



PROJECTPLAN

How people form beliefs about generics

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Course:

Afstudeerproject bachelor
Informatica

Course code:

5062ABI18Y

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1 Background

To be able to acquire the Bachelor of Computer Science, it is necessary to successfully complete the "Afstudeerproject Bachelor Informatica" - "Graduation project Bachelor of Computer Science". This project plan is part of the preparation of the graduation project. The graduation project discussed in this plan will contribute to a research project on the semantics of generic statements.

Generics are statements that express generalizations about the members of a kind, such as 'ducks lay eggs', 'tigers are striped', 'cars have radios' and 'ravens are black'. 'Bare' generic statements express useful generalizations, but it is difficult to come to an unambiguous conclusion on how these statements come about. There is no unique critical point where people tend to designate a statement as true. For example when people have to judge the statement "lions have manes", the predominant conclusion will be true, while less than 50% of lions (only the older male lions) have manes. When asked about the statement "ticks spread Lyme disease" the predominant conclusion as well would be true, even though the statement is only true for 2.7% (RIVM 2019) of tick bites that actually transfer the disease whereas 20% of ticks carry the disease. These rather large differences in truth-conditions are described in Leslie, Khemlani, and Glucksberg 2011, where different types of predications are used to classify the generic statements.

2 Relevant readings

The generic overgeneralization effect, as described by Leslie, Khemlani, and Glucksberg 2011, shows that people tend to falsely (over)generalize statements. Another relevant research project is the project by Tasimi et al. 2017 which concludes that "people's judgments about generic statements differ depending on whether the target category is human or non-human. Generic judgments about human categories do not exhibit the same negativity bias that generic judgments about non-human categories do." This research also suggests that it is "necessary to explore the cognitive processes underlying these effects" which is part of the goal of the overarching research project of this project.

Cimpian, Brandone, and Gelman 2010 also states that "generic statements require little evidence for acceptance" such as the previously mentioned tick example and other striking generics like "Rottweilers maul children" and "Lions eat people" even though these statements are only true for exceptional cases. In their conclusion they state that "Generic statements are often judged true based on weak evidence but have implications that go far beyond what is needed to accept them." which underlines the importance of the parent research. The research done by Khemlani et al. 2007 is about how people interpret generic assertions, which is important to be able to understand how people form these assertions in the first place.

3 Research question

The goal of this project is to implement software to be used for a scientific research project on how people form beliefs about generics. The result would then be an online experiment where participants are able to interact with the environment, discover information about the objects inside it and evaluate generic statements about those objects.

The final result of this thesis will be an online hosted experiment that can be used for the aforementioned scientific research project. This will be published in a final thesis, along with the source code and the necessary documentation.

The research question of this project will be in line with the research project and therefore be: "How people form beliefs about generics."

4 Organisation

4.1 Method

The project will be a combination of a literature review, to be able to understand the goal of the project. Together with setting up the experiments environment, executing the experiment in a limited form and submitting this instrument to be used in a bigger scale research project, by hosting it online.

4.1.1 Communication

- Zoom - Planned meetings through Zoom, every Wednesday at 4pm.
- Email - For questions outside the Zoom meetings.
- Logbook - Keep track of progress made on a daily basis, available through GitHub
- Github - Keep track of coding and progress being made, as keeping files available at all times.

5 Planning

The table below shows a graphical display of the proposed deadlines for the project.

Table 1: Deadlines			
Date	Type	Assignment	Necessities
April 2nd (23h59)	Personal	Project plan	Send to supervisor for approval
April 3rd (23h59)	Project	Project plan	Approval by project supervisor
April 24 (23h59)	Personal	First draft of the thesis	Send to supervisor for approval
May 1st (23h59)	Project	First draft of the thesis	Layout (Better if first chapter finished and sections of the other chapters have been set up)
May 29th (23h59)	Personal	"Go" / "no-go" version of the thesis	Send to supervisor for approval
June 5th (23h59)	Project	"Go" / "no-go" version of the thesis	Approval by project supervisor
June 15th (23h59)	Project	Final version of the thesis	Approval by project supervisor
June 15th (23h59)	Project	Delta document of the thesis	Briefly indicate the changes that have been made compared to the Go / No-go version of the thesis.

These deadlines can be used as a guide for the critical points of the project. Intermediate critical points have to be formed during the project itself. These intermediate points depend on the design and how this affects the overall flow of the project. Some critical points, such as that results must be in by the end of May. It is also important that the workload of the thesis itself is spread out throughout the project instead of postponing this till the very end. In conclusion, there is one extremely critical dependence which is the correct functioning of the code/software.

5.1 GanttProject

The GanttProject planning in figure 1 has been included to be used as a guideline. (A full-page version has been added as Appendix 6.1)

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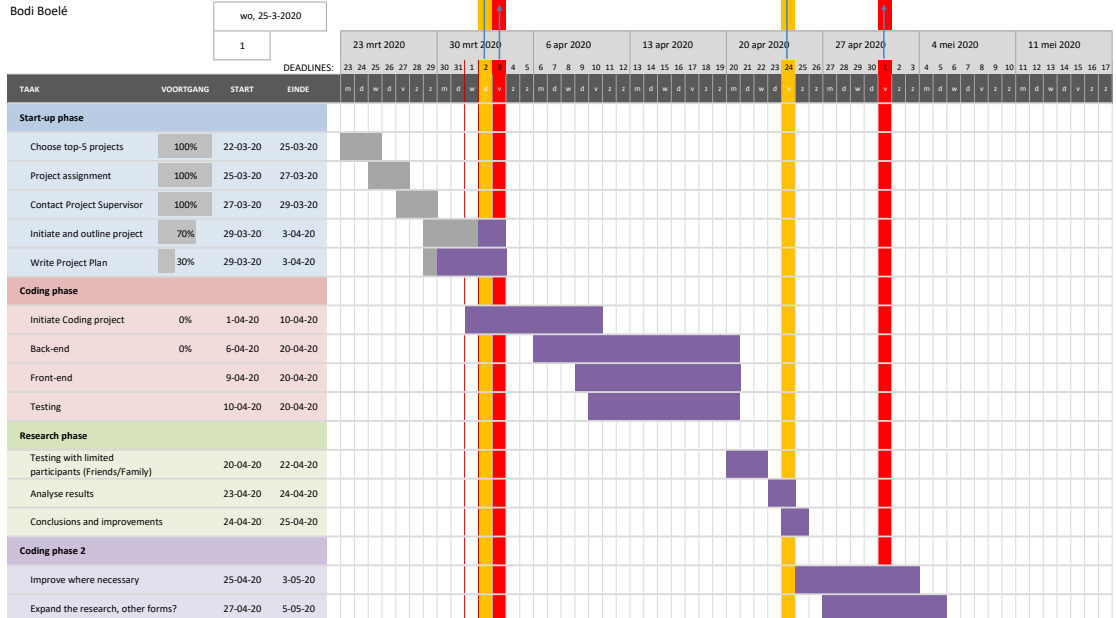


Figure 1: GanttProject planning (d.d. 1-4)

References

- Cimpian, Andrei, Amanda C Brandone, and Susan A Gelman (2010). "Generic statements require little evidence for acceptance but have powerful implications". In: *Cognitive science* 34.8, pp. 1452–1482. DOI: 10.1111/j.1551-6709.2010.01126.x.
- Khemlani, Sangeet et al. (2007). "Do ducks lay eggs? How people interpret generic assertions". In: *Proceedings of the Annual Meeting of the Cognitive Science Society*. Vol. 29. 29.
- Leslie, Sarah-Jane, Sangeet Khemlani, and Sam Glucksberg (2011). "Do all ducks lay eggs? The generic overgeneralization effect". In: *Journal of Memory and Language* 65.1, pp. 15–31. DOI: 10.1016/j.jml.2010.12.005.
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6 Appendix

6.1 GanttProject.pdf

