



DANMARKS
BIBLIOTEKSSKOLEN

Users' perception with work task oriented thesaurus design

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Outline

1. Research topic and purpose
2. Research questions
3. Research methodology
4. Research findings
5. Sum up of findings (prototype)

Research Purpose & Topic (1/3)



The purpose of the project is to develop the methodology of thesaurus design

Thesaurus design should be developed according to:

- **Information environment** (Aitchison, Gilchrist & Bawden, 2000)
 - Users information needs → *coverage topic, concepts*
 - Information seeking and searching behavior (Soergel, 1985; Pejtersen & Fidel, 1998; Nielsen, 2001) → *structure*
 - Domain features (Hjørland & Albrechtsen, 1995)
 - Technical features



Research questions

- How could the gained knowledge of information environment be translated into thesaurus design?
 - What type of conceptual information should be included in the thesaurus entries?
 - What type of relationships should be presented in the thesaurus?



Methodology

Case study at the Department of Plant Pathology at the The Royal Veterinary & Agricultural University

1. Questionnaire survey

- Demographic data,
- Work tasks,
- Information needs,
- Information searching behaviour
- Sources and channels

2. Follow up interview

- Information needs
- Information resources
- Search behaviour
- Search aids and specially thesaurus use
- Subject field
- Opinions about Prototype (Agrovoc evaluation and thesaurus improvement discussion)

3. Literature review (topics, related domains, concepts, vocabularies)



Findings (1/ 3)

Work Tasks	Focus topic of thesaurus: concepts, subject coverage
Information needs <ul style="list-style-type: none">• PSI& DI need• Verificative& conscious	Domain information(known facts, basic concepts of domain) Problem solving information(methods of problem treatment) Precise and specified concepts (Different names of organisms: common, scientific and trade names)
Language use	Linkage to vocabularies in other related domains Use identifiers
Information resources	Cultural warrant Link to other vocabularies in related domains



Findings (2/ 3)

Information searching & seeking behaviour

- Different information behavior
- Search on the web, in textbooks & dictionaries and ask colleagues for alternative terms
- Self service
- Blurred role of thesaurus

Important role of the thesaurus

Cultural warrant

Powerful, precise and comprehensive thesaurus

Enriched thesaurus

Thesaurus evaluation

- Broad area, old terms and not updated
- Poor and incorrect relationships
- Lack of some helpful information

Precise information with details

Precise relationship

History note

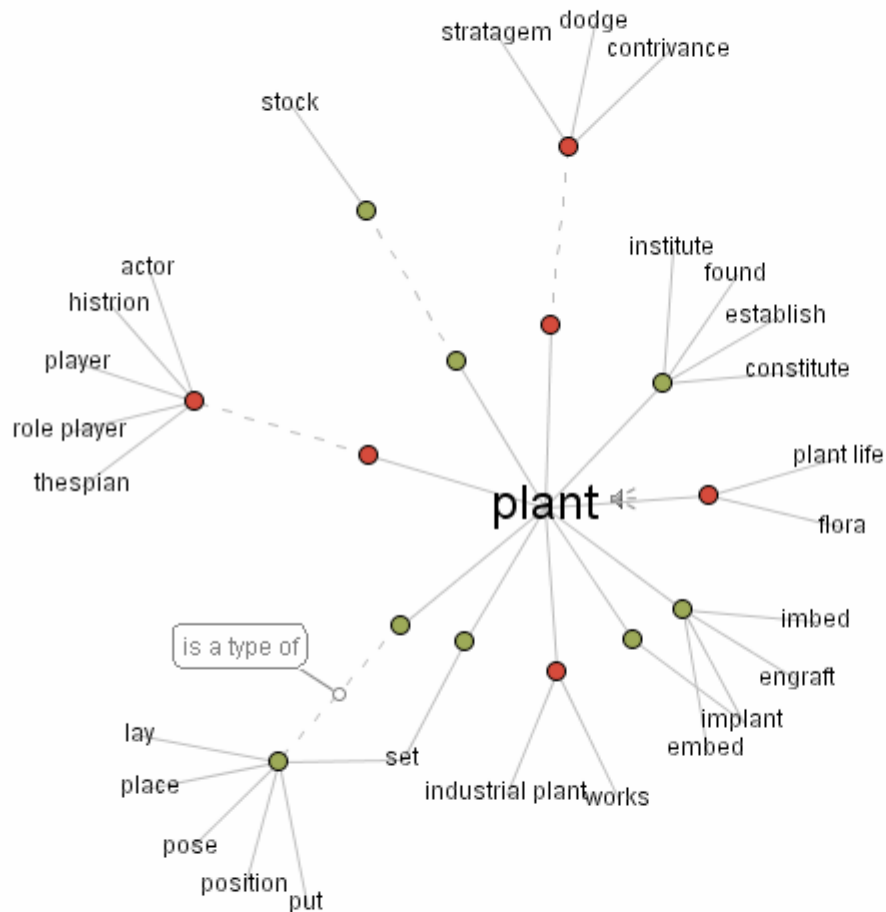
To include different names, Gene symbol catalogue, individual names, a comprehensive classification of diseases,



Findings (3/ 3)

Some features for a developed thesaurus:

- Priority levels for thesaurus information to guide display (for novice and expert)
- Choice between a brief and detailed information representation
- Definitions from many different places, including links into texts (parts of documents) that convey the exact meanings of terms
- More powerful displays that let the user explore hierarchic and network structures at various levels of detail and amount of information, such as [Visual thesaurus](#)



NOUNS ON

buildings for carrying on industrial labor

a living organism lacking the power of locomotion

something planted secretly for discovery by another

an actor situated in the audience whose acting is rehearsed but

ADJECTIVES ON

VERBS ON

put or set (seeds or seedlings) in the ground

fix or set securely or deeply

set up or lay the groundwork for

place into a river

place something or someone in a certain position in order to secretly observe or deceive

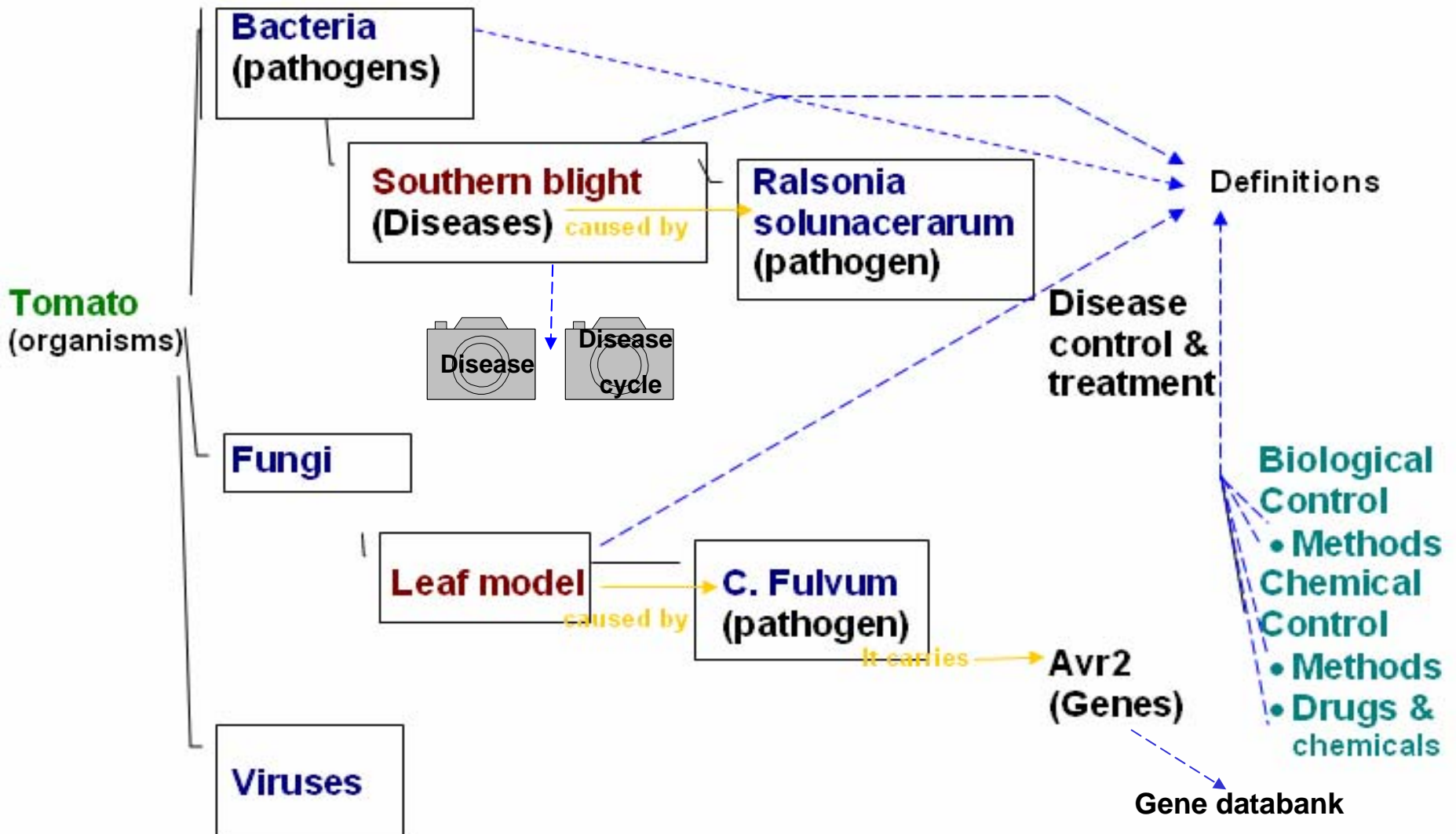
put firmly in the mind

put into a certain place or abstract

ADVERBS ON

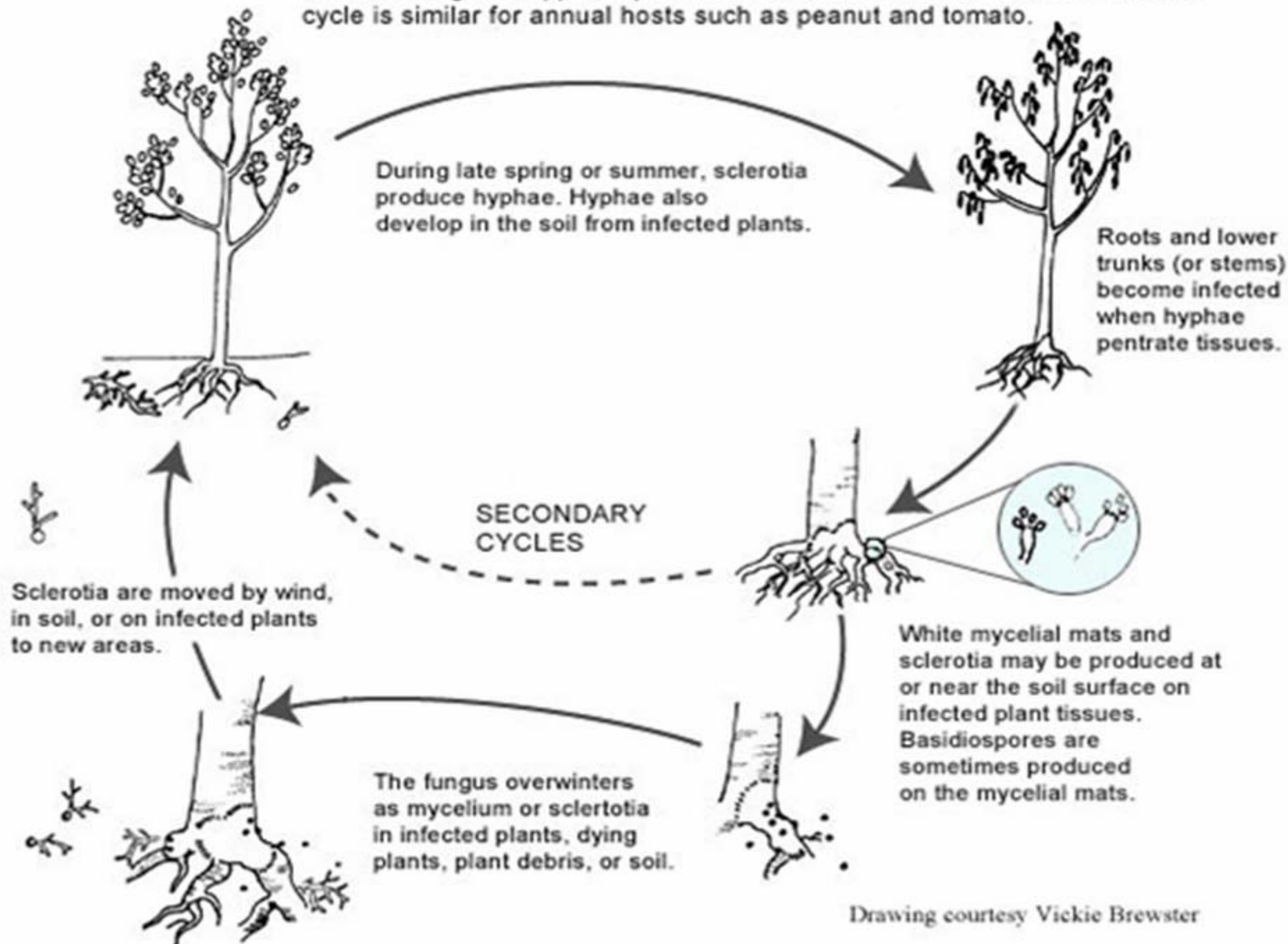


Summing up of findings(prototype)





Southern blight of apple, a perennial host, is illustrated here. The disease cycle is similar for annual hosts such as peanut and tomato.



Drawing courtesy Vickie Brewster



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