

Steve Ruggles

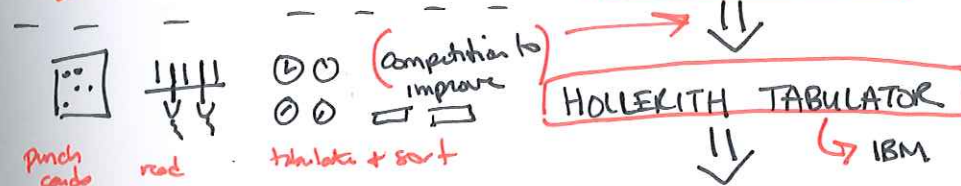
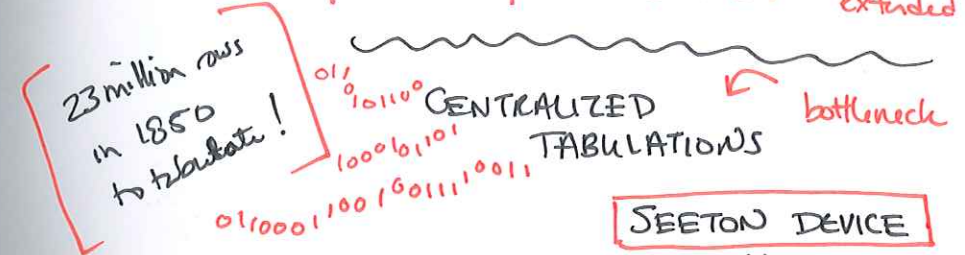
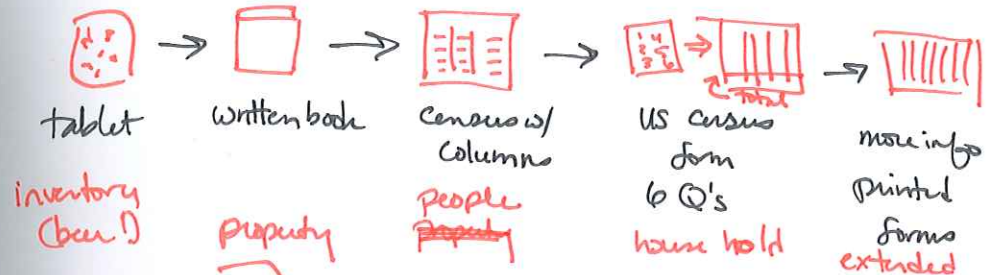
The History of Data:

Technological Change and The Census  
1790-2020

Minnesota  
Population  
Center



## DATA CAPTURE



## CENSUS BUREAU

directly or indirectly spawned  
two biggest computer companies  
of early 20<sup>th</sup> century



Univac  
bought by  
Remington  
Rand

## US CENSUS MACHINE

bought machines from  
IBM in 1950

1950's and computers!  
UNIVAC

1960 mail out census form



photo ~~sensing~~ reading for collection



1967 invention of GIS

1970 mailed out AND mailed back

1/1000 1/10000

microdata for universities

uses dittoed at #2 pencils

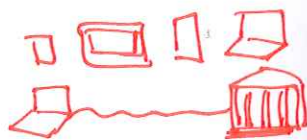
Compared w/ 1960's data due to compatibility

1980 } faster computers ...  
1990 }

2000 data capture outsourced to Lockheed Martin  
lots of scanning, lots of errors

2010 "was a colossal failure"  
ended up w/ Lockheed again due to  
handheld device? failures by other contractors, Harris  
CANCELED internet response option  
↑ CANADA did this no problem

2020? Not looking good ...  
bring your own device  
internet response option  
neither looking good



US CENSUS TIMELINE

Recover?  
Compare old data

1960-1990



Build longitudinal study  
from 1990's on...

CLIP



link to other  
existing microdata

truly an extraordinary  
moment to be a  
data nerd!

CENSUS BUREAU

→ drove huge innovations  
in computing in  
20<sup>TH</sup> century

→ changed recently with  
outsourcing

→ still ahead in data  
(depth, breadth, free)



Missing Chicago data  
from 1960

data discovered  
in a cave in

Kentucky (really)

