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Using “etalon- gazetteers” for evaluation cartographic information system

The purpose of evaluations is not only to search for mistakes in the software- for getting successful results the ignition of right processes is has the same importance [1, 2].

Right data enables the software to work properly.

Data can be purified through testing [3] and visual control, but advance control conditions can be put on the input field or use data that has been corrected earlier.

We would like to discuss the last subject while using the experience of Digsaw-the project of antique maps [4].

Digsaw is an info system with SOA [8] that has no SQL [6] type data tier. So predicate queries can not be asked [7]. Though three search systems have been created;

Thesaurus- for place names,

Indexer- for search by geographical coordinates,

Catalogue- for bibliographical search.

Analogue search systems exist from earlier times and they have passed test phase. That gives us reason to believe that they consist of better purified data. For instance Geo Names [5], Google maps etc.

In the paper we offer algorithms to purify data while using existing gazatteers.

Algorithm 1: compare geographical name with criterium and make from not correct records lists, what after test will work manually

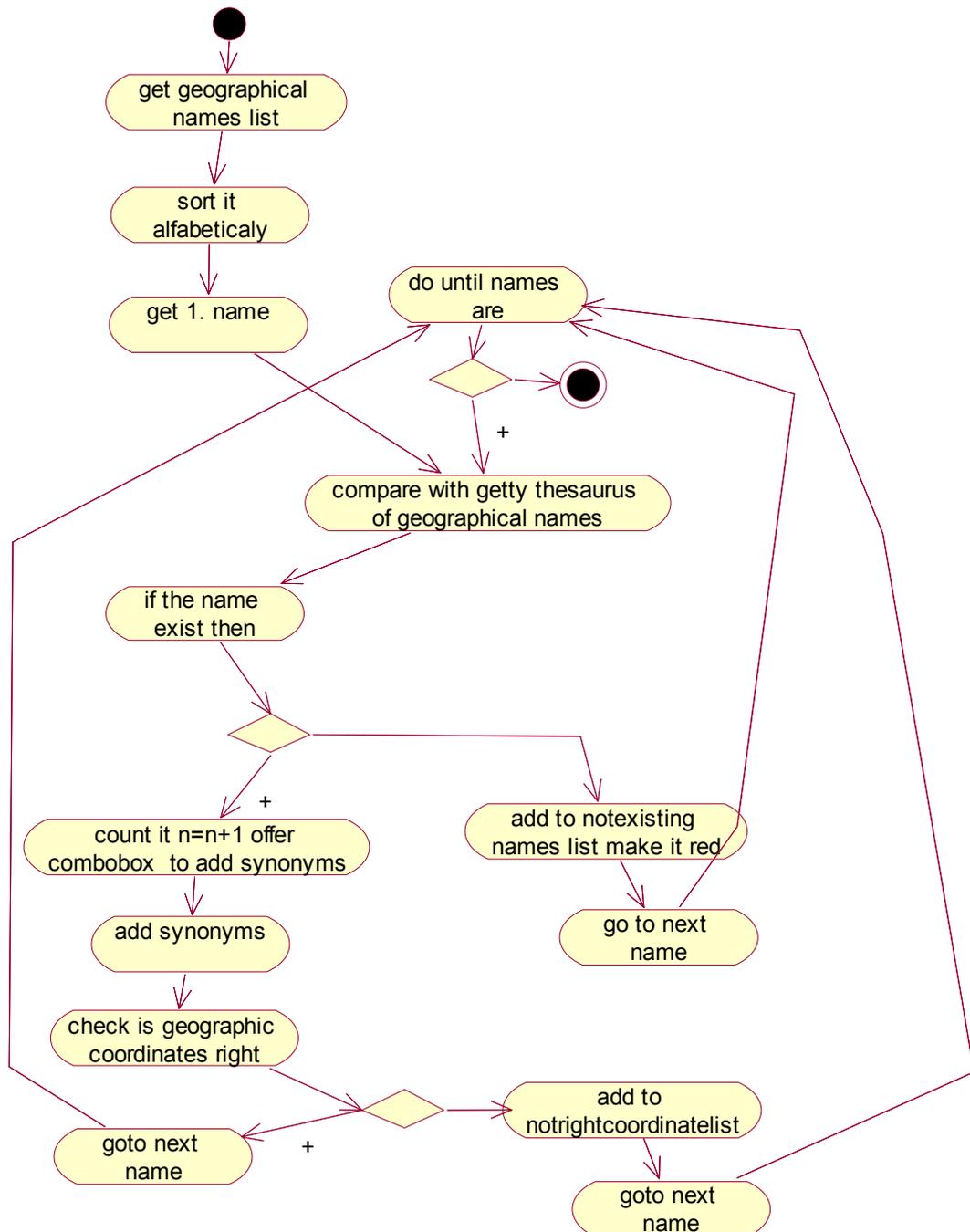


fig.1 Getty thesaurus

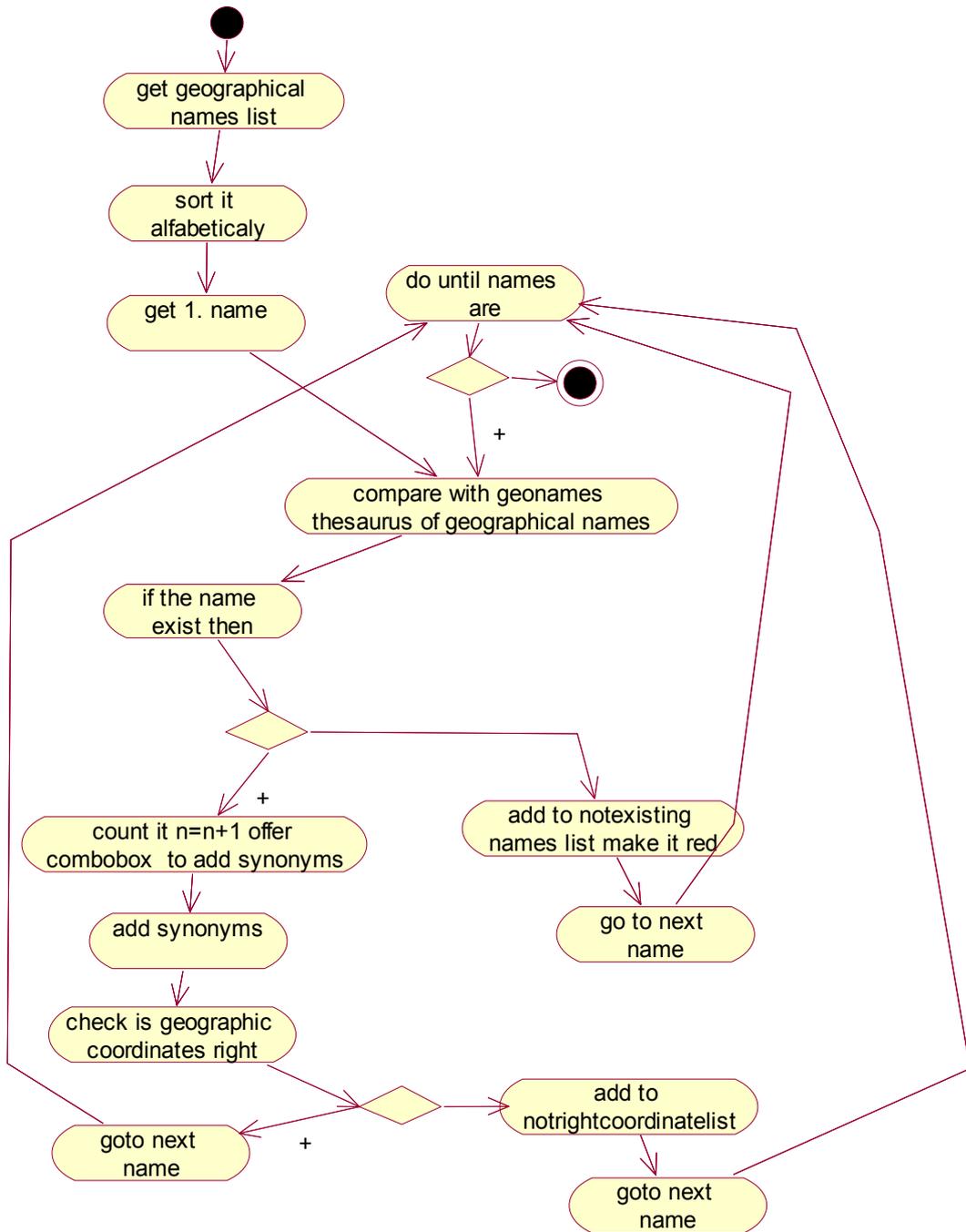


fig.2 geonames

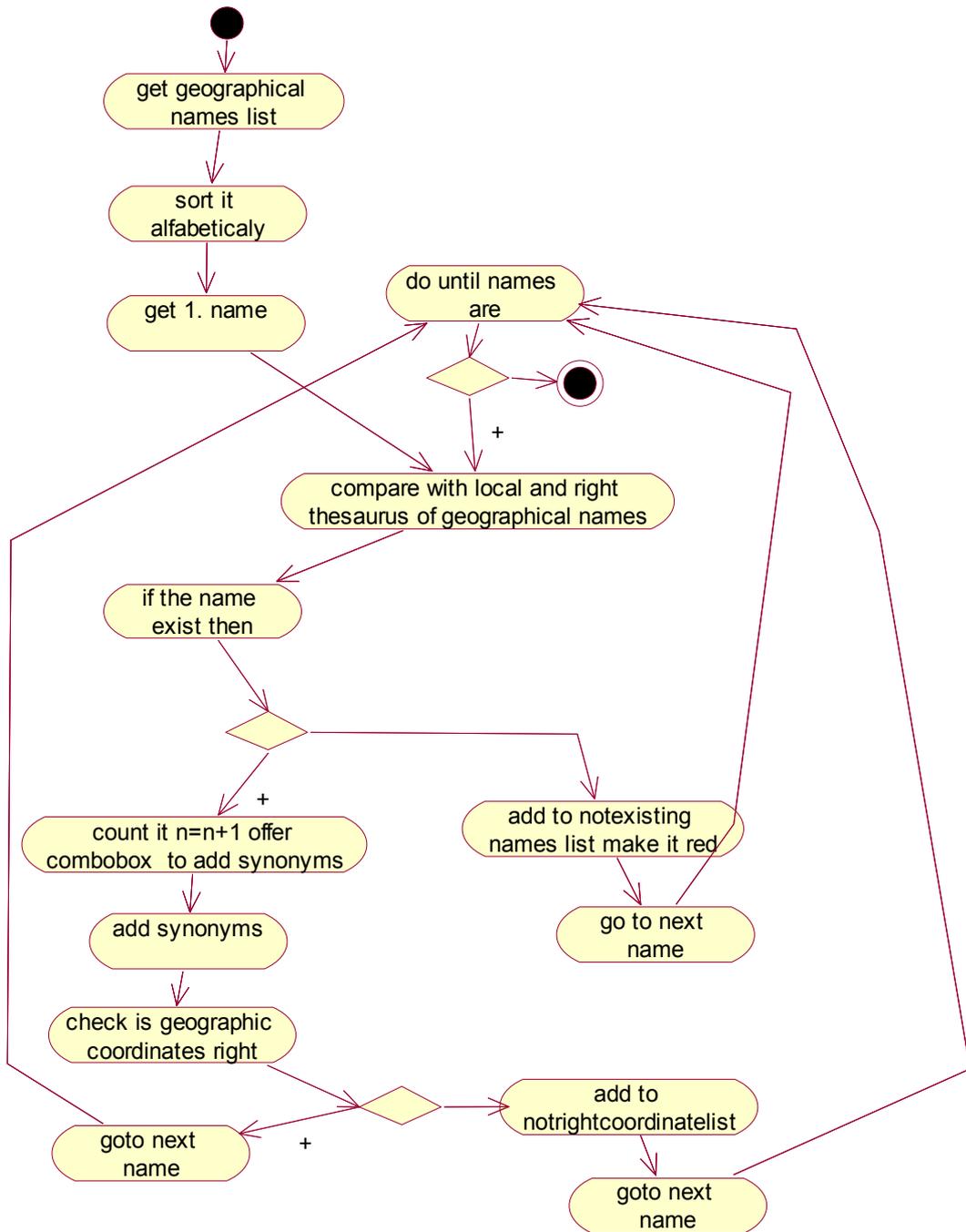


fig 3. local names list

Algorithm 2: find not correct mapmakers.
Compare mapmakers names with criterium and not correct records lists what will workout manually

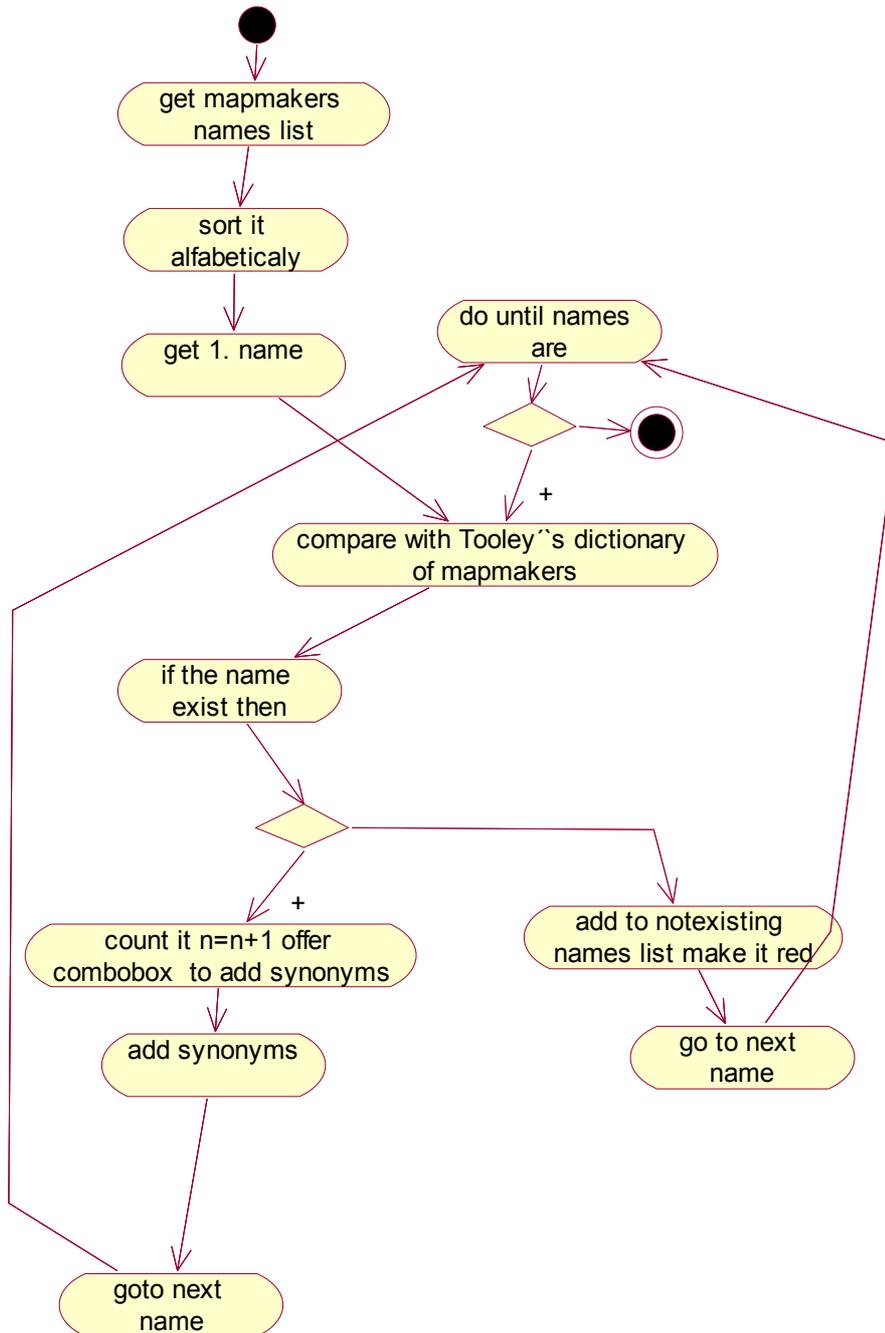


fig 2.1. Tooley mapmakers

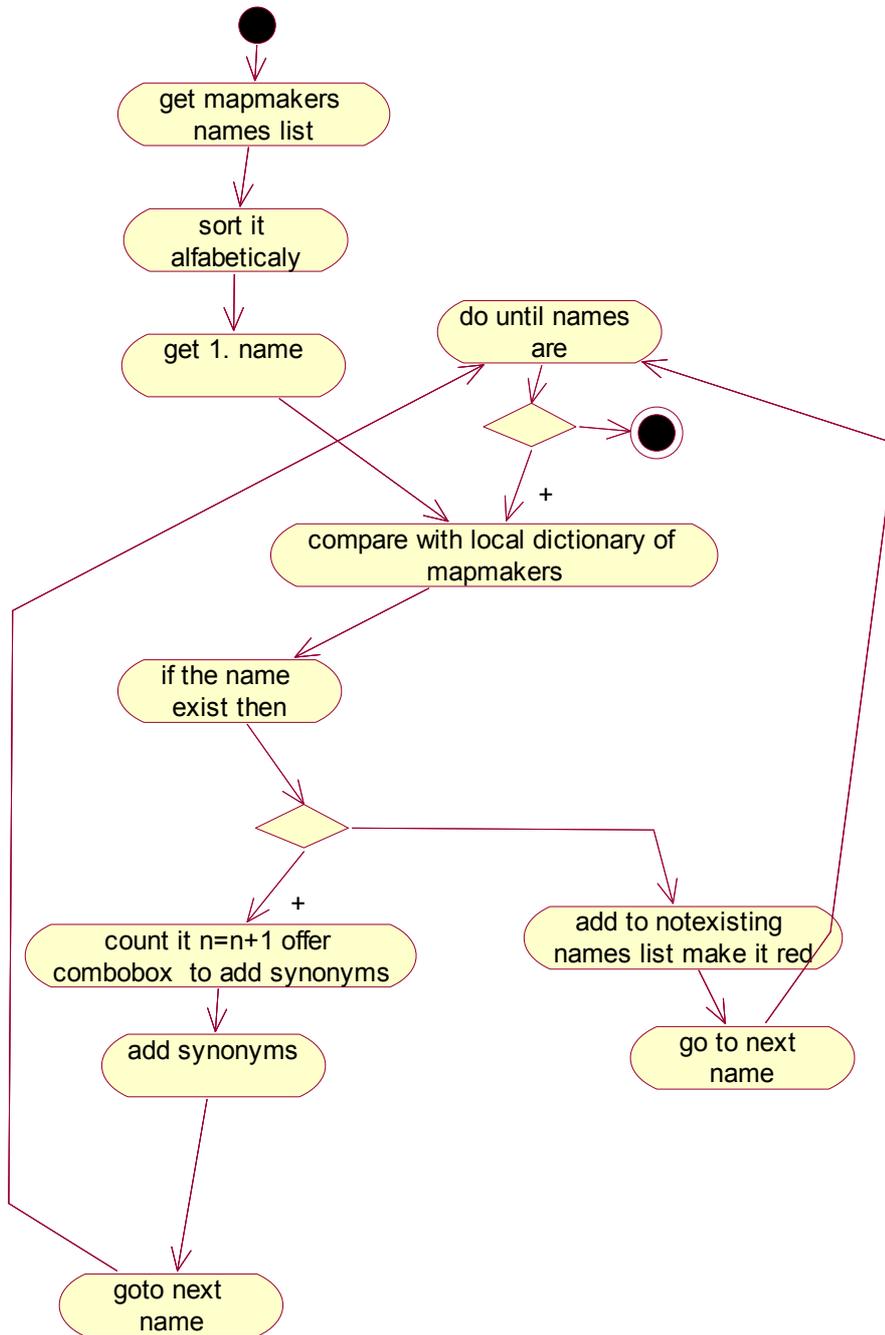


fig.2.2 local dictionaris

Results

The usage of existing analogue and better gazatteers for comparing the data in input phase enables better results than any other method. We hope that Gazatteers will develop into etalons like the SI-measure system in Paris.

References

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