

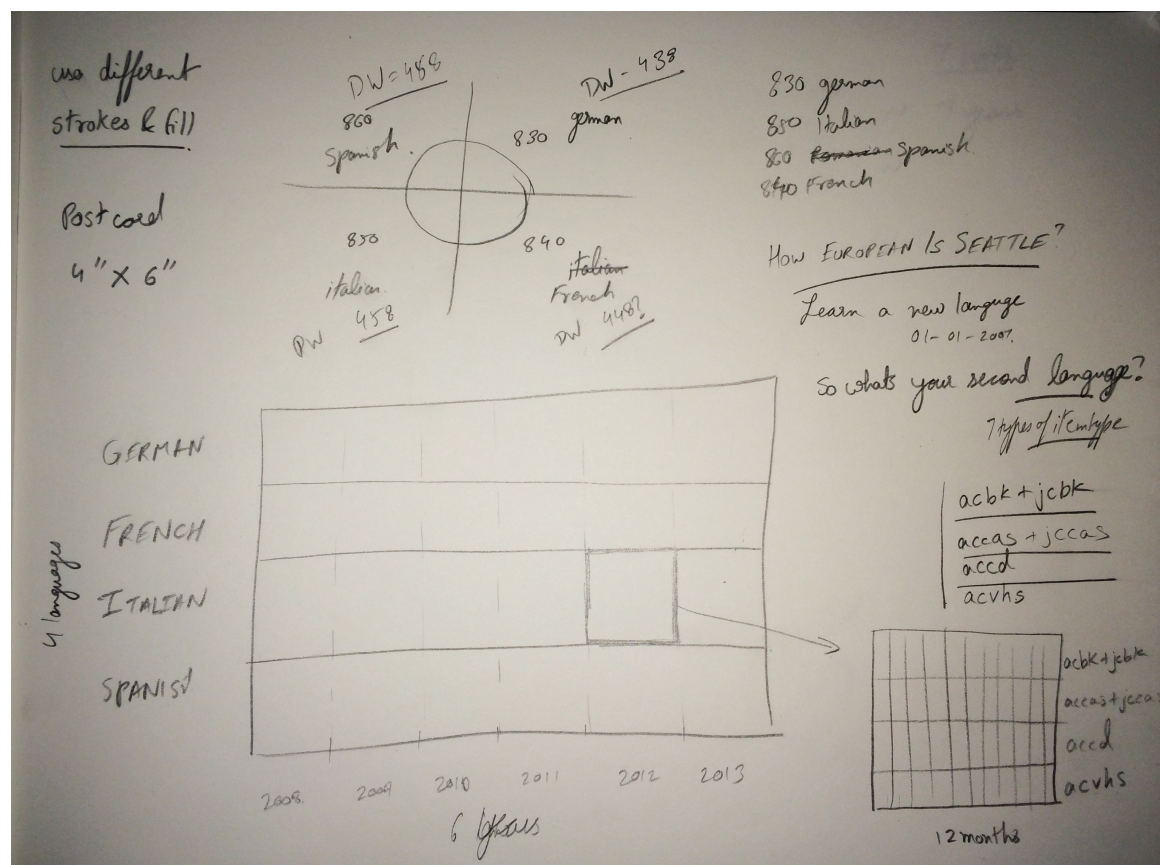
Assignment 2

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What's your Second Language Seattle?

Concept:

For this assignment I have studied the interest of Seattle's citizens in learning a new European language. I have chosen to study French, German, Spanish & Italian over a 6 year period (2007-2013). The checkouts have been made in the following itemtype categories: books, cassettes & DVDs tapes. I intend to visualize not just the language trends but also the means of study employed.



Labels:

X-axis: Year (2007-2013)

Y-axis: Language (Dewey Class, Name)

(438: German, 448: French, 458: Italian, 468: Spanish)

Color: Intensity represents the number of checkouts

DATA:

I have used 4 Dewey classes: 430: German, 440: French, 450: Italian ,460 : Spanish .

Query:

```
select month(cout),year(cout),sum(case when itemtype = "acbk" or "jcbk" then 1 else 0 end) as book,sum(case when itemtype="accas" or "jccas" then 1 else 0 end ) as cassette,sum(case when itemtype = "acdvd" or "jcdvd" then 1 else 0 end) as dvd from inraw where deweyClass>=450 and deweyClass<460 and date(cout) >= "2006-01-01" and date(cout) <= "2013-12-31" group by month(cout),year(cout) order by year(cout), month(cout)
```

similar queries were run for other languages (only change was the dewey class)

Results:

According to the visualization, Spanish is the most popular language. This might be because it is widely spoken and is not just limited to Spain but also in central & south America as well as neighbouring Mexico. Spanish is recorded the highest volume not just in the books section but also in Cassettes and DVDs. An interesting comparison would be with Mandarin or possibly English which are the most popular languages.

Another interesting observation was the number of checkouts drastically reducing as soon as DVDs were introduced in 2009. There has been a strong demand for Spanish DVDs and the number of Spanish books being checked out also increased during that period.

The introduction of DVDs regained interest in Italian & French languages. There was a marginal increase in the number of books checked out in this period.

However no German DVDs were checked out indicating that they were never introduced to the library.

Processing visualization:

