIED

Fix logging problems
Became much slower (10 hours = halfway done on only one volume) try on a computer without chrome running
play with preferences

Add the stock machine
( remove footnote as necessary
rewrite image caption
export word
( fix all the stupid stuff from BigSur
chapter 7 footnotes run out at the end (p. 197) - test
do things in real/actual size
Write down recreation for synthesized photos and renders
move 0.3125 left to $0.3861=0.0736$

675 pages with just text
1030 pages with images
1080 pages with images predicted

550 pages with just text predicted after editing
950 pages with images predicted in total
475 per volume
/
(405 pages with photos)
40\%: images
what to do with «»- something cool? :
change kerning
update string
change text
swap the font for real

Lavender = chapter opener
Yellow = full spread
Brown = full spread/important keyboard
Pink = keyboard atop or abottom
Red $=$ inline
Green = two at the bottom together
Black = old
Dark green = two-for (on the right/mystery)
cover + spine
Cover left aligned title
Spine smaller font
Change the key on spine to be real
add opening image for olivetti
figure out images for Univac
, move video teletype opener inside
88 opener: EXPLAIN WHY JAPANESE TYPEWRITER in image caption
fix indented because of grid
10 PRINT space after 0.21 -> 0.19
maybe more testing is needed here?
add intellikeys
step 3 and so on
make sure footnote symbols are monospace at the bottom
check split between paragraphs 1192 all / 549 start of second 549 / 643
current status: 21/21 549/643
if we move in situ: 551/641
if we move crime back to first chapter: $22 / 20 \quad 581 / 611$ (crime is 30 pages)
add two pages of acknowledgments: 22/20 583/611
move music kbd to first chapter / add foldable: $22 / 20 \quad 585 / 611+36-32$
reupload cover v1
reupload cover v2
update bold below
reupload copy v1
reupload copy v2

PDF review
p476 apple memo is broken [ch 19]
p748 one image is cut off because of z-index overlap force curves
p676-679 arrow keys don't have bleed!?
p144 mechanical spread doesn't have image captions
p1030 writehander the image caption is all small caps
p560 twain letter bleed
p442 monospace proportional bleed
italian typing pool clean up
p507 micro switch testing is too low?
p1194 wide spacing bottom left bleed
p1016 small tape bleed
p994 iphone bleed
p982 rotary collection 2 bleed
p836 din bleed
p812 vic reset switch on the left bleed
p775 mtron tk1 bleed at the bottom
p620 ibm pcjr chapter opener bleed bottom
p608 zx spectrum replacement keyboards bleed bottom
p702 ibm 2260 add a simulated screen!
prototype 6
vol 1: 1-588
vol 2: 591-1207

450dpi
v1 regular
v2: error about embedded fonts: trying Acrobat 8/9
v3: subset fonts 0\%
v4:
$\checkmark$
switch back to 100\%Ten Mincho Regular / OpenType CID (SVG) is probably the culprit?
reviewed in Acrobat - detected T3Font_0 - Type 3 fonts?
v5: try PDF-X/4:2010 (got a warning it's not real PDF-X/4)
v6: redid Songti TC as TTF
v7: remove missing glyphs, although still got a warning when finishing exporting
v8: get rid of: Songti (and 120dpi) / didn't get a missing glyph warning!?
v9: get rid of: Ten Mincho
v10: remove output from Figma that Acrobat flagged as Type 3: pages 15/174/179 THIS WAS IT
redo all Figma output as outlines!
v11: going back to v2 but with Figma outlined stuff
other ideas that were not necessary
( try missing glyphs in embedded stuff!?!?!
warning about missing glyphs? try preflight in InDesign

$\square$
$(\checkmark)$
$(1)$maybe it was missing glyphs all along! fix replacing the missing invisible last character with en space or sth undo songti change
test which fonts are T3Font_0
Just remove all the fonts, try to re-upload with much less dpi problematic fonts (not embedded)?
(V) redo as TTF
(v) redo as OTF?
try lower standards
ten mincho redo font?
try a standard
try to look at all the fonts, see what is embeddable
try to inspect a PDF
how to assemble

- save first volume as "01 step 3"
- remove TOC from the end
- add one empty page so it's left facing only
- open vol 2
- select all pages in the sidebar
- right click $\rightarrow$ Move...
- move to the other file at the end
step 4
limit to two pages
duplicates in the wrong place
acronym messes up the rhythm
something goes wrong with title and arrangement
hanging quotes don't work
remove shift enter from the first one
save to step 5
make sure on communitymosaic image caption is on next page (hypothesis: it will be okay for !all)
the magic cap pda footnote talks about [center] key but it's [expand] key
v fix this systemically
test this
remington photo write down
iphone spread: straighten and remove hair at the bottom
Add erasing medley
gamechats rotate the ASCII one
p 102 device medley before extended - test
little fingers move up one page earlier - test
dropcap atari test
imagesphoto sg green big - hair around 6 coronet automatic 12 dirt everywhere
( ) connect
lin yutang clean up
vol1 [43]
( b) better last footnote symbol
add the Apple memo
monospace proportional conflict
( move mt/sc up, and everything that follows up
test monospace captions here
 optical margin was applied - fixed - test teletype 15 photo doesn't have a bell symbol!?!
"but even it"
same with 32 - replace with 28
$\checkmark$ also in captions
needs caption: mt/sc or whatever that is
word
teletype 37 rewrite - last without a screen
"with a face of George" the
"note that many keys are covered." add bottom mechanism mention
"can be clearly visible in the photos" rewrite
"man opearting a japanese typewriter" contextualize
swap heatmap and dvorak charts
( this should fix this - test: 199 footnote symbol missing!
"a third-party typewriter keys"
, actual size? 15mm black to black
chapter with key ads: move to the next page
( test
friden $1217 \uparrow$ arrow
( $)$ also [0] key
when you press (shift $+q$ ) why italic?
indesign
royal spread - wider
chambers a bit higher up than hiss
jilted: move up image caption frame
weird zuse keyboards - left image caption pushes text
visible experiments: wider
heatmap image caption a bit lower
blick condensed repair list - 6 times lower
calculator testing NO FOOTNOTES
june 18 evening
vol 2 [40]
v conflicts
(v) 26 / valleymap
( $31 /$ switch3
( 40 / magiccaptoughbook
image captions
IBM PC Model 5150 - no arrow
IBM Model M SSK variant, comma
for a IBM 1401 - an
cushioned - 2018 л
EnterCollection is not on next page
( move to the right?
( ) shift reinventions - previouspage
reservisor / swap
"a version of the maltron"

71 footnotes are running out of symbols!
, globe?
add a note to add to the end paper
v indesign
caption alive after five left a bit higher up
"king of kong" - swap footnote symbol
drop cap 38 is S, should be T
early backspace keys - indented image caption text influence
swap autocorrect from newton
inline densmore top padding

229 a foothote went across chapters... but we can live with that
june 18 morning
v. count footnotes in a third way!
vol 1 [38]
ibmelectric4
(v) try to process images before AND-after footnotes in the same-loop?
(v) add a new ad
(v) spreadsheet
soviet keypad
cover image for caption 16
"a part of a linotype machine" one line
204 writing ball one line
206 writing ball one line
214 ibm electromatic two sis - move the caption a touch up

June 16 afternoon
vol 1 [37]
well, chapter 16 needed opening? fixed from chapter 15 something is wrong with footnotes STILL newer kitchen computers should've already put footnotes there, but instead is on the next page chapter 5 last two pages of footnotes are broken!!!
( also p. 127 chapter 6 two first are broken, too - because of the above chapter 6 acknowledgements are not AFTER
chapter 9 / operated by keys
 reverse AT\&T Keypad and rotary collection ( missing one footnote on page 242 - emergency number 112 chapter 7 footnotes run out at the end (p. 197)
(V) let's try to put NO FOOTNOTES on the right of Dvorak chart and see what happenstest it
machine assembly room image caption - make black and at the top

## June 16 morning

vol 1 [34]
## AT\&T YES on the left

rotary YES on the left
kitchen two examples on the right YES on the left
girl-less NO FOOTNOTE
images

> the small piano a bit darker
> image: trs-80 appreciation - darker
> remington (the one side by side with caligraph) add lighter bk between keys intellec spread: maybe try simpler backgrounds?

V intellec - clean up the bottom and the side
in the remington no. 1 opposite the circle, shadow looks bad add the above to the spreadsheet retroactively
"Either way, the situation in America's 1870 had reversed itself by 1930" add the fifth photo
captions
left right remington caligraph one line columbia 2 typewriter - reorder so caption is at the top a speed competition in stockholm $\mathbb{K}$
add arrows: Remington Standard №7 with a carriage that needed to be lifted, and Underwood №5 that offered visible typewriting

19071982 - p. 108 - one line
foreign language type kit - swap
a linotype squirt - swap
teletype 37 no arrow

## ( teletype 37, add date

univac two photos: bottom one $\rightarrow$ comma at the end
waverley - are there two (p. 74)
the one with boxes (p. 84) a little more padding at the bottom typewriter love letters - make sure image caption aligns typewrtiter identification caption a bit lower byte zaks and sticky note - move both to the right a bit wider
( smith premier no 10 molle etc.
three kinds of computer operations
4978
early adopter juxtaposiiton x3
two calculators (friden/everest)
turkish
hcesar etc.
univac two photos on the right
ibm 026 wide
v and auto size top/bottom
vol 2 [36]
( conflicting spreads: try dropcap first, maybe it'll fix things


455 dropcap:cropcapatari not removed
V maybe add a space after?test
page 258 next page indentation broken + use enter not newline 572 overlap

606 more bottom padding on inline densmore
p 102 device medley before extended
add the word processor rulers next to word/wordperfect
image caption
spreadsheet

430 right tape align right
little fingers move up one page earliertest

## June 15 evening

vol 2 [35]
conflicts


26: xtandat (fixed blindly?)
30; starandhp250 - test for main flow!!!

42: monsterrat art (fixed for sure - tested)
42: sheriffkubus (fixed for sure - tested)
still footnote count mismatch

log both sides
after testing, it implicates chapter 46 [file 40.txt]
"did you mean: nag a ram" why is there a space above? is this related? p. 546 - I thjink so
hypothesis: my stupid pasting offsets in collecting frames made the long footnote go offscreen and indesign fucked it up on copy/paste - removed offsets
 did it work?

## June 15 morning

fix debug and regular log names being out of sync (ridic I never noticed)
vol 1 [34]
fixed? NO
"did you mean: nag a ram" why is there a space above? is this related? p. 546 - I thjink so
image captions
"early explorations" image caption $\uparrow \rightarrow$ instead
"Example of a double-shot injection key" $\llcorner$
"osborne 1 portable" no arrow
"a sampling of microwriter" no arrow
thinkpad 701c wider
fujitsu oasys two-fer wider
lucile wider
lenin swap
KPH wider
a typewriter meeting SFCB one photo - wider
"a modern ortholinear" etc. four - wider
"Games with graphics based on ASCII characters" arrows oneliner
chariton courier - arrows oneliner
for "tone up at the terminals" introduce one line caption
( one line remove indented
"harris viewwriter" image caption simplify
( and move up images on that page by five notches up
"an advertisement for a remington typewriter" full spread - make wider medium screenshot move up a notch
tenki inline reduce top padding
modern steno - move image caption (next page) to the top make wider
twiddler - move image caption (next page) to the top make wider datadesk little fingers etc. - move image caption (next page) to the top make wider
still check the spreadsheet for missing thingsand run the image caption script
footnote: 250 why here? PROBABLY FIXED vol 1
pre-typewriter: add next page captions
selectric fonts doesn't have image caption
, shift modern inventions: add (previous page)
macintosh should get it (recreated screen)
Enter collection should get it: why different sizes and why stepped often and also smallest and biggest (previous page)
"a chinese typewriter" mention overflow
 mention closeup on the next page same with wordperfect word - missing two backspaces from early typewriters - needs it monarch/alive after five - add dates
install a reset switch add dates
v one line
cushioned same keycushions
( one line
also force mc force face missing
big numeric keypad doesn't have one
collection of rotary doesn't have one

## June 14 morning

review both 31/32
InSitu wider
first vol

check for the weird number at the end? yes, volume 1
$\checkmark$ it was hiding under TabKey!!!
chapter 7 (09) actually 07a
ERROR: Usually only one deferred after spread should be present 167
$\uparrow$ I feel we can remove this, BUT they are not present after royal, but beforecannot repro on 07a standalone SHIT
some spreads have not been processed!
( $\uparrow$ still cannot repro on 09 standalone SHIT
second vol
ERROR: Footnote count mismatch between top and bottom, giving up on footnotes! 32132281 broken / 82 good - before removing empty spreadschapter 31: tenkeyless (no numeric keypad) keyboard...

AFTER spreads are brokenthe spread after enter chapter is not :AFTERsame with 07a don't remove empty pages if there are text frames
okay, but why didn't it flag mismatch!?!?!? should be 15 - because we delete pages afterwards
figure out why that footnote is extended
remove saveSnapshot() // DEBUG
figure out why the last one is landing properly in standalone, but not when grouping sigh

## June 13 morning

Add logging time for each chapter
check split between paragraphs 1192 all / 549 start of second 549 / 643
current status: 21/21 549/643
if we move in situ: 551/641
if we move crime back to first chapter: $22 / 20 \quad 581 / 611 \quad$ (crime is 30 pages)
add two pages of acknowledgments: 22/20 583/611
move music kbd to first chapter / add foldable: $22 / 20 \quad 585 / 611$ +36 -32
move crime back to vol. 1
chapter 11 conflict: sovietkeypad
chapter 30 conflict: adjustablewordperfect
also fix below
chapter 36 conflict: tandyalphasmart
chapter 40 conflict: fingerworks2 / blackberry hand

09 / spread qwertyevolution hasn't been processed (try on 7-8) - save a list and check two pages aftercannot repro on standalone or one before + this one - let's see if it happens again will try 01-09
( nope
blick wrong arrows
working inside royal factory no arrow
still missing a footnote!
V actually list that missing one in the process somehow?
add beautiful after olivetti
move in situ in this (olivetti) area somehow
disconnect
connect
add two more pages of acknowledgements
spreadsheet
keaton move to volume 1
disconnect
reconnect
move in spreadsheet
. image caption move
moon: add spread with flexible etc.
image caption
add to spreadsheet
connect
moon add tiny and yekaterinburg
image caption
check if we mention yekateringburg
spreadsheet
connect
46A re-run
last chapter: KPH image caption no indent since no arrows (problem when moving to the next page, it defaulted to indented)
word
"a linotype keyboard at the international printing" no arrow
keyboards courtesy jesse vincent. remove full stop
indesign
( function keys chapter / 30
NO_FOOTNOTES next to Commodore/IBM Lotus stuff side by side
YES_FOOTNOTES on the left of NeXT
break/whatever move down again
rheinmetall NO_FOOTNOTES on the right
indesign 09 - dvorak charts left text gets funny
iphone blackberry - extend the no text zone under blackberry

Spot check footnotes etc.
spot check stuff below

09 running out of footnote symbols!write a check for that

## June 12 monring

try to figure out what the stupid bug was
, "object invalid" try catch
chapter 31 laserswitch cofnlict
( also extra lines in 6 switches spread
chapter 12 ibmelectric conflict
some arrows
increased dont go beyond page no by 1 - no help
done it by not processing spreads if the beginning of the \|\| is on another page than the end
check whether they are there at the end
chapter 18 monospaceproportional conlfict

June 11 morning
some footnotes are messed up - allowing them to be processed on the same page as the current page made things push them forward
chapter 4 (all the fingers) something is wrong with tolkien, gets moved down too far the emergency number 112
chapter 46 (tracks in new-fallen snow) nanowrimo footnote is in a wrong place!!? overflows way beyond the last chapter spot check footnotes again!
something went wrong on page 1218 (inline) - last chapter this is because I temporarily switched units to mm let's fix this systemically!
( ) olivetti spread (p554) - on the same page, not previous page same with hp 250 same 1188 alphabetic but 733 is ok!? spot check!!!

46A putting an image caption on previous page messes up image caption symbols ( solved by redoing those manually
keyboards are everywhere: in situ spread is not after all the text
( doesn't appear when doing standalone - try again
why do we still see empty spreads? (e.g. before 9 operated by keys alone) and before 18 and before 17 [restored old code, let's see what happens]
add franklin
( backup: molle move from there, put barlock 14 in there
move obra triangular next to franklin
move in BTC 8140M
write down update image caption for ErgoKeyboards and Ortho and update spreadsheet ask the guy
typematrix previous page is not a previous page! dammit context is a bit wonky
zaisan move to the top like Model F etc.?
$\checkmark$ and image caption contextualize
image caption with a summary report
( ) add to ortho, too
add half rotated arrows?
add to images: ergologic fix cables in both
fix and colorize remington $3 b$

54 enters
new book stuff
v big one May 11 morning
12 move it down
( SWAC etc. doesn't fit
16 image caption too down?
try interleaving footnotes and images in a smarter way!!!Maybe try again and again but don't let them get ahead the current spread?
"The LISP editor" acronym should be changed by AcronymFootnoteBlockquote
big one (11 step 2 snapshot 47) May 10 morning

Shift50 is not after, reallyInSitu is not after, either
ERROR: spreadAfter with text frames is not supported RoyalEvolution and Shift50 and InSitu etc. and OlympiaFinallnspection
self keylogging is broken for sure
in PC chapter, 5251 gets moved down weirdly?
KitchenSideCHM is MISSING!!!
big one (09 step 2 snapshot 47) May 9 morning

## fix footnote symbol

add an option to process just one chapter
J. R. R. Tolkien is broken
footnote symbols mismatch off by 1perhaps spreadAfter with text frames $\operatorname{In}$ Situ is the culprit (but why?) penultimate chapter: InSitu is not at the end weird page number at the end? 161 WHAT IS THIS
and also HugeHugeHuge repeats - that was my mistake, aberrant frame left behind
"yours truly, samuel clemens" is not small
instead of some errors being a toggle, increment it and output it

Get stuck at Olympia inspection after
split log log more for this only one chapter
run again at the end
LATEST: somehow the footnotes are found in reverse order at the end symbols below aren't working glyphs are wrong sometimes / the numbering doesn't reset
big one (06 step 3) May 8 morning
Finish the word import one
why is the first page deleted?!? WHAT THE HELL
if I go from 4 to 15, electric breaks it

Save a few more
spread after is not after since footnotes are moving it - switch to before? (but then... the latest) - maybe save for later
now: in selectric
process image captions!
weird issue with extra spacing before last footnote in chapter 5 (and 1)
soldier typing mystery on the right is broken
no image caption for 07 if it's on the right?
penultimate chapter (p 1234) PREVIOUS PAGE is not supported yet
chapter 42 p 1241 and 1243 footnote symbols are off - this is because acronym in footnotes and block quotes needs to be smaller
normal 10 G3, small caps 11 G2
footnote 8 G4, small caps 9 G3
add tracking 25 to both
add FORBID to the list
as Michael Bloomberg confessed... book title not italicized
e.g. ::appleii image caption doesn't have the right colour

HugeHugeHuge image caption is not white
4 the machine you will eventually buy is delayed by a spread: 03 step 2 (text flow) NEWEST
( if you stop right after the distribution, it looks good 04 step 2 (text flow) STOP 1 also looks good after you stop after SPREAD:TypewriterRowMap STOP 2

STOP 3 has it without removing empty spreads, but I don't think it's changing much
( I think we need to remove empty spreads smarter like in STOP 3
maybe honestly just remember when the thing started before removing footnotes, and take action accordingly
split log into error + debug
process L. B. Hill and this kind of stuff
detect
(v) J.R.R.
( ) capital letter afterwards
write a style
add to style guide
add check for A.B. without spaces D.C. U.K. U.S.
( but maybe try, too?
in word
hhkb image caption is repetitive
contextualize apple iic caption
Exxon Oil Company flirted briefly - two attributions
a satirical postcard (with bush) right arrow instead of $\nearrow$
Berry replied in defense that his wife actually liked the job - but never allowed her to make that claim herself. (allowed $\rightarrow$ we didn't see)
a letter from Tomasz Lem $\leftarrow$ arrow
polish spectrum recreation move up one page
big ibm model f no arrow (courtesy eric keppel)
"two early replacement pc keyboards" no arrow
"typing close-up" no arrow
"a modern usb keylogger" $\nearrow$
IBM model F 50-key $\nearrow$
norton commander simulated screen
tablet pc edition right
rheinmetall caption $\rightarrow$
( in indesign
crayola little fingers two spreads same id
monospaceproportional make wider
"mark twain struggling" no arrow
a modern usb keylogger move the right part down
IBM model F 50-key allow text to get closer
blue model m15 split so they can't cover each other (p. 668)
apple extended prototypes - the left one text is uneven
move first switch to the left both photos
break/reset move both a bit up
( verify
game chat wider
interesting keys spread - white line
keycapcomparison missing!

## June 9 morning

. 16 THE FLYING WALNUT starts funny, but only this
repeatable in 16-17
this was because removing image caption for preceding spread pulled up the chapter title above and it wasn't procesed
where did the opening photo go?
remove snapshots
ibm $51401 / 2$ symbol is missing (install new output font?)
similar issue: HHKB laquered, no yen symbol

## TEST BOTH

all the conflicts in the log
v) 08 linotype

31 royaldigital
39 oasys
41 stenochords/cerebral
redo word
398 the top left needs to be wider
rheinmetall portable move to the lower left corner
mac top row swap captions
double shot (four shifts) swap caption
( same page: make the shift smaller - text looks funny
apple iic / next page / make orange
ibm 5140 NO footnotes on the right
arrows wrongchessmaster $2000 \rightarrow$ move arrow diagonally
hhkb professional 2 arrows wrong
boss key caption wider
photo production: write down to make 6770 warmer to match before

## fix the-seript so it checks so that table-of contents are-even numbers

no page number on 1
after getting everything from Glenn, make sure all the spreads are still there
image caption regular
v alert about image captions that were not filled
warn about full stop-at the end!
"actual size" standardize style

## June 8 morning:

nobody's perfect [18] flow works, but the chapter after and everything after is broken! try 17-22
$\checkmark$ try adding a possibility to change a range?
$\checkmark$ def limited to 17-22
( limited to 18-20
related to there not being an-opener image? NOPE
this happens at the end, instrument more
it's removing end of chapter symbols!!!
( verified by looking at the snapshot
DONE: try removing pageNo++
chessmaster 2000 overlaps text
change time from seconds to minutes and minutes to hours
z-index
$\checkmark$ zaisan needs to be shorter since it's reordered 856
Also review the last snapshot, chapters 18+
longer image captions
establish width 5.1694 in / but short on the right, e.g. ibm $1052 ?$
p. 852 typematrix
homemade keyboards 476
homemade keyboards NO
( apple kitchen left YES
epson/switchboard (p. 854) could be longer
zaisan-857 also
506 looks of approval
534 socialist parade
538 coin op
basic
poland house
example shorthand strokes
the michela - black
zx spectrum actual size
typewriting department at national cash register
470 an italian apple ii (giacomo)
bytezaks 544
5251
apple lisa/mac charlie
greenpc
gamecube image caption is broken
previous page on 380 e.g.
(v) and 304

474
( 583
(V) 728

260 linotype keyboard
244 at\&t
osai wider
termite wider
three shifts wider
four shift printing needs to be higher
"examples of modern keyboard layouts" dot in front
"selected standard keyboard icons" - no arrow and wider
olympia reporter - Ionger and move a bit down
mac top row wider
a profile of an apple wireless wider
din 2111 wrong arrows
spell check wider
gray powerbook is too low
701c wider
tandy 102
elwro 800jr wider
market garden wider
four smartphones lampooned
( remove 2007
( make wider
two-page touchstream - smaller margin below
nokia 6820 - weird text wrap at the bottom
magic cap pda and toughbook swap
blick 7 align bottom
blackberry porsche design on the wrong side
osborne 1 wider
udac wrong arrows
apple iic next page
numeric keypad
$\checkmark$ where we have quick fingering and telephone, replace with everest TwoWeirdCalculators
then the quick fingering RotaryExample
then at\&t KeypadLayouts
then gallery RotaryCollection
image caption
break/reset key combination - no arrow
bus at the top + black
, various keyboard overlays on top + black + not previous
pcjr opener white
230,099 wrong arrow
character sets no arrow
artyping examples wider
remington 3 b too low/high
a few overtyped wrong page
the original version no arrow
2019 anti-texting no arrow
original emoji set wider
no arrow
like many business

(businesses no arrow
using sholes \& glidden no arrow
a letter from mark twain no arrow
a typewriter meet-up wider, no arrow
keyboardio prototypes no arrow
hhkb revert
grandjean swap
dutch velotype swap
cerebral palsy too low
lacquered hhkb no arrow + wide
boss key too high
qsenn too high
nls keyset wrong arrows
original instructions no arrow
giacomo exposed no footnote there
six key switches - no footnote there
modem m in industrial coating wrong arrows
model f big has an unnecessary arrow
model f twice at the top - wider and no arrow
early prototypes of the zx spectrum remove arrow
adjustable/model f swap image caption
early zuse - don't allow here
a telegraph key: YES on left, NO on right where the key is early telegraph keyboards: no footnotes
"two pages from the linotype parts manual" to the left move 257
video display terminals at a travel agency texts flows inside
busa archive one is too long (shorten text)
dura mach 10 wrong arrow
japanese typesetting keyboard with thousands - wider and wrong arrows
big nec - wider and wrong arrow
japanese ime methods no arrow
fujitsu oasys 30ax-w swap two
mtrok tk1 wrong arrow
ergologic keyboard no arrow
comfort keyboard "keyboard courtesy" remove kbd
a beam spring switch key wrong arrow
( sholes \& glidden typewriter key same
$\checkmark$ and the rubber dome
snapshots from thomas ran's videos no arrow
prototype selectric wrong arrows 416
elektronica bk0010 wrong arrow and wider
a russian terminal keyboard no arrow
rheinmetall portable wrong arrows
v yes footnote on the left
ibm 4978 too high (p. 388)
linotype tekniska museet (with the guy) also p 263
ibm 610/6500 - wrong arrows and reverse
$\searrow$ UNIVAC computer, console, and tape drives, 1950s. no full stop baudot code and tape wrong arrow
a printing telegraph from 1908 no full stop
"a thai typewriter layout" contextualize qwerty
"showcasing a dotted $\mathrm{i}^{\prime}$ - mention uppercase
"polytechnic museum" add courtesy
a linotype squirt wrong arrow 266
system3 too wide on the side
"a typewriter keyboard retrofitted" remove keyboard
image caption space conflict (try to move up?)
394 - also make wider
308
word processing
( swap monospace/proportional font with last two ads place-wise make monospace/proportional font on the left as a nice closer selectric: back selectric move to the left
new arrow key device medley - a bit later
prepare spreads etc. for prototype (bold = ready)
1(01) 2(02) 3(03) 4(05) 5(04) 6(07A) 7(09) 8(12) 9(06)
$10(08) 11(14) 12(11) 13(13) 14(88) 15(16) 16(17) 17(18) 18(20) 19(22) 20(21)$
21(55) 22(50) 23(26) 24(19) 25(28) 26(29) 27(30) 28(31) 29(32) 30(33)
$31(35) 32(34) 33(36) 34(38) 35(39) 36(40) 37(41) 38(42) 39(43) 40(46) 41(46 A) 42(47)$
add modernshiftinventions
move the skinny bars to the top! moving them to the bottom hides stuff
reintroduce the red spreads removed?
move images down as below
chapter NaN (31) - the tragic fable
footnote "apple advertised" gets repeated over and over again / infinite loop - tragic fable
( is this related to above or not? probably not...
oldindexsoftware is repeated
before:
footnote 583!!! loop moved already tried before up one level
fix the stupid 30465 bug paras.length at the beginning of chapter 7 / kRequestNotHandledError things tried: adding recreation of paras $=[]$ just in case in both blocks DONE: remove chapterld - do any page - I think this helped DONE: save snapshot to see what's going on

DONE: output PARA count every time
test what's up with previous one
if not, try paras $=\{$ length: 0$\}$ ?
maybe move appliedMaster to after the leave (something is wrong about chapterld not being removed)

And for emdashes
and for " wpm"?
something new typographically
«» maybe?
20th etc.
Initials like J.R.R. Tolkien

## switch right hand to left hand, because chapter openers have to be on the left?

update visual style-guide
v reduce some diagonal and make one side
dejamcyanide move(d) a bit further
on page 10, the footnote symbols shouldn't get reused (left hand side, all three footnotes come from before, but first symbol is reused)
smith-corona manual footnote is fucked up
MALFUNCTION 54 / TREATMENT PAUSE
more index stuff
( game genie
backgrounds
( michela
big keys
and the other one
book is repeated on both sides mactoprow is not present and its imagecaption is still visible add macintosh and the new spread

The card measured 7 3/8 " by 3¼", - extra space
footnote count mismatch for 11 (punch cards chapter)
TEMPORARY_FOOTNOTE_CHARACTER was already present in alpha jeez
in stuff like kangaroo paw, the last footnote was supposed to be on the left? it's on the right did we ever implement it
also if chapter ends on the left even if it goes earlier than the symbol in this case! (in other chapters!?) infinite loop, of course
remove symbol!
kangaroo paw etc. the after spread something complains about image caption, but it works well?
complaint about text frames is erroneous complaint about image captions missing doesn't get deferred why is the image caption black
why is the image caption black for four ergo
in the RSI chapter: repetitive strain injury[SPACE], or RSI
this is because copy and paste from Word into XXX somehow changes little things like parens and commas for Times instead of keeping the same font
combinations of keys have weird spacing (grid?)
no footnotes on the yellow/orange page

## allow for YES_FOOTNOTES

mactoprow put before combinations
dejam image caption resizes in the wrong direction
de jam symbol]
image captions on the bottom left allow text to leak/flow on the right figure out why image captions on second-page two-fers are broken
some of the ATARI symbols are not replaced
remove dropcap atari
figure out how to have spread on last pages without footnotes pushing them
23/26 mr. kildall goes flying early footnotes are missing - now spreads are pushing footnotes
special symbol font
36 complex vulgar fractions (23/40) i 63/34
41 recreate permutation typograph font, and end a line about it with that font (permutation typograph patent US39296)

21 «F» and «R» are displaywriter's special boxes letters, as per training
add semigraphics mentioned in text
split lines into two
( make sure it's 0.1733 in across
photo work
update nokia photo in the book (already taken)
small caps: Hcesar + QHTCSZ + ENIAC + JOHNNIAC + MESM + BINAC + MANIAC, ILLIAC, WEIZAC, EDVAC, BIZMAC, SPEEDAC, SILLIAC, CARDIAC, LIST, REMOVE, SAGE, MT/ST, MT/ SC, MC/ST, IMSAI, SWTPC, WARNING! APPROACHING INSUFFICIENT SPACE, AIDS, HIV (as exception/close to AIDS), YWCA, COBOL, PAUSE, INVERSE, FORE, BACK, INK, PAPER, SORT, SHOW, DISPLAY, PRINT, LIST, OUTPUT, LISP, WYSIWYG, TRON, CANS, MSD-UE, TONY! PFDGB, PARITY ERROR, PEBKAC, ANSI, ASCII, PARC, PWAU, WRAUFRBGT, PHUPLT, READY, PLATO IV, PLATO, PETSCII, DSKY, PERQ, SAVED, WRITE, BLBBLB, LUMUMI, CAPTCHA

WHAT A PERVERT, THANK YOU, PLEASE, OPEN DOOR, HAIL TAXI, BUY CONDOM, SIT DOWN, TALK TO BARTENDER, ENTER THE TRASH BIN, UNHOOK THE BRA, SHOOT LASER, UNMOUNT THE HORSE, GO NORTH
add plural

test MC/STs / HHKBs not working
verify VDTs and ADMs and ELIZAs and CAPTCHAs
NEW and IF and PRINT, but also TRUE VIDEO, and DIM, and... CAT?
add ISO because OF ANSI (and also IEC and ITU)
remove SPACEBAR
do this? VHS, GBS, DEC, VDT, ADA
if not, remove IBM and DNA and RSI and CTS and RPC and IBM PC and DIN
dot matrix replace quotation mark with straight quotes chapter number on the side next to page number? too gimmicky?

Finish key font (see the other file)
production notes finish all
"bold" move to "medium"? (semibold)
stuff from Mike Sall
( Move from that file
$\checkmark$ page numbers fatter?
better divider
page 23 (green-s\&g) page number make visible remove stuff like \{PRODUCTION NOTE: 1 INTENTIONAL\}
fix black bars after mosaic etc.
try to make footnotes not appear on some pages
or http://www.virginiasystems.com/
Footnotes are broken on a narrower page (indent)
footnotes need to be glued to text better (sometimes they go to the next line)
make sure the lines align on both sides (grid?) see RussianRedTypewriter support chapter openers with image captions on the other page
five spaces before credit... replace with three
change the width of indent to match the paragraph mark
also footnotes 0.3056 in
remove the extra last frames automatically (since I removed smart reflow, they appear)
move divider to be glued to the stuff above, not below (to appear at the bottom of the page, not top of the page)
bottom line of footnotes and text should match
( change height a teensy bit to fit extra line $8.2 \rightarrow 8.25$
fix divider because of grid
compose etc. broke - grid?
update colours of all paper to be similar beige
swap (...) to [...] for continuity
font for symbols (such as propeller, etc.)
before bullet points, we used stylized hands called "manicules" () - and was later appropriated by internet as a mouse cursor shown as you're about to click a link. ! has $\vdots$ symbol making - TRICOLON
® led "Correcting Key," and received a symbol we'd still rec- ognize today - - a visual representation of going back merged with a piece of correcting tape. I

H It was a pictogram used in Sweden to indicate an interesting feature or attraction on road signs. It looked something like this: $\mathscr{H}$.
© First of all, symbols like ? and look good on screen,


咀 The story of :), , JK and omg. [repeated]'
make it with eyes
ৎ Or perhaps instead of QWERTY, you will see AZERTY, QZERTY, AIERTY, or \&ৎEPTY meaning a ma- chine created for France, Italy, Turkey, or Greece.

Chinese has, which someone explained to me as "some kind of mystical kungfu skill involving a single finger."

Some of the challenges were well known, too. The typist would have to 297 vary the force of the stroke depending on whether the character was simple (for example ) or complex (for example ); pressing the key too strong would puncture the paper, pressing it too weakly would give a faint impression.

He called it or MingKwai - ming stood for "clear, under- standable" and kwai for "fast."

And so, the character mao meaning "hair" would find itself next to ze and dong , but also right next to zhu and xi to form "Chairman Mao." The character mei (beauty) would be put next to di and guo to form "American imperialist." And so on, and so on.
s Chairman Mao right next to social- ism, but also dengdeng ("so on and so forth"), and "American imperialism" right next to "invade" and "destroy" - no two typewriters and no two typists were alike.

## japanese

And then there's Japanese, which means "raindrop typing."
The word weather, written in kanji as XXX and pronounced "tenki," could be written on a Japanese keyboard asthreekeys: ? , ? ? ? (readaste, readasn, andreadaski)-or the keyboard could be swapped into what's known as "Romaji," and typed in as T, E, N, K, and I. Either way, an on-screen IME will eventually suggest XXX.
drawing the kanji shapes with your fingers on a trackpad or a touch screen, and seeing them become perfect, cleaned up characters just in front of your eyes, immediate- ly ready for further editing or sending.
popular shrug emoticon $\downarrow() \_\Gamma$.
russian: origin of that story is fascinating: it is someone typing the Russian word meaning diary - without realizing the keyboard was switched to English. That curious typo that couldn't have existed before multilingual keyboards, evolved to be a specific word meaning something, and eventually became adopted into Russian and "recyrillized" as .b

## before printing next prototype

finish visuals

$\checkmark$a few new photos

Verify stray text frames
endpapers
cover
image captions
( mid dot
. hide mid dot if wraps / make it wrap
( sync styles (line height of just small caps)
try end stuff (?)
try four different paragraph treatmentssync the style change the output of the script to do the right letter
try four different page number treatments wire up chapter no properly , output from script
fix: weirdarrowsmosaic caption doesn't get properly applied something is wrong with moving pages (to labor less + whole) don't complain about spreads without content colliding
make it start from "text flow" selected - if in "spreads," it breaks

Collection*of*Museum*of*Applied*Arts*and*Sciences,*photographed*by*Marinco*Kojdanovski*|
page number has to go a bit higher

ERROR: Two spreads fighting for space! Second one: UnivacKeyboard ERROR: Couldn't find spread destination: ModernKeyboardLayouts ERROR: Two spreads fighting for space! Second one: EarlySteno ERROR: Couldn't find spread destination: PrototypeMosaic

There were some issues with removing text. Search for ((() to make sure this still works. fix Shift50 appearing after the next chapter starts

Add rest of blue (ready) rows
Add placeholders for the future

1. node convert.js (see below)
2. Flow text into "XX step 1 (text flow)" (see below)
3. ignore missing font warning! particularly if "missing fonts" is empty
4. Save as "XX step 2 (text flow)"
5. Open "XX step 2 (spreads)"
6. Run "step 2" script - should save as "XX step $3^{"}$
7. Run "step 3" script - table of contents

## nook press

first volume: paper 70lb
second volume: b\&w, white paper, 50lb

## Script

remove page numbers from title pages
create empty preceding page
keep scroll position
support prepared chapter pages
fix master boxes being off (by reapplying the master, sigh)
support prepared other pages (inside)
spread, align to two
support prepared other pages (whole) - same as above? just don't do/skip frames?
reflow at the end of chapter (remove pages if unneeded, add pages if needed)
make sure the pages go through the end even if they reflow because of new stuff inside detect stray [[[ ]]] and report

## Typesetting to do

problem with selectable items - you have to redo!?
stuff from Mike SallMove from that file
( fix broken font in table of contents
rotate a keyboard sideways
split the keyboard on one page and then the second one
grayscale photos, but with orange cover of parts of it
better divider

<hr> divider: dots across the line? (unify with key cap and other elements) or maybe a blank key?
easter egg: use zero with dot in one chapter (Gorton)
keysalt key is wrong symbolnew: $2 u$ blank for memotech reset
gorton
v q with down tail
. font - follow Hoefler's advice
re-test removing lorem ipsum on "blame my cats"
page 23 (green $s \& g$ ) page number make visible
borders around screenshots?
no hyphenation chapter title (THE GRAY BIG-[new line]ASS ENTER)
remove stuff like \{PRODUCTION NOTE: 1 INTENTIONAL\}
dot matrix replace quotation mark with straight quotes
"bold" move to "medium"?
unify grayscale in photos
credits
Footnotes are broken on a narrower page
image caption regular

on top of underwood spread

$\bigcirc$alert about image captions that were not filled $\bigcirc$ warn about full stop at the end!
inline images
"get green" page number seems misaligned!
something new typographically
table of contents nuancesadd keys? / [Enter]? key fontmake sure in the script, table of contents digits are all odd (not even)
font for symbols (such as propeller, etc.)
031 S tabular\{ALLOW TABS\} etc.
20th etc.
index: keys? keyboards? names of people? all the proper nouns?
footnotes need to be glued to text better (sometimes they go to the next line)
chapter number on the side next to page number? too gimmicky?
swap (...) to [...] for continuity
extra space when italics start, e.g. The game is called Leisure Suit Larry In The Land Of The Lounge Lizards.
make sure captions have a full stop, and courtesy doesn't (or whatever)
Finish Gorton font

Finish key font (see the other file)find a good font for Japanese/Chinese letters
for some images, add "compare with" XXX
production notes finish alletaoin
some screenshot on black background!
add more textures and grain for backgrounds

## Graveyard

take a pass at visuals and make sure everything is centered!
Make sure vertical images match top/bottom edge of text
fighting for space
EarlySG
UnivacKeyboard
EarlySteno
TypewriterCases
errors
linotypemachine
typewritercases
touch typing cover

SG meeting
elapsed time in minutes

## going to page very far

## Remove and text next next text

manualrecomposer
elapsed time
support for spread after
( Shift50
Royal stuff
fix inline (now disabled because of an error)
typewritercases
iphonevisual

DEBUG remove
fighting for space C64
fix not flowing issues: 118 dalton chapter 06
why is it reverting to $A$ ?
fix progress bar
make redrawing faster
issues
( ^^^ FAILED TO MOVE THE PAGE 378
Two spreads fighting for space! Second one: XeroxStar
$\checkmark$ Two spreads fighting for space! Second one: NaturalAdjustableTop
"eventual-ly" and "me-chanical" - but you have to accommodate "motherfucking" which doesn't fit
ventex wordplex (hope it solves itself out)
TouchTypingCovers2
XeroxStar
RemingtonAndUnderwood
CardPuncherMosaic
complaint about repeated spread ids
REJECTED (ignore)
iPhoneVisual

PortableJuxtaposition
fix: "SPREAD:Rheinmetall" text at the bottom
fighting
TouchTypingCovers1
TouchTypingCovers2
fighting
v TouchTypingCovers1
PCJrDuel
AdjustableWordPerfect
SpaceCadet
XeroxStar
RoyalEvolution
fighting BackspaceAds
remove fake text
faster indexing
assign names to everything
SPREAD:EarlyAdopterJuxtaposition1 repeated
re-enable: WARNING here: two places have the same ID

## Type Council questions

come up with rulesnon-pretentious, non-coffee tableblue collarbad command or file name
big "enter" etc.
20th
Small caps
divider
something new typographically
go through below
two themes for two volumes
E. A. Klockenberg / 435
patterns?
white text on TwoCalculators
( and white page number
copy to main
dot matrix broke
E. A. Klockenberg (smaller spaces)
the pink things in spreadsheet
re-do all the stuff from TEST 3
709 why dot matrix?
image caption: no hyphenation
bold below
page layout etc. broke!!!!!
$\checkmark$ NOPE did the empty thing at the top of front page cause it?
SOMEHOW THIS BROKE IT: It created room for "the second shift": the woman's domestic workload, usually above and beyond men's responsibilities at home. ((((SPREAD:TypingPool2))))
problem: "This was just a prelude" is a line lower [FIXED ALREADY?]
703: The letter m disappears from the page. - widow

(in Divider, uncheck Keep With Previous and add Keep With Next 1 Lines beginning of the first chapter, do something!

397 small caps bug!!! (IBM followed by PC probably?)
" Space Invaders elbow," bug extra space restore font substitution

FLOW GOT BROKEN SOMEWHERE / SECOND VOLUME (step 5 only) big car got broken
big phone got broken also
test the blank caption!!!
don't do acronyms when colorize (ELIZA)
QWERTY don't hyphenate
(inline: ) is not removed!!!!!

```
was actually made inmy own
dih s or dah s
ed inThe hacker
remove <CharStyle:Italic><CharStyle:None> - two styles together
"Notes app"
```

image caption regular
$\checkmark$ don't flow into the image caption
$\checkmark$ use auto-resizing text frames
$\checkmark$ alert: caption without resolution? (on the other side)
, Iarry SPREAD:LarryScreenshots
$\checkmark$ regular one (white background) with credit

credit style
white style
on chapter title pages, move page numbers below to where text starts?
chapter title with " - hanging quotes [hair space -700]
divider doesn't work on narrower pages
inline images support?
v detect
position
, Royal thing "type up a complete sample"
(V) add this to the spreadsheet
(V) align again
do something interesting/unique for 1-2-3 chapter openers
( for "get green on the screen" output white on black?
( ( Chapter title + page number (new) + Story ॥

Semigraphics different font (Atari)
, warn if changes number count! (and reflow stuff)
Chapter title number Atari
, Chapter title Atari hanging quote fix
, redo the vertical page number on title page new font
( style
, semi 2 mono
For word processors output in their style?

## color to teat: \#00bfaf

table of contents nuances
remove the first one
even out sides
"get green on the screen" and "susie" are missing!!!
$\checkmark$ copy to the step 1
QWERTY small caps
fix hanging quote -450
, copy to step 1
duplicate into two copies

(V)make sure page numbers get synced again
move to -step 3?
remove DEBUG
adjust vertical positioning one of the unimatic symbols! burroughs symbols: TOT or NA

Monospace below, so they align better
more
three lines Siemens T1000S b Siemens DSC00307
dot and circle or line Siemens T1000S b Siemens DSC00307
star from siemens
look at monotype + comptometer + calculators + teletype!
Add one more from tron?
OCR chair from IBM
grzybek from siemens
look at weather teletype
redo: $\mathscr{H}+\#+$ grzybek + three lines + O + down arrow + fork + burroughs star + alt + cursor

Rotate for the second volume! (more computery)
\& / clear / diamond / enter arrow / one of selectrics arrows / tricolon?
nice symbols for footnotes: domino? five versions of a star? F1-F5? symbols?
do something funny here for one chapter (semigraphics?)
footnote line height should be larger (per Mike)
Block quote: at least unify line height with footnote
better handling of <br> when need be
keep together (at least 3 lines?)
"then there was hammond"
( add indentations
male / female / stout
we're big, but bigger we will be
o, come all ye mindless
the writing ball is a thing like me
can't handle petty cash
PSYCHOANALYSIS FOR YOUR TYPEWRITER
on fond heart

That he conveys
(5) 79G

Lunar Module verbs
( color?
computer output
also HTML + Markdown
dotmatrix font from PCjr Hands-On BASIC manual? (see pg 17) / FF Dot Matrix One
modify font

remove ligature
add $1 / 2$
add slashed zero
remove hanging quotes/optical margin
word spacing reduce? (from 588 to 488)
remove hyphenation

Person: Men are all alike.
ح add dialog dual style
PARRY: I know the mob controls the big rackets.
, add dialog dual style
Is something troubling you?
( add dialog dual style
HANDSOME

FLASH / PRESIDENT KENNEDY DEAD

add spaces
MTC/F

031 S
( extra spaces
HELLO / NEW TEST /
you are facing
( dialog dual style
ESSAY.TXT
, dialog dual style
, fix slash slash
look at the other books for inspiration
small caps: BASIC, KEYBOARD, SHORTHAND, GOOD, DHIATENSOR, ZPRCHMI, ZQJBPFD
fix TYPE - need to be individual wordstest with ESSAY.TXT
blockquote: same font size, gray background?
footnote line divider is weird, maybe extend to the left, maybe outdent footnote symbols
[CharStyle:None](CharStyle:None) sometimes shouldn't be none, but emphasis? verify this (restore the last one!)

Thoughts from third prototype:more guttervariable gutter / creep?Also illustrations that go across gutter need to be duplicatedrelated to binding, though

50 nicer than 70 for portability, but see through still a lot of editing to do! :•( orange a bit darker for keys?
page numbers sans serif? (Gorton not modified)use gorton modified instead
feedback from robin rendle:
Move page numbers inwards
V Move the whole page down? (why does it sit so high?)
also make sure the spreads work as well
re-link everything
remove "on rem" filler
page 542: 10 " wrong quote
problem: "If a Difference Engine jams," has a slash above
problem: "one of the Apple designers" and a space afterwards
repro titles in gorton
space remove extra space
remove dot
repro footnotes
( ignore optical margin
repro divider (output 0/zero)
repro key color (black)
include all the spreads from TEST
typing pool remove text frame

Thought after second prototype:
Page numbers too far
Spine font too large
visual rulesno gross typewriter skeuomorphic font
have only master text frames, not actual frames on the pages
go to first page, but on the first page HAVE the frame (by dragging A to the page)
press Cmd+D, select the (tagged text) file - !all.txt
[x] Show Import Options [ ] Replace Selected Item
then:
shouldn't ask you to click into the first frame should reflow and add frames automatically
...or you have to press red plus on the first one, and then click on the second one (lock cursor)

## Process

start with " 25 no text"
run node convert.js
flow in text from all.txt (as above) with Ctrl+D
update table of contents
export PDF according to Book Proposal Template
split manually while keeping TOC
add blank pages as needed

## After printing for real

check whether gutter needs to be adjust ed for center items
## IGNORE EVERYTHING BELOW

(
prepare $7 \times 10$

adjust page number height
( adjust page number height again
fix divider break in rhythm 6pt top 9pt bottom
remove detritus
stuff at the end? weird
table of contents:
make sure it falls on the even page
reconnect
right frame 3.19 in
add warning when spreads overlap!!!
something went wrong
( starting with eastern airlines, and later:

- $(((($ SPREAD:RoyalLetterPerfect $))))$
re-add $(((($ SPREAD:CodeKey $))))$ - "function cluster," or "fun cluster."
re-add on to Apple's [[`]]], allowing for extra diacritical letters and symbols such as $€ .((((S P R E A D: E a s t e r n A i r l i n e s))))$
fix \f0\fs38 \f0\fs40
fix width of main divider
color divider
hide footnote divider
footnote leading: 12 » 13
Colored page numbers
Colored keys
work on script


## Lulu

"Shift Happens Second Draft Part 1"
"Shift Happens Second Draft Part 2"

## Cover for part 1

- Spine width: 91.728 Postscript points wide (1.274") (382 px)
- Spine begins 693 Postscript points (9.625") (2888 px) from the left.
- Total cover width: $1477.728 \times 684$ Postscript points (20.524" X 9.500") (6157px X 2850px)
- Cover image width: 459 Postscript points wide (6.375") (1913px). 216 points (3.000") ( 900 px ) of your cover image will wrap around the edge of your hardcover. Important text/graphics should not be placed in this area.
- Width of cover flaps: 234 Postscript points wide (3.250") (975px). 18 points ( $0.250^{\prime \prime}$ ) ( 75 px ) of your flaps are for bleed. Important text/graphics should not be placed in this area.


## Cover for part 2

### 8.89 more for spine

- Spine width: 100.618 Postscript points wide (1.397") (419 px)
- Spine begins 693 Postscript points ( $9.625^{\prime \prime}$ ) ( 2888 px ) from the left.
- Total cover width: $1486.618 \times 684$ Postscript points (20.647" X 9.500") ( $6194 p x \times 2850 p x$ )
- Cover image width: 459 Postscript points wide (6.375") (1913px). 216 points (3.000") (900 px ) of your cover image will wrap around the edge of your hardcover. Important text/graphics should not be placed in this area.
- Width of cover flaps: 234 Postscript points wide (3.250") (975px). 18 points ( 0.250 ") ( 75 px ) of your flaps are for bleed. Important text/graphics should not be placed in this area.


## Converter from RTF to indesign

replace typography
escape \}
italic (emphasis)
key font mapping
fake keys

## footnotes

<hr>
<blockquote>
chapter title atop
$<>$
bold
underline
small caps
try with one contiguous file (breaks)

## Typesetting

reset footnote numbers
top line remove
first paragraph
, after break
text following footnote number is tinier, too: character set reset on one of the last pages "Ironically, one of the most"
missing fonts?
numero [from Times]
manicule
wider margins etc.
re-save and process all the text
two volumes
Table of contents / Space after: 0.08
don't include TOC itself

Table of contents?
page number style
fix style
spacing instead of \t (see elsewhere)
start page count in second volume?
dual table of contents for both (do this in PDF?)
template etc
cover?
textures change font
change antialiasing back to 16
render title
author?
volume?
spine
spine volume number

ORDER IS WRONG
without images
without new pages for chapter starts
without footnotes
without images
without footnotes
999
without images
without \n collation
with too small a font for superscript
1005
without images
without \n collation
998
without images
with rudimentary \n collation
//
the eagerness
49 ok (not processed)
59 ok (not processed)
69 below weird - pasted badly because too low or something?
72 bad
76 bad
82 bad

## After reviewing first draft

[1] meh, too quickly
[2] Meh
[3] Meh
[4] OK
[5] OK!
[6] OK
[7] OK
[10] Mechanical OK
[9] Dvorak OK
[8] Linotype OK
[11] Data processing OK
[12] Nice OK
[14] International ? OK
[13] OK
[15] OK
[16] OK
[17] Good, but long
[18] OK
[19] OK! Fun
[20] Good!
[21] Great
[22] ?
[23] So-So/Boring [since removed and split between 17 and 34]
[24] OK, not great though
[25] OK?
[26] OK
[27] Kinda nice
[28] Pretty nice
[29] ?
[30] Actually good!
[31] Good!
[32] Nice
[33] OK
[34] OK!
[35] OK!
[36] Good!
[37] Good
[38] Little rough, but nice ending
[39] ?
[40] OK
[41] OK
[42] Pretty good
[43] Nice!
[44] ?
[45] Okay
[46] Super good, a bit long?
[47] Great!


[^0]:    "care about orange" (e.g. red in ads)

