![Tilburg University – School of Humanities and Digital Sciences]

Research Traineeship proposal 2022-2023

1. Title

The Futures We Do and Do Not Want: The Effects of Hope and Fear in Climate Change Fiction for Young Readers

2. Coordinators

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3. Project description

Anthropogenic climate change is one of humanity's greatest contemporary challenges. In order to battle against it, we need current and future generations to be willing to act towards climate change mitigation. Narratives can play a fundamental role in persuading individuals to change their attitudes and behaviors towards climate change and the mitigation thereof (Schneider-Mayerson, 2017). **Children's literature** is therefore a crucial tool for building universal climate literacy (Oziewicz, 2022). However, as children's literary fiction is confined by restrictions based on both the children's stage of literacy development and adult's conception of what stories are appropriate to produce for them (Gaard, 2009; Bradford, 2003), a very much open question is what cli-fi books for children should look like to make an impact.

In this project, we look particularly at the role of **emotions** in children's narratives about climate change. Emotions play a fundamental role in the engagement of readers to narratives (Oatley, 2002/2013; Vermeule, 2010). As cognitive literary theorist Keith Oatley posits: "Emotion is to fiction as truth is to science. We would no sooner read a novel that did not move us, than an empirical article that did not offer a validly drawn conclusion" (2002/2013, p. 39). Affective engagement can establish **narrative empathy**: an invitation for readers to share the emotions of fictional characters (Keen, 2006, 2007, 2013; Nikolajeva, 2014). By means of the narrative empathy that is established, climate change narratives offer proxy emotional experiences for readers to partake of, which might result in changing readers' **attitudes and behaviors**. The latter is reflected in the Extended Transportation-Imagery Model (Green & Brock, 2002; Van Laer et al., 2014), which predicts that the more readers engage with narratives and take over the characters' viewpoints, the more likely they are persuaded to change their attitudes or behaviors regarding the topic at hand. In this proposal, we

are therefore interested in the effects of the narrative techniques to establish narrative empathy on child readers' engagement with climate change, both in the short and longer run.

Fiction uses a range of affective strategies to evoke different emotional responses from readers. **Fear** has played a key role in the emotional landscape of climate change narratives. This was facilitated by the central position that the dystopian novel has held since roughly the 1990s. Via these dystopias, authors constructed horrifying images of the futures that may await us. More recently, literary scholars have pointed out the short-comings of this dystopian approach as the leading force in imagining climate change. In a recent volume, a group of scholars of children's literature exclaim: "Too long have we focused on projections of the futures we dread instead of the futures we want. We can do better. And we must" (Oziewicz et al., 2022, p.5). This call resonates with empirical findings in communication sciences, indicating that focusing primarily on fear is not always effective in climate change communication (O'Neill & Nicholson-Cole, 2009; Stern, 2012). Across both disciplines, we find a call to focus on more positive emotions to engage people in a constructive re-imagination of climate change. The notion of **hope** has been suggested to provide readers with the imaginative space needed to rethink how we might respond to the climate crisis (Kelsey, 2016; Stern, 2012). However, there is little empirical evidence to suggest that this more optimistic approach to climate fiction will affect readers more effectively or even differently, let alone that these effects would hold for children, and for a longer period of time (Schneider- Mayerson et al., 2020). We seek to contribute to this upcoming debate by answering the following research question:

How does the narrative use of fear and hope in existing climate change fiction affect young readers' attitudes and behavior towards climate change?

In order to answer this research question, we propose to combine insights and methods from both cognitive literary studies and communication sciences. The project starts with a critical exploration of the field of climate change fiction for young readers (age 9-12) that is available in Dutch. Building on previous studies on Dutch children's books on the environment and climate change (Van der Beek & Lehman, 2022; Van der Beek & Kulkarni, forthcoming), this exploration maps this literary field and leads into the construction of a **corpus** of approximately 6 books. These books will be analyzed for uses of narrative techniques that evoke either fear or hope via narrative empathy, using previous theory on affective engagement and narrative empathy (Keen, 2006; 2007; 2013; Nikolajeva, 2014; Stephens, 2015). We select fragments from these books to set up an **experiment** with three conditions: one focusing solely on fear, one focusing solely on hope, and one that combines fear and hope in one story. The fragments are selected based on maximum similarity in all aspects other than the affective strategy that is applied. Should adaptations be required anyway, they will be developed by the trainees, and checked by the supervisors.

The experiment is conducted at a couple of primary schools in the Tilburg area that are recruited via the professional networks of the supervisors. Classes are randomly assigned to one of three conditions, in which the children experience one fragment that is read aloud by the school teacher during the regular reading hour. The trainees will attend this reading session, and invite the children to take part in a questionnaire in a regular class setting that the children are comfortable with. The questionnaire measures narrative empathy, identification with the main characters, attitude about climate change, and self-reported behavior, all as a function of affective strategy. The variables are measured using validated scales, which are simplified to fit the children's level of understanding. To examine longitudinal effects, the children will complete a questionnaire three times: before (M1),

right after (M2) and after a month (M3) of listening to the story. For M3, the trainees will visit the schools for a second time. Before data collection starts, ethical clearance is asked with the TSHD Research Ethics and Data Management Committee (REDC), paying special attention to parental and child consent.

4. Project timeline

The project will run from approximately (mid) September 2022 till (mid) July 2023; see Table 1 for our planning. We aim to start in September already, in order to have sufficient flexibility in the first months of 2023 to plan our experiments in collaboration with the primary school(s).

Table 1: Project timeline

Task	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Start project	■										
Contact primary schools	■	■									
Theory development	■	■									
1. Corpus development		■	■	■	■						
Define selection criteria		■									
Collect literary works		■									
Read literary works			■	■							
Narrative analysis*				■	■						
Progress report					■						
2. Experiment						■	■	■	■		
Select literary works						■					
Develop experiment						■	■				
Collect data							■	■			
Analyze data								■	■		
Progress report									■		
Paper writing									■	■	■
End project											■

* Only selected literary works will be analyzed narratively, to prepare for experimental use.

5. Research Trainee profile

We are looking for two research trainees (both 0.15 fte); one with experience and/or interest in narrative analysis, and one with experience and/or interest in empirical research. Given the affiliations of the supervisors (DCU and DCC), we aim to hire one student in Culture Studies, and one in Communication and Information Sciences. This would ensure that both students have the opportunity to experience cross-disciplinary research. The trainees will collaborate in all parts of the project, so that they broaden their scope, and learn how various research methods can reinforce each other. We could however be flexible here, depending on the applications we receive. In any case, both trainees should have an interest in literature and storytelling; be aware of the challenges that climate change poses for society; and be comfortable with doing research with child participants. Applicants should be in the third year of their Bachelor's, or in their Master's. Research Master's students are also welcome to apply. They should be native speakers of Dutch, because of the nature of the materials that they will work with (i.e. literary works written in Dutch), and due to the experiments that they will have to conduct on Dutch primary schools.

Applicants should send a resume and motivation letter to Ruud Koolen (r.m.f.koolen@uvt.nl). In the motivation letter, they should indicate their interest in the topic of the traineeship, as well as the contribution they think they can make to the project.

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