# Chapter 1

# Beyond Zeiger

Practical work: \( \tilde{\)Documents/GitHub/space-exploration

## 2024-01-21

- Creating test 1: Double Between
- Finding places through Norgeskart
- Wenn Schnittfläcke ist leer: error
- Modified the width of between objects in pizzacut.py::Between

#### Idea

- 1. Find a movement passage in Schnitler
- 2. Enter all relational information, implicit and explicit
- 3. Add geolocation of all known places
- 4. If all places are known:
  - (a) Run as many experiments as there are places
  - (b) In each, one place is made unknown
  - (c) Look a consequences of systematic choices as to if the place falls within the area predicted

(d) What is the smallest possible area of prediction?

https://github.com/jjimenezshaw/Leaflet.UTM

#### 2024-01-24

Can also use R for conversion: https://rdrr.io/cran/oce/

## Research plan

- 1. Create a place record for each place name in Schnitler Table.html.
- 2. Establish coordinates for each place using a methodology.<sup>1</sup>
- 3. Set parameter values for distance, span and direction based on distance in mile and contextual direction information.
- 4. For each place:
  - (a) Generate rooms of possibilities from the place before and after.
  - (b) See if the place falls within based on the parameter values used.

# 2024-01-25

Introduce an outer iterative layer directly in the python scripts?

## 2024-01-26

Write a python script implementing the structure of the research plan

<sup>&</sup>lt;sup>1</sup>In this case, modern map studies based on the gazetteer in Schnitler

2024-02-01 3

## 2024-02-01

Zeiger is using mathematical coordinates, not geographical.

## 2024-03-25

Modified main.py, pizzacut.py and draw.py so that a map is drawn also when there is no overlap.

Steps:

```
Space> python scripts/reearchPlan.py
Please input filepath (../file.csv): Documents/testSchnitler.csv
UnknownPlaces—master> python main.py
```

There is something weird with the distances.

And: the road does not in reality go eastwards.

#### 2024-09-20

Start with distance only, with three values for Miile: 6, 8, 11,3

### 2024-09-20

It is now working with one pair of places, length of mile and with of span set by variables that can be changed.

Rutten Field to bræcke gaard is too far away with my locations, well over 11,3 km.

Todo 1: make it work for all pairs. OK

Warning!!!!

Modified /Users/oeide/Library/Python/3.10/lib/python/site-packages/folium/folium.py

## 2023-09-23

Now generating one map for each relationship. Also storing the maps in outputMaps

Can start experimenting with span and distance.

Everything is run from:

 $>./generate Example Maps.pl\ / Documents/Git Hub/space-exploration/output$ 

#### Call order:

- 1. generateExampleMaps.pl
  - (a) researchPlan.py
  - (a) callMapGeneration.py
  - (b) generate\_map\_from\_file
  - (c) draw / drawNoOverlap
  - (d) show in browser (modified library file, see diff)

Parameters are in: researchPlan.py, where the csv file is generated.

# Experiments

See ExperimentLog.xlsx

Here are the overlap counts. Overlap area is not considered. Neither is match with assumed place

# 2024-09-24

Added plotting of the coordinates for the unknown place.

Redo some experiments

2024-09-26 5

## Benchmarking map correctness

Created the file: allCoords.txt

and the Python script: drawPointOnly.py

to generate the map: benchmarkingMap.html

which shows all the places as points with names as popups

#### Incorrect maps

Two places almost the same coordinates – only some 60 meters apart:

- hof annex eller aalens annex Ålen kirke
- holtaalens hoved Kircke Haltdalen kirke

Coordinates for holtaalens hoved Kircke corrected. All experiments must be run again.

## 2024-09-26

Rutten Field – check location

Landscape classes as polygons for hypotheses

Over/under-estimateion of Miile based on travel considtions and landscape type?

# TODO