

# **Exploring Participatory Design Fictions by Average Citizens to Elicit Civic Engagement**

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## Abstract

The current study aimed to investigate whether participatory design fictions are an appropriate method to get citizens to engage in discussions about possible futures of Europe. Previous research has examined the use of design fiction to encourage discussions within an academic context. However, no studies have explored whether generating design fictions by average citizens while ensuring a sufficient degree of story world absorption might prove a valuable method to engage ordinary citizens in discussions about possible futures of Europe. In view of this, a three-part study was conducted. Firstly, 10 participants were asked to complete a story from a story stem set in 2050. Story completion was used as a participatory method to elicit the participants' visions of possible futures. Secondly, 40 participants read the stories and reported their story world absorption through the SWAS. Finally, follow-up interviews were conducted with seven SWAS participants to gain insights into their willingness to engage in discussions. The findings of this study suggested that (1) the ordinary participants from the story completion activity were able to use the story stems to generate design fictions; (2) the SWAS scores indicated that the design fictions had a sufficient degree of story world absorption; (3) the follow-up interviews helped in further understanding whether design fiction might prove a valuable method of engaging average citizens in discussions about the possible futures of Europe. This study serves as exploratory work for future research that uses these methods for encouraging meaningful and productive discussions on possible futures of Europe.

*Keywords:* alternative futures, participatory design fiction, story completion, SWAS, civic engagement

## **Preface**

This Master Thesis represents the completion of a challenging, but enjoyable time: the Master Communication and Information Sciences – New Media Design track at Tilburg University. I would like to explain the interest I had in the topic of study.

My interest in design fiction started during my Master's. I was introduced to it in one of the courses and it immediately caught my attention. In design fiction I saw a combination of my passion for social and political engagement, and science fiction with a more creative approach towards research.

My supervisor Simone Ashby introduced the topic participatory design fiction, and derived from my personal interests I decided this was the subject I wanted to research. I sought to create insights into the influence participatory design fictions can have on citizens' willingness to engage in discussions, as to explore whether average citizens can create absorbing and relatable design fictions. By studying this method, I hope this thesis can contribute to finding ways to facilitate citizen engagement in discussions around the possible futures of Europe.

Lastly, I would like to thank several people. Firstly, I would like to thank my supervisor Dr. Simone Ashby for her guidance and feedback. Besides, I would like to thank my parents and my partner Johan for their unconditional support, and my friends Pía, Sandra, Nour and Markus for their constant encouragement and advice. Last, but not least, I would like to thank Dr. van Enschoot for her time to review this thesis.

Laura Beamuz Mingote

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## Table of Contents

|                                                                                             |    |
|---------------------------------------------------------------------------------------------|----|
| Exploring Participatory Design Fictions by Average Citizens to Elicit Civic Engagement..... | 6  |
| Theoretical Framework.....                                                                  | 9  |
| Design Futuring.....                                                                        | 9  |
| Design Fiction.....                                                                         | 11 |
| Participatory design fiction.....                                                           | 13 |
| Story completion .....                                                                      | 14 |
| Story World Absorption .....                                                                | 15 |
| Story World Absorption Effects .....                                                        | 18 |
| Public engagement .....                                                                     | 20 |
| Citizen deliberation.....                                                                   | 20 |
| The present study .....                                                                     | 21 |
| Method .....                                                                                | 22 |
| Design.....                                                                                 | 22 |
| Co-creating the Stimuli .....                                                               | 23 |
| Materials .....                                                                             | 23 |
| Participants .....                                                                          | 26 |
| Procedure .....                                                                             | 27 |
| Data Analysis.....                                                                          | 27 |
| Examining Story World Absorption .....                                                      | 28 |
| Materials .....                                                                             | 28 |
| Story World Absorption Scale.....                                                           | 28 |
| Participants .....                                                                          | 29 |
| Procedure .....                                                                             | 30 |
| Data Analysis.....                                                                          | 30 |
| Semi-structured Interviews .....                                                            | 31 |
| Materials .....                                                                             | 31 |
| Procedure .....                                                                             | 32 |
| Data Analysis.....                                                                          | 33 |
| Results.....                                                                                | 33 |
| Overview of the Stories.....                                                                | 33 |
| Thematic Analysis of the Stories .....                                                      | 34 |
| SWAS Scores .....                                                                           | 38 |
| Semi-structured Interviews .....                                                            | 40 |

|                                                              |    |
|--------------------------------------------------------------|----|
| Summary of findings .....                                    | 42 |
| Discussion .....                                             | 43 |
| Findings Regarding Story Completion.....                     | 44 |
| Findings Regarding the SWAS Scores .....                     | 45 |
| Findings Regarding the Follow-up Interviews.....             | 46 |
| Implications of the Findings.....                            | 47 |
| Limitations and Recommendations for Future Research .....    | 48 |
| Conclusion .....                                             | 49 |
| References .....                                             | 51 |
| Appendix A. Story Completion Survey .....                    | 62 |
| Appendix B. Five Stems in Spanish .....                      | 73 |
| Appendix C. Survey with a Story and SWAS .....               | 74 |
| Appendix D. SWAS.....                                        | 83 |
| Appendix E. Consent Form and Survey for the Interviews ..... | 85 |
| Appendix F. Interview Questions .....                        | 89 |
| Appendix G. The Ten Unedited Stories.....                    | 91 |
| Appendix H. Thematic Analysis of the Interviews.....         | 99 |

### **Exploring Participatory Design Fictions by Average Citizens to Elicit Civic Engagement.**

The use of design methods to do research has increased within Human-Computer-Interaction (HCI; Kozubaev et al., 2020). The term design futuring includes the different design research methods used to generate and discuss possible futures (Howell et al., 2021). The methods included in design futuring trigger discussion and reflection about alternative future scenarios and the issues that may arise with them, which eventually produces knowledge (Howell et al., 2021). Some of the methods encompassed within design futuring are critical design, adversarial design, speculative design, discursive design, and design fiction (Howell et al., 2021).

As part of design futuring, design fiction is a relatively new method of research that has grown in popularity since the early 2000s in the world of HCI (Tanenbaum et al., 2016). Design fiction is used as a research method that contributes to the field by envisioning new futures and technologies, communicating innovations to researchers and the general public (Tanenbaum, 2014). The term design fiction was first proposed by the science fiction author Bruce Sterling in 2005, who described it as a mix between science fact, design, and science fiction. The meaning of design fiction later evolved to telling stories through design, focusing on technologies and their future implications (Bleecker, 2009). The objective of design fiction is to raise critical inquiries, question assumptions about technologies, and expand our sense of what is possible through objects or prototypes (McVeigh-Schultz et al., 2018). These objects or prototypes evoke the future and describe how socio-cultural systems and their impositions have evolved (The Practical Poetry of Imagination, 2021).

The prototypes within design fiction are classified as *diegetic* (Sterling, 2005). ‘Diegesis,’ in the context of design fiction, refers to the story world (Lindley, 2015). Compelling design fiction

has to build a strong ‘diegesis,’ which means that it has to be grounded in the reality of the audience (or reader), but it also has to be able to build a fictional scenario where the new technology being prototyped can exist coherently (Lindley & Potts, 2014). Diegetic prototyping in design fiction is used to build a space that challenges the audience’s expectations, which provokes critical thinking about the practices in a culture (Auger, 2012). In order to create compelling design fictions about technology and socio-political events, narrative forms are used (Auger, 2012; McVeigh-Schultz et al., 2018)

Narratives are robust systems for creating cognitively and emotionally engaging worlds, to the degree that narrative readers may experience difficulty returning to reality (Busselle & Bilandzic, 2008). The subjective experience of the reader of getting lost in the world of the story is referred to as story world absorption (Kuijpers, 2020). Experiencing absorption in the story world can trigger attitudes and beliefs in the reader related to the story being told (Busselle & Bilandzic, 2008). For instance, in a study by Green and Brock (2000), participants read a narrative about a psychiatric patient who murdered a child. Participants who experienced higher absorption levels stated that psychiatric patient’s freedom should be more restricted and that violence was more likely to happen (Green & Brock, 2000). Thus, being absorbed in the story world of the narrative elicited story-related beliefs on the readers (Busselle & Bilandzic, 2008).

Additionally, involving the audience in the writing process of fictional narratives can yield unique design insights that researchers might not have considered (Cambre et al., 2020). A participatory design approach treats participants as partners in the research process, focusing on the human-centered aspect of “designing with” (Forlano & Matthew, 2014). Participatory techniques directly involve the participants in creating design fiction (Cambre et al., 2020). For instance, Prost et al. (2015) explored different paths toward sustainable futures through story-

writing workshops. Participants co-created (i.e., collaboratively created) fictional stories that generated new design dimensions that the researchers had not considered before. The resulting stories changed the focus from the researchers' practical concerns to broader societal themes introduced by the participants (Prost et al., 2015). Hence, design fictions directly benefit from a participatory approach since it facilitates the generation of more relatable and plausible futures (Nägele et al., 2018).

As a matter of fact, design fiction and related design futuring practices have been classified as elitist since the discussions they encourage are often used in a museum or academic context (Bardzell & Bardzell, 2013; Forlano & Mathew, 2014). Additionally, the lack of involvement of everyday end-users (i.e., ordinary citizens) constrains the impact that these discussions could have in the real world (Bardzell & Bardzell, 2013; Noortman et al., 2019). One way to move design fiction practices out of the realm of academia and art is to use design fiction probes. The use of probes allows researchers to understand and gain insights into the end-user's experience, which could ultimately be fed back into the design process (Noortman et al., 2019). These probes must be believable and plausible to support the participants' suspend of disbelief regarding change and get absorbed into the fiction (Noortman et al., 2019). Furthermore, when combined with participatory design, design fiction probes could create compelling and absorbing stories since participatory methods yield more relatable and believable futures.

In this research, the potential influence of participatory design fictions in citizens' perceived willingness to engage in discussions about the possible futures of Europe was explored, focusing on the collaboration with average citizens. The overall goal was to understand whether collaboratively written fictional stories by ordinary citizens are an appropriate method to get people to engage in discussions. A research question was composed to meet this goal:



RQ: *To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?*

In addition, to help answer the research question, the stories the citizens created and the capability of average citizens to create absorbing stories were explored to assess the efficacy of this method when used with non-expert writers (e.g., average citizens). The following sub-questions were set up:

Sub-question 1: *What kind of stories do average citizens write regarding the different futures of Europe?*

Sub-question 2: *Are average citizens able to write absorbing fictional stories?*

## **Theoretical Framework**

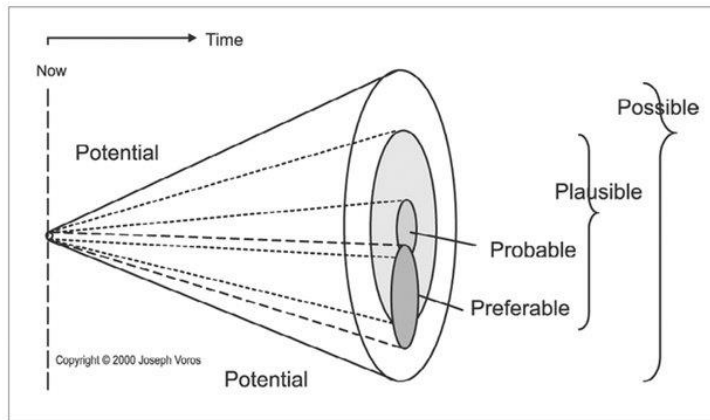
### **Design Futuring**

Within the research field of HCI, there has been an increase in the use of design methods to build and explore alternative futures (Kozubaev et al., 2020). Design futuring encompasses the different research methods used in design research to create and discuss different futures (Howell et al., 2021). Some of the methods included in design futuring are critical design, adversarial design, speculative design, discursive design, and design fiction. All these methods trigger debate and reflection about the concerns that may arise with alternative future scenarios, which ultimately results in knowledge production (Howell et al., 2021). One of the critical aspects for design futuring to succeed is that it needs active engagement and questioning on how futures might be and how they are different from the present (Kozubaev et al., 2020).

The studies about futures focus on the unceasing creation, inspection, and assessment of different futures (Kozubaev et al., 2020). The term ‘futures’ is used instead of ‘future’ because talking about a single future means following established predominant narratives that focus on

technological advances as the only way to picture the future (Kozubaev et al., 2020). This idea of multiple futures is defined as *pluriverse*, a world in which other worlds fit (Escobar, 2018; Howell et al., 2021). The *pluriverse* is proposed as a way to make alternatives to the one-world plausible assumption, which states that there is only one reality for many cultures, perspectives, and subjective experiences (Escobar, 2015).

One of the models used in design futuring to promote deliberations about alternative futures is the Futures Cone (Howell et al., 2021). The Futures Cone visualizes the relationships between different futures through four cones: probable (i.e., likely to happen), plausible (i.e., could happen), possible (i.e., might happen), and preferable (i.e., want to happen; Howell et al., 2021; Kozubaev et al., 2020). In the cone, the future advances in several directions from the ‘present’ (a dot on the left) towards different futures (represented on the right; see figure 1). The Futures Cone is a helpful model to open discussions about alternative futures while challenging predictability and one-world plausibility (Kozubaev et al., 2020).

**Figure 1***The Futures Cone by Voros*

*Note.* The visual representation of Voros' Futures Cone. Adapted from The “futures cone”, by J. Voros, 2003, *Foresight* (<https://doi.org/10.1108/14636680310698379>). Copyright 2003 by Company.

### ***Design Fiction***

As previously mentioned, there are several research methods included in design futuring. It needs to be considered that all design practices are a future-oriented activity since design strives to depart from existing situations and arrive at desirable ones (Lindley, 2015). When considering *speculative* design, the focus is on producing insights into possible futures, rather than only focusing on the materialization of a future object (Lukens & DiSalvo, 2011, as cited in Lindley, 2015). Since speculative design produces insights, not a product, it is considered a research practice (Lindley, 2015). Similar to speculative design, design fiction is used as a tool to envision, communicate and inspire, and it is also referred to as a research method since it produces knowledge (Tanenbaum, 2014).

Design fiction is a relatively young research method within interaction design and HCI (Markussen & Knutz, 2013). It has been defined as the purposeful use of diegetic prototypes

(prototypes in the fictional world; Kirby, 2010) to suspend disbelief regarding change (Lindley, 2015; Sterling, 2012). Design fiction is used as a medium to open a space for discussion (Dunne & Raby, 2013; Lindley, 2015). Furthermore, design fiction is considered a method that allows designers to surpass the limitations that restrict normative design procedures from the commercial sector (Auger, 2012). This dissociation from commercial constraints allows design fiction to aim for goals based on questions and discussions instead of relying on market demands (Auger, 2012). Additionally, design fictions work with hypothetical prototypes rather than with actual products (Auger, 2012).

As a method, design fiction places the user at the center of the design process, enabling designers to explore the user's interactions with an innovative technology (Blythe & Wright, 2006). In user-centered design, personas and scenarios are two of the most popular storytelling approaches for finding and characterizing user demands, generating a more united emphasis on different end-users and their individual goals and constraints, portraying complex organizations, and examining design adjustments with end-users (Buchenau, et al., 2000; Hanna & Ashby, 2016; Pruitt et al., 2003). Using personas and scenarios can be helpful for designers to explore the user experience and evaluate the social and cultural influence of new technologies in a design fiction (Davidoff et al., 2007). Furthermore, design fictions point out the social and political context of a future by formulating scenarios, personas, and storyboards that illustrate future technologies and services (Blythe, 2014; Briggs et al., 2012; Carroll, 2000).

Additionally, design fictions have been used to critically reflect on existing or emerging universal computing technologies (Blythe, 2014). An essential aspect of design fiction is encouraging the audience to think about the futures they prefer while also take the futures they do not want into consideration (Auger, 2012). Crafting future fictions helps individuals dive into

the unknown, which might help the audience (or readers) realize how much power they have in achieving the futures they want (Hanna & Ashby, 2016).

**Participatory design fiction.** Within the field of design fiction, it is the norm that the researchers author the design fiction, leaving the participants' involvement to be just the audience (Cambre et al., 2020). Other forms of design fiction directly involve the participant in creating or co-creating (i.e., collaboratively creating) the narrative, which makes the design fiction participatory (Cambre et al., 2020; Prost et al., 2015). The participatory design approach enables public services to address and respond to the citizens' disengagement with politics, social justice, and democracy (Donetto et al., 2015).

In fact, participatory design aims to enable the people who will use and be affected by a technology to have a voice in its design (Robertson & Simonsen, 2012). Additionally, through participatory design, average citizens are able to contribute to the design process without speaking the language of expert designers (Robertson & Simonsen, 2012). Participatory design also serves as a learning method for both the designers or researchers and the users, since designers might discover new insights about the users' concerns, and the users might learn what is possible within design (Robertson & Simonsen, 2012). As a result, the participants of participatory design can create and inspire different views on future ways of living researchers might not have contemplated (Sanders & Stappers, 2014). This process can take diverse forms, such as tangible prototypes and probes, enacted scenarios, or fictional narratives (Nägele et al., 2018).

The crafting of participatory design fictions can also be approached through different techniques. For example, Nägele et al. (2018) combined participatory design strategies with design fictions to gain insights about users of medical technologies. By conducting a workshop

in which participants had to craft science fiction writing prompts and co-create a world in a narrative, the authors gave voice to vulnerable users that otherwise would not be included in the design process (Nägele et al., 2018). The workshops resulted in inspiring insights (e.g., critical aspects of self-care devices that had been overlooked) given by the end-users that could be used by developers of medical technologies (Nägele et al., 2018). Hence, writing stories through a participatory approach enriched the design process, leading to designs that were more specific to the users' wants and needs.

### **Story completion**

In this thesis, story completion is adopted as a participatory method to craft design fiction. Story completion is a method to collect qualitative data that offers a different approach than traditional self-report methods (i.e., focus group, interviews, diaries) which involve accounting for personal experiences in the first person (Clarke et al., 2017; Clarke et al., 2019). In contrast, participants of story completion have to write about speculative scenarios generated by the researcher (Clarke et al., 2019). Participants do so by being exposed to a stimulus that consists of at least one complete sentence that serves as the start of a story (Rabin & Zlotogorski, 1981, as cited in Clarke et al., 2019). This story starter is called the 'stem,' which is often brief and ambiguous and establishes the story's opening while inviting the participants to write the rest of the narrative (Cambre et al., 2020; Clarke et al., 2019).

The story completion method has its roots in psychiatry and clinical psychology, where it is used as a projective test to assess the psychopathology and personality of patients (Rabin & Zlotogorski, 1981, as cited Clarke et al., 2017). Projective tests consist of exposing people to ambiguous stimuli (i.e., Rorschach inkblot test) and asking them to draw their own understandings to make sense of the stimuli (Clarke et al., 2017). By doing so, participants reveal

information about themselves that otherwise would not be shared through other conventional tests, such as self-report questionnaires (Clarke et al., 2017).

Despite its use in other fields, the HCI and Design communities have implemented story completion as a research method (Cambre et al., 2020). For example, Cambre et al. (2020) analyzed 149 stories created through story completion to examine how the capabilities of voice assistants might shape human societies in the future. Using story completion allowed the authors to understand the participants' concerns and thoughts on voice assistants' future capabilities. In addition, the visions the participants had about voice assistants obtained through story completion might have been informative and inspirational on the design of future voice assistants (Cambre et al., 2020).

Similar to Cambre et al. (2020), story completion was used as a speculative method to craft design fiction in this study. In this study, participants created stories from a stem given by the researcher on the topic of futures of Europe. This collaboration between the participants and the researcher is what makes the story completion method participatory. Story completion was used to understand the different possible futures that ordinary citizens envision for Europe by answering the following sub-question:

**Sub-question 1:** *What kind of stories do average citizens write regarding the different futures of Europe?*

### **Story World Absorption**

Story world absorption is relevant to design fiction because design fictions place the focus on the story world, especially on how cohesive this world is and how the elements and people interact within the world of the story (Coulton et al., 2017). Storytelling (i.e., the narrative) is used as a guide to move through the fictional world, where different situations, prototypes, and

stories take place (Coulton et al., 2017). Moreover, design fiction creates a world in which something is prototyped (Lindley & Coulton, 2016). Hence, to create compelling design fiction, a cohesive story world must be built, where the prototypes can exist coherently (Lindley & Potts, 2014). In design fiction, story world absorption might be a tool to assess how the readers of these fictions perceive the fictional worlds.

Story world absorption is experienced while reading a narrative text, switching the reader's attention from their physical surroundings to the story world presented in the narrative (Busselle & Bilandzic, 2017). Experiencing story world absorption triggers the readers to lose awareness of themselves, loss of awareness of the physical space, and losing track of time (Busselle & Bilandzic, 2017). While in the state of absorption, the reader gains emotions and thoughts coherent within the story world (Calarco et al., 2017). This experience is enhanced by having emotional reactions to the events in the story world and the mental images created (Kuijpers et al., 2014). Nonetheless, the absorption experience is different for every reader since it depends on the text itself, the feelings of absorption of the reader, and the text's arrangement of the story world absorption elements (Busselle & Bilandzic, 2017).

Story world absorption comprises four sub-dimensions: *attention*, *emotional engagement*, *mental imagery*, and *transportation*. The dimension *attention* explains readers' loss of awareness of the 'real world' due to their concentration on the story world. *Emotional engagement* refers to the readers' emotional engagement with the story's characters. *Mental imagery* refers to the readers' specific imagery related to the narrative in mind while reading it. *Transportation* describes the reader's sensation of being transported into the world of the story (Kuijpers et al., 2014). Some of these dimensions can co-occur, and others are more prominent

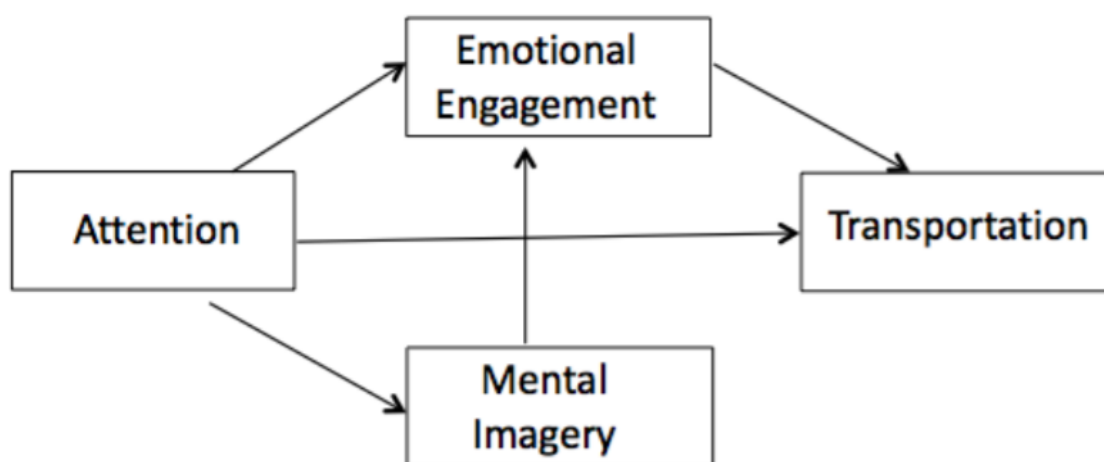


than the rest, indicating that they can function independently from each other (Kuijpers et al., 2014).

The story world absorption dimensions have different weights within the story world absorption experience, starting with focused *attention* (see Figure 2). Focused *attention* causes the reader to be more prone to engage with the story and its characters or vividly imagine the story world, leading to a more profound sense of absorption, namely *transportation* (Kuijpers, 2020). In other words, readers with increased *attention* are more prone to *emotional engagement* and *mental imagery* (Kuijpers, 2020). The imagery in the reader's mind can increase *emotional engagement*, leading the readers to experience the story world as if they 'were there' (Kuijpers, 2020). Thus, it can be argued that *attention* is a prerequisite for the other dimensions of story world absorption to happen (Kuijpers, 2020).

**Figure 2**

*Theoretical model of the relationships between the dimensions on Story World Absorption.*



*Note.* This figure was produced by Kuijpers in 2020 and portrays the relationship between the four dimensions that constitute Story World Absorption. Reproduced from Theoretical model of

the relationships between the dimensions on the Story World Absorption Scale , by M.M. Kuijpers, 2020, *OSF Preprints*, (<https://doi.org/10.31219/osf.io/xebzs>), CC 2020 by 4.0 International.

### ***Story World Absorption Effects***

The phenomenon referred to as story world absorption has been conceptualized as the reader's state of detachment from their world of origin experienced by feeling taken away by a narrative (Calarco et al., 2017). This theory has been further developed into another context to understand how a narrative might influence the readers (Calarco et al., 2017) and how fictional stories' reader may develop empathy (Bal & Veltkamp, 2013, as cited in Samur, 2020). For instance, Calarco et al. (2017) suggested that what the readers experience in a fictional story can shape their real-world beliefs, attitudes, emotions, and behaviors. These findings have been supported by previous empirical research, which showed that fictional stories have an influence on the reader outside of the narrative world, especially regarding how the readers behave, think, and feel (Calarco et al., 2017; Mar & Oatley, 2008).

In contrast to other genres that are more informative and communicate ideas (e.g., nonfiction essays), the content in fictional stories emphasizes topics of a social nature (Calarco et al., 2017; Mar & Oatley, 2008). Fictional narratives are likely to describe accurately social situations, which provides insights into human psychology and relationships (Calarco et al., 2017; Mar & Oatley, 2008; Oatley, 1999). Hence, fictional narratives help the reader imagine rich and detailed social experiences (Calarco et al., 2017). Through the story, the reader might assume a role that allows them to gain access to different social experiences that might otherwise be inaccessible to them (Calarco et al., 2017). Consequently, fiction might be helpful to disclose

essential truths about the current social environment (Calarco et al., 2017; Mar & Oatley, 2008; Oatley, 1999).

Moreover, the degree to which readers simulate the story world and learn from it might be influenced by the level of story world absorption (Calarco et al., 2017). Higher levels of story world absorption make readers more likely to shift their attitudes and beliefs to be consistent with those in the story, compared to lower levels of absorption (Appel & Richter, 2010; Calarco et al., 2017; Green & Brock, 2000; Vaughn et al., 2009). For example, Green et al. (2005) suggested that individuals who experienced a higher absorption level also experienced profound character identification, making them more likely to align their attitudes with the character's attitudes. These findings highlight the potential of being absorbed in fictional stories, as it could increase empathy or perspective-taking for people who have difficulty understanding others (Calarco et al., 2017).

In this thesis, story world absorption was used to study whether the stories obtained through story completion were absorbing or not. Obtaining absorbing stories is of interest since it can elicit feelings, emotions, and beliefs in line with the narratives (Calarco et al., 2017), which could aid to suspend disbelief regarding change (Lindley, 2015; Sterling, 2012). Previous studies have mainly focused on measuring story world absorption of narratives written by professional authors (see, e.g., Jensen, 2016; Pianzola et al., 2019; Samur et al., 2020). There is a lack of knowledge about how absorbing stories written by non-experts might be. This thesis aims to address that gap in the literature by answering the following sub-question:

**Sub-question 2:** *Are average citizens able to write absorbing fictional stories?*

## **Public engagement**

Design fiction aims to encourage discussions, opening up new debate spaces and new possibilities (Dunne & Raby, 2013; Lindley, 2015). In addition, design fiction can also potentially change social behaviors and increase civic engagement (Ferri et al., 2014, as cited in Hanna & Ashby, 2016). Civic engagement refers to different ways in which citizens take part, individually or collectively, to improve the living conditions of their society and shape their future (Adler & Goggin, 2005). Civic engagement requires understanding and addressing the public's priorities (Reed, 2008; Reed et al., 2018). For instance, when approaching environmental challenges, a participatory approach with the public reduces conflict, builds trust, and facilitates learning about the issue (Reed, 2008; Reed et al., 2018). This approach makes the public more likely to support the project's goals and make long-term decisions that might affect their future (Reed, 2008; Reed et al., 2018; de Vente et al., 2016).

Previous literature has suggested that consulting with the public is an essential link between researcher and designers, and the potential users of the obtained information (Clavisi et al., 2013; Manafò et al., 2018; Natale & Gross, 2013). The lack of engagement by the public might lead to researchers missing the high priority needs of the end-users, such as concerns and values (Clavisi et al., 2013). Whether successful engagement means achieving desired and beneficial outcomes, or whether it leads to an increase in trust and positive working relationships, public engagement might improve long-term decision-making processes (Reed et al., 2018).

## ***Citizen deliberation***

In order to make informed and collective decisions, democratic deliberation is key (Grönlund et al., 2017). Democratic or public deliberation by citizens refers to collective

discussions that involve sensible arguments, critical listening, and diligent decision-making (Carpini et al., 2004; Gastil, 2000). The base of democratic decisions should be public discussions among equal citizens or their representatives (Setälä et al., 2010). In these discussions, the participating citizens have to justify their opinions by arguments and commonly accepted principles, such as justice and the common good (Grönlund et al., 2010). Moreover, participating in democratic deliberation increases participants' knowledge and amends their misconceptions on the debated matter (Grönlund et al., 2010). Thus, the decisions yielded after public deliberation are expected to be more reasonable than decisions based on individual preferences (Setälä et al., 2010).

Furthermore, previous research has studied the outcomes of deliberation, focusing on how deliberation might enhance 'civic virtues', such as political knowledge, trust, efficacy, and readiness for political and other collective actions (Grönlund et al., 2010). For instance, Grönlund et al. (2010) explored whether citizen deliberation on the topic of nuclear power increased any of the aforementioned 'civic virtues'. Their study showed that the participants' civic virtues were enhanced when exposed to a commonly accepted statement. Specially the participants' knowledge on energy-related issues, political trust and preparedness for collective action increased more when they were exposed to a commonly accepted statement. Thus, citizen deliberation might be a helpful way to enhance the public's 'civic virtues', which might ultimately encourage citizens to take part in improving the living conditions of their society (i.e., increase civic engagement).

### **The present study**

The collaboration between participatory design fiction and its influence on the reader's willingness to engage in discussions has not been a specific topic in the literature. The present

study explores the relationship between participatory design fiction with the willingness to engage in discussions of the readers of the fictional stories. In addition, the study investigates the capabilities of non-expert writers (e.g., average citizens) to write absorbing design fiction. To this end, a three-part research was conducted as described in the following section.

## **Method**

### **Design**

This study used a mixed-method approach, using exploratory and experimental research, which yielded both qualitative and quantitative data. This approach was used to answer the research question: *'To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?'*

Firstly, to answer sub-question 1 (*'What kind of stories do average citizens write regarding the different futures of Europe?'*), a story completion activity was conducted to collaboratively create the stimuli (i.e., design fictions) with average Spanish citizens. Once the stories were completed, a thematic analysis of the stories was done. The obtained themes and categories gave an overview of the types of design fiction the story completion participants wrote.

Secondly, to answer sub-question 2 (*'Are average citizens able to write absorbing fictional stories?'*), a survey was created so a new set of Spanish participants could read one of the previously created design fictions and report their story world absorption experienced in the SWAS. This data was later compared with a benchmark to assess whether the stories created by average citizens in the first part of the study elicited sufficient story world absorption. This section was the quantitative part of the thesis.

Finally, to answer the main research question, follow-up interviews were done with a subset of the participants from the SWAS survey. The participants' answers were analyzed using a thematic analysis approach. The resulting themes and codes helped understand the participants' willingness to engage in discussions about the possible futures of Europe.

## **Co-creating the Stimuli**

### ***Materials***

The first set of participants received a link to a Qualtrics (n.d.) survey with a consent form, basic demographic questions (i.e., gender, age, nationality, employment/education status, country of residence), the writing instructions, the *arcs* for the story, and one of the five stems (e.g., *It is the year 2050. Alex gets home in a European city from work and enters the living room, where Zuri is sitting. The situation in Europe...*) to start the story completion activity (Appendix A).

Ten different stories were created as stimuli by the participants. The stories used in the present study were motivated around exploring the possible futures of Europe through the fictional written narratives that participants created. The stories were created through the participatory method of story completion. Participants were presented with a well-defined stem constrained by the narrative context (i.e., futures of Europe) while leaving other aspects open to imagination. Based on the study by Cambre et al. (2020), the scenarios and number of main characters were manipulated while the time stayed fixed (the year 2050).

Similar to Cambre et al., (2020), the selected contexts for the stems in the present research were: home, doctor's office, school, work, and transit. The number of characters presented in the scenes varied from one to two with ambiguous names (i.e., Alex and Zuri), so gender would not be conditioning for the story writing. The year 2050 was chosen so participants

could think creatively about the technology and society of that time without any constraints based on current events in Europe. With all these criteria in mind, five stems were created in Spanish (Appendix B). The following five stems are the English version of the original Spanish stems:

- Home** It is the year 2050. Alex gets home in a European city from work and enters the living room, where Zuri is sitting. The situation in Europe...
- Doctor** It is the year 2050. Alex is at the doctor's office at a European hospital, with Alex's partner, Zuri, for a yearly check up. The situation in Europe...
- School** It is the year 2050. Alex is about to begin 9<sup>th</sup> grade at a new European high school and is anxious to meet new classmates. The situation in Europe...
- Work** It is the year 2050. Alex walks into a conference room at work in a European-based company. The rest of the team has already gathered for their weekly meeting. The situation in Europe...
- Transit** It is the year 2050. Alex and Zuri are taking the subway at a European station to go back home from work. The situation in Europe...

The five story stems used in the present study were as similar as possible in setting the space and the time and their length. The five stems ended with the same sentence to focus on the role the future of Europe has in the story. The nature of the relationship between Alex and Zuri was not explained, apart from the Doctor's stem where it was said that they are partners. Participants were told to spend ten to twenty minutes writing the stories. Moreover, to ensure that all participants spent at least 10 minutes writing the story, they could not go onto the next page until 10 minutes had passed.

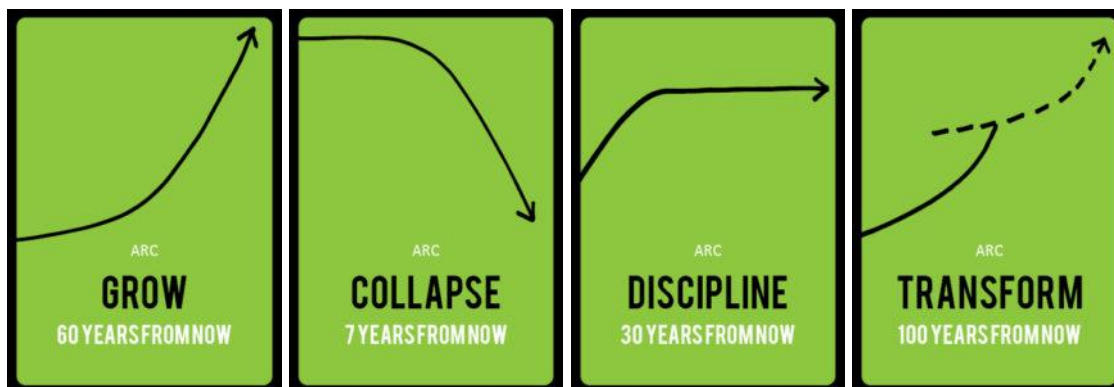
Additionally, to control for the output of the resulting stories, one of the guidelines that the participants received before writing the story was to select an *arc*. The *arcs* of the stories outlined the type of future world that had to be imagined and were inspired by the imagination card game *The Thing from the Future*, as can be seen in Figure 3 (Candy & Watson, 2015). The



cards of *arc* were relevant to the topic of futures of Europe since it guided the participants when choosing the tone and setting of the story, so people were not only driven to write extreme dystopian or utopian scenarios.

### Figure 3

*The Arc cards in the game The Thing from the Future*

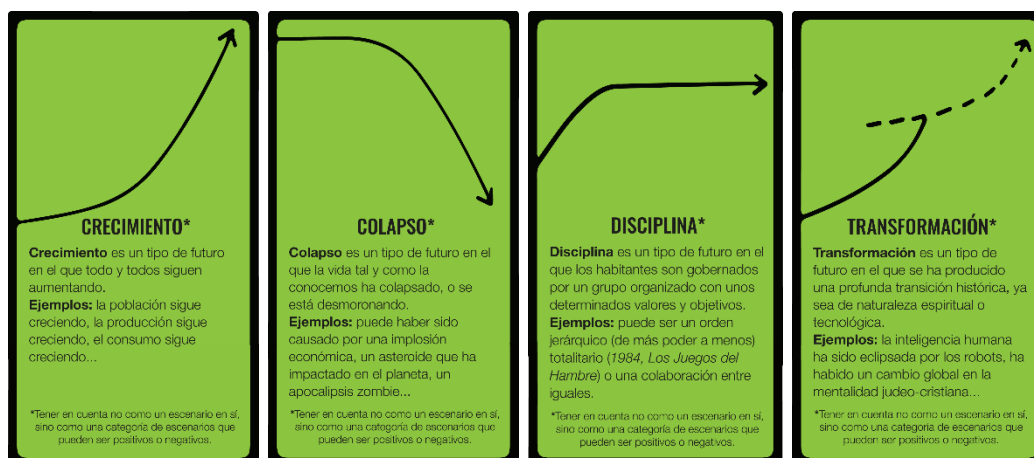


*Note.* These cards were produced by Candy and Watson in 2015. Reproduced from Arc Cards, by S. Candy and J. Watson ,2015 , *The APF methods anthology* London: Association of Professional Futurists (<http://situationlab.org/projects/the-thing-from-the-future/>), CC by 2.0.

There were four types of *arcs*: growth ('progress' has continued in the future), collapse (society, as we currently know it, has been destructed in the future), discipline (order is intentionally organized or enforced in the future), and transformation (a deep evolution has occurred in history in this future). Each participant chose an *arc* to combine with one of the story stems. The *arc* cards with their definition were shown to the participant next to the writing instructions. A clarification was added in the cards so that participants knew that the *arc* was not a scenario on its own but a group of scenarios that could be either positive or negative (see Figure 4).

**Figure 4**

*The four Arcs presented to the participants in Spanish*



## **Participants**

For this first part of the study, the participants were recruited through convenience sampling and snowballing using the researcher's network via social media (e.g., WhatsApp, Instagram, Facebook). This sample of participants was originally composed of 13 participants. However, three participants were randomly excluded from the sample to have an equal distribution of story stems. The final sample ( $N = 10$ ) consisted of five males with a mean age of  $M = 30.20$ ,  $SD = 14.78$ , and five females with a mean age of  $M = 45$ ,  $SD = 15.58$ . The overall mean age was  $M = 43.60$ ,  $SD = 16.99$ . The youngest participant was 20 years old, and the oldest participant was 56 years old. All the participants had Spanish nationality. The majority of the sample had completed higher education, with most respondents having attained a Bachelor's degree ( $n = 7$ ), followed by a Bachillerato (the Spanish Baccalaureate) Degree ( $n = 2$ ), or a Master's Degree ( $n = 1$ ). Regarding their current occupation, five had a full-time job, followed by three students, one unemployed participant, and one participant who had an early retirement. Only one participant had previous experience with creative writing techniques.

## **Procedure**

Participants were recruited to participate in the study via a social media platform (e.g., Instagram, WhatsApp, Facebook). They received a link to a Qualtrics survey. The first step was to inform participants about the minimum age restriction and let them know their rights in a consent form. Once they had given informed consent, they had to answer a set of demographic questions (i.e., country of residence, age, employment/education status, gender). After filling in these questions, participants were randomly assigned to one of the five story stems conditions. Participants were introduced to the story writing task, and they were asked to spend 10 to 20 minutes completing the story in a large text field. They were asked to select one of the four presented *arcs* to use as a guide line for the type of futures they could imagine. Participants were informed that there was a 20.000-character limit. In addition, participants were asked to write the story in a separate document and paste it to the text field when they were satisfied with it. In Appendix A, the instructions in this part can be found, which were adapted from Cambre et al., (2020) study on story completion in combination with definitions of the *arc* cards from The Thing from the Future (Candy & Watson, 2015).

Participants were encouraged to use their creativity, emphasizing that there were no ‘wrong’ or ‘right’ answers. Participants were asked to imagine and elaborate the story’s content within the topic of the futures of Europe. Once participants had finished writing the story, they were debriefed and thanked for their participation.

## **Data Analysis**

To answer the first sub-question (‘*What kind of stories do average citizens write regarding the different futures of Europe?*’), the stories created by the first set of participants were analyzed using a thematic analysis approach in line with previous work by Braun and

Clarke (2015). The researcher conducted open coding in all the stories and developed an initial set of codes. All codes were binary, meaning that a code had the value ‘0’ when it did not appear in the story, and the value ‘1’ was given to the code when it appeared in the story. The codes were clustered into general theme categories to create codes that could identify the content and elements within every story. Some of the codes were clustered to be mutually exclusive (e.g., the tone of the story can only be one out of the three options).

## **Examining Story World Absorption**

### ***Materials***

The second set of participants received a link to a Qualtrics survey with a consent form, basic demographic questions, one of the resulting stories as a stimulus to read, and the Story World Absorption Scale (SWAS), as can be found in Appendix C.

**Story World Absorption Scale.** The SWAS (see Appendix D) was a reliable instrument designed to focus on textual narratives (Busselle & Bilandzic, 2017). The SWAS consisted of a total of 18 items, which were divided into: five items to measure *attention* (e.g., “When I finished the story, I was surprised to see that time had gone by so fast”), five items to measure *transportation* (e.g., “When I was reading the story it sometimes seemed as if I were in the story world too”), five items to measure *emotional engagement* (e.g., “When I read the story I could imagine what it must be like to be in the shoes of the main character”), and three items to measure *mental imagery* (e.g., “When I was reading the story I had an image of the main character in mind”). The scale items were rated on a 7-point Likert scale (with 1 being *completely disagree* and 7 being *completely agree*). When presented to the participants, the order of the items of the scale was randomized.

The participants' scores were compared with the scores obtained in a previous study by Pianzola et al. (2019) that explored the story world absorption experience after reading the first chapter of the children's book *Alice in Wonderland*. The selected scores from Pianzola and colleagues' (2019) study were the total SWAS scores for the printed version of the text. It is important to address that there are some differences between the present study and Pianzola and colleagues' (2019) since the story that was evaluated was longer (i.e., 2141 words) than the ones evaluated in this research, and it is a well-known literary piece written by a professional author. Moreover, Pianzola et al. (2019) used a printed version of the story, while in this research, the text was displayed on a screen (e.g., computer or phone). Hence, the scores from the study by Pianzola et al. (2019) were treated as a benchmark, a standard measure used to make comparisons (Thomas & Peng, 2004).

### ***Participants***

The sample of participants for this part of the study were also Spanish citizens. They were recruited through convenience sampling and snowballing using the researcher's network via social media (i.e., WhatsApp, Instagram, Facebook). Data collection resulted in 41 responses. One participant (#28) was deleted as he/she was not consistent with his/her responses. The data ( $N = 40$ ) contained 23 females (57.5%) with a mean age of  $M = 36.08$ ,  $SD = 14.35$ , and 17 males (42.5%) with a mean age of  $M = 41.17$ ,  $SD = 16.92$ . The overall mean age was  $M = 38.25$ ,  $SD = 15.49$ . The youngest participant was 22 years old, and the oldest participant was 61 years old. All the participants had Spanish nationality. The majority of the sample had completed higher education, with most respondents having attained a Bachelor's degree ( $n = 22$ , 55%), followed by a Master's Degree ( $n = 8$ , 20%), a Bachillerato (the Spanish Baccalaureate) Degree ( $n = 4$ , 10%), a FP (vocational training) degree ( $n = 3$ , 7.5%), or an ESO (mandatory secondary

education) degree ( $n = 1$ , 2.5%). Two participants (5%) reported having another kind of educational background. Regarding their current occupation, 19 had a full-time job (47.5%), followed by 11 students (27.5%), three participants who were part-time workers (7.5%), two who were unemployed (5%), and one participant who was retired (2.5%). Four participants (10%) reported having other occupations, including early retirement, a special contract, self-employment, and a student for public exams.

### ***Procedure***

Participants were contacted via social media (e.g., Instagram, WhatsApp, Facebook), and they received a link to a Qualtrics survey. After providing informed consent, participants answered some demographic questions (i.e., country of residence, age, employment/education status, gender). Afterward, participants were randomly assigned to one of the resulting stories from the first section of the experiment. They were told to carefully read the story presented to them since they had to answer some questions about it in the next part of the study. When the participants were done reading the story, they proceeded to a page with 18 statements of the SWAS. Participants were asked to state to what extent they agreed with the presented statements concerning the story they had just read. Following the SWAS, participants were asked whether they wanted to participate in a follow-up interview about the story they had just read or not. If the participants wanted to do the interview, they were re-directed to a new Qualtrics survey. If the participants did not want to do the interview, they were debriefed and thanked for their participation.

### ***Data Analysis***

The SWAS data were analyzed using SPSS (IBM, n.d.) statistics. The overall score per participant for the SWAS was calculated, and each score for the dimensions of *transportation*,

*mental imagery*, *emotional engagement*, and *attention* was calculated by obtaining the mean score per sub-scale. To answer the second sub-question, ‘*Are average citizens able to write absorbing fictional stories?*’, the resulting values were compared with a benchmark value to evaluate whether the co-created stories were sufficiently absorbing or not.

## **Semi-structured Interviews**

### ***Materials***

A subset of seven participants from the SWAS survey received a Zoom (n.d.) link to join a meeting with the researcher and a consent form for the last part of the experiment, the semi-structured interviews (Appendix E). In the semi-structured interviews, the researcher asked open-ended questions allowing for discussion with the participant. Semi-structured interviews were the selected tool because they were well-suited for probing respondents’ perspectives and opinions on intricate issues and allowed for gathering additional information and clarifying responses. Furthermore, semi-structured interviews function better with heterogeneous groups than standardized interviews since the wording of the questions can be adjusted per participant (Louise Barriball & While, 1994).

The interview questions were created using the laddering technique. The laddering technique is used to understand how the informant sees the world by asking *why* questions (i.e., Why is that attribute/aspect important to you; Reynolds & Gutman, 1988; Jensen, 2006). In the present study, a set of six questions per story were prepared that contained elements which could have affected the participants’ willingness to engage in discussions (see Appendix F). The elements in the questions were presented at a more or less abstract level, and *why* questions were posed (e.g., “Do you think that the future that is described in the story would be a plausible

scenario in Europe by the year 2050?” and then “Why do you think it is plausible/not plausible?”).

The interviews aimed to gain insights into the participants’ willingness to engage in discussions about the futures of Europe. The interviews were recorded within Zoom by the researcher with the recording function. These videos were later transcribed using an online transcription software (Amberscript, n.d.). The researcher revised the interview transcripts and analyzed them using the Thematic Analysis method based on previous work by Clarke and Braun (2015).

### ***Procedure***

Participants voluntarily agreed to take part in the interview at the end of the SWAS survey. When the participants had agreed to participate in the follow-up interview, they were redirected to another Qualtrics survey. By redirecting the participants, it was not possible to link their email addresses back to their survey responses. In this survey, they were asked to provide the title of the story they had just read (e.g., *Historia 1*), their email address so the researcher could schedule a meeting with them, and they had to provide informed consent. Participants were informed that this part of the experiment would require an audio recording of the interview in the consent form. Once participants had given consent, the researcher sent them an email to schedule a meeting, followed by the link to a Zoom meeting. At the beginning of the call, participants were informed about the start of the audio recording of the meeting. Consequently, the researcher proceeded with the interview. By the end of the interview, participants were thanked for their participation.



## **Data Analysis**

To answer the main research question (‘*To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?*’), the semi-structured interviews were analyzed by transcribing the video recordings made on Zoom. The transcripts were later coded using the thematic analysis method as prescribed by Braun and Clarke (2015) by dividing the interview comments into low-level codes and clustering them in high-level themes. These interviews provided deeper insights into the participants’ willingness to engage in discussions about the futures of Europe. The results from the interviews were analyzed to answer the main research question.

## **Results**

This section elaborates on the results of this study. Firstly, an overview of the collected stories obtained from story completion is shown. Following the stories’ overview, the thematic analysis of the stories is presented and described. The SWAS scores and their evaluation compared with a benchmark follow the stories’ thematic analysis. The thematic analysis of the semi-structured interviews is shown and discussed after the SWAS scores. Lastly, the findings of this section are summarised.

### **Overview of the Stories**

A total of 10 stories were obtained from the story completion part of the study. Three additional stories were collected as part of the study but were randomly excluded from analyses since it created an imbalance concerning the equal randomization of story stems. The full unedited 10 stories are found as supplemental materials in Appendix G.

The median story was 329.5 words long, and the stories varied from a minimum of 124 words to a maximum of 578 words ( $M = 321.4$ ,  $SD = 133.5$ ). Each scenario had two related stories. Due to people’s freedom to choose the *arc* (i.e., the type of future world that had to be

imagined) they wanted, out of the 10 stories, five stories had a Transformation arc (i.e., a future in which a profound historical evolution has occurred), four of the stories had a Collapse arc (i.e., a future in which society, as we know, has fallen apart), and one of the stories had a Growth arc (i.e., a future in which ‘progress’ has continued). Table 1 shows an overview of the stories:

**Table 1**

*Summary of the completed stories (not including the stem) in words, scenario, and arc.*

| #Story | Words | Stem    | Arc            |
|--------|-------|---------|----------------|
| 1      | 388   | Home    | Transformation |
| 2      | 397   | Transit | Transformation |
| 3      | 287   | School  | Transformation |
| 4      | 124   | Home    | Collapse       |
| 5      | 372   | Work    | Collapse       |
| 6      | 275   | Doctor  | Transformation |
| 7      | 578   | Doctor  | Collapse       |
| 8      | 267   | School  | Transformation |
| 9      | 385   | Work    | Collapse       |
| 10     | 141   | Transit | Growth         |

### **Thematic Analysis of the Stories**

To answer the first sub-question, *‘What kind of stories do average citizens write regarding the different futures of Europe?’* a thematic analysis was conducted in line with previous work by Braun and Clarke (2015) on the collected stories. The stories were processed manually by one coder, who also coded the following thematic analysis. First, the stories were coded for story segments expressing any relevant event in the story that influenced the future. In addition, story segments that referred to elements of the story world, such as characters or atmosphere, were also coded.

All codes were assigned to the following high-level themes: characters' attributes, world crisis, story world characteristics, new models, and story tone. An example for a story segment in the 'characters' attributes' was: "In his last job he [Alex] worked as a street sweeper" (S9). A story segment included in 'world crisis' was: "The elimination of the EU had plunged the international economy into chaos" (S6). Another story segment included in 'story world characteristics' was: "There was an optimistic atmosphere, and they were hopeful and excited about the future" (S2). An example of a story segment included in 'new models' was: "The recently formed European Community of Defence (ECD) [was ruling]" (S6). An example for a story segment included in 'story tone' was: "They were times of peace, joy, and transformation. Humanity had managed to overcome one of the toughest challenges in its short history" (S2).

Once all the data was distributed between the five high-level themes, they were divided into lower-level codes (see table 2). The high-level theme 'characters' attributes' was divided into the following two low-level codes: background information and shared thoughts and feelings. Several stories gave information about the interests of the characters (S1), their job (S9), or their thoughts and emotions (e.g., S2, S5). For example: "[Alex] asked Zuri to play a movie, he connected with his best friend and opened a beer. That was the best night he could have" (S1).

The high-level theme 'world crisis' was divided into the following seven low-level codes: economic, societal, health, demographical, political, military, and climate. Out of the 10 stories, more than half described economic (e.g., S2, S9), health (e.g., S1, S7), and demographical crises (e.g., S10, S7). An example of a story segment that described a health crisis was: "People get sick with diseases from different places due to the lack of research, resources and our bodies' adaptation..." (S7).

The high-level theme ‘story world characteristics’ was divided into three low-level codes: technology in use, environment/ambiance, and new characters. Most stories described the physical environment where the story was set and the ambiance (e.g., S8, S9). For instance, one story described the character’s workplace: “He entered the conference room that not long ago was a sauna used by the old manager” (S9).

The high-level theme ‘new models’ was divided into six low-level codes: mentality and values, work and production, governmental and political, healthcare and medicines, economic systems, societal behavior. Half of the stories described new governmental and political models (e.g., S1, S6) and new societal behaviors (e.g., S1, S3). An example of a story segment that described a new societal behavior was: “He could not believe that physical contact existed. Nowadays, personal relationships were getting harder and harder each day” (S1).

The high-level theme ‘story tone’ was divided into the following low-level codes: positive, negative, and neutral. The tone of the stories was primarily dystopian (e.g., S4, S5), with half of the stories portraying negative consequences of human behavior (S7) compared to four stories (e.g., S3, S8) that were utopian (i.e., positive tone). The remaining story was mundane (i.e., neutral tone). An example of a story that was negative was: “We are ending our time on Earth, and we have condemned ourselves, now we have to face the consequences of our greed and ignorance” (S4).

Since participants were asked to complete hypothetical scenarios rather than provide a first-person account, the data gathered does not reflect authentic, real-world experiences, beliefs, or predictions about anticipated possible futures of Europe. As a result, the stories were read like fiction and considered the topics as possibilities that could influence and inspire the readers to think about different futures of Europe.



## SWAS Scores

The first step was to measure the internal consistency of the scale. The overall SWAS scale reliability score was  $\alpha = 0.91$ . The reliability was measured for the dimensions: *attention* ( $\alpha = 0.78$ ), *transportation* ( $\alpha = 0.82$ ), *emotional engagement* ( $\alpha = 0.80$ ), and *mental imagery* ( $\alpha = 0.60$ ). According to Cronbach's alpha, the scale's reliability was excellent, while the reliability of the subscales was acceptable, aside from the *mental imagery* scale that had low reliability. This low value could be explained by the fact that the *mental imagery* sub-scale had fewer items than the other sub-scales. Nonetheless, the items used to measure *mental imagery* explicitly asked about mentally picturing the elements of the story (e.g., "When I was reading the story, I had an image of the main character in mind"), so they were considered a valid instrument to measure the construct. Given that the reliability of the SWAS scale was good, we can indeed combine the items to an average measure of the dimensions and the SWAS overall scores.

To answer the second sub-question, '*Are average citizens able to write absorbing fictional stories?*', the SWAS scores were analyzed to explore the reader's absorption experience while reading a participatory design fiction. The mean was calculated for each SWAS dimension and for the overall SWAS scores per story (see table 3). These scores were compared with a benchmark in order to assess whether the stories written by non-experts in the present study were absorbing or not. A story was considered sufficiently absorbing if it scored above the benchmark.

**Table 3**

*Mean and Standard Deviations of the Scores for the SWAS and its Dimensions per Story compared to Pianzola's results.*

| Story# | N | SWAS          | P. SWAS       | Attention     | P. Attention  | Transportation | P. Transportation | Emotional Engagement | P. Emotional Engagement | Mental Imagery | P. Mental Imagery |
|--------|---|---------------|---------------|---------------|---------------|----------------|-------------------|----------------------|-------------------------|----------------|-------------------|
|        |   | <i>M (SD)</i> | <i>M (SD)</i> | <i>M (SD)</i> | <i>M (SD)</i> | <i>M (SD)</i>  | <i>M (SD)</i>     | <i>M (SD)</i>        | <i>M (SD)</i>           | <i>M (SD)</i>  | <i>M (SD)</i>     |
| 1      | 3 | 5.52 (1.43)   | 4.53 (0.81)   | 4.90 (1.83)   | 4.53 (0.98)   | 5.60 (1.69)    | 3.30 (1.10)       | 5.70 (0.98)          | 4.63 (1.09)             | 6.16 (1.17)    | 5.67 (1.01)       |
| 2      | 3 | 4.81 (1.50)   | 4.53 (0.81)   | 4.93 (2.21)   | 4.53 (0.98)   | 4.20 (1.40)    | 3.30 (1.10)       | 5.26 (0.98)          | 4.63 (1.09)             | 4.88 (1.89)    | 5.67 (1.01)       |
| 3      | 5 | 4.42 (1.15)   | 4.53 (0.81)   | 4.35 (1.49)   | 4.53 (0.98)   | 3.36 (1.75)    | 3.30 (1.10)       | 5.00 (0.78)          | 4.63 (1.09)             | 5.33 (1.08)    | 5.67 (1.01)       |
| 4      | 4 | 4.61 (0.69)   | 4.53 (0.81)   | 4.50 (0.62)   | 4.53 (0.98)   | 3.70 (0.90)    | 3.30 (1.10)       | 5.25 (0.80)          | 4.63 (1.09)             | 5.25 (0.87)    | 5.67 (1.01)       |
| 5      | 4 | 4.51 (0.76)   | 4.53 (0.81)   | 4.50 (1.01)   | 4.53 (0.98)   | 3.50 (0.93)    | 3.30 (1.10)       | 5.00 (0.90)          | 4.63 (1.09)             | 5.41 (1.22)    | 5.67 (1.01)       |
| 6      | 5 | 3.87 (0.94)   | 4.53 (0.81)   | 3.48 (1.10)   | 4.53 (0.98)   | 3.24 (1.31)    | 3.30 (1.10)       | 4.28 (1.06)          | 4.63 (1.09)             | 4.93 (1.40)    | 5.67 (1.01)       |
| 7      | 3 | 4.15 (0.60)   | 4.53 (0.81)   | 4.85 (0.34)   | 4.53 (0.98)   | 3.20 (1.14)    | 3.30 (1.10)       | 3.80 (1.15)          | 4.63 (1.09)             | 5.16 (1.00)    | 5.67 (1.01)       |
| 8      | 4 | 3.98 (1.45)   | 4.53 (0.81)   | 3.90 (1.39)   | 4.53 (0.98)   | 3.65 (1.73)    | 3.30 (1.10)       | 4.30 (1.62)          | 4.63 (1.09)             | 4.16 (1.34)    | 5.67 (1.01)       |
| 9      | 4 | 4.79 (0.82)   | 4.53 (0.81)   | 4.25 (1.18)   | 4.53 (0.98)   | 4.05 (0.98)    | 3.30 (1.10)       | 5.65 (0.57)          | 4.63 (1.09)             | 5.50 (0.69)    | 5.67 (1.01)       |
| 10     | 5 | 4.57 (0.51)   | 4.53 (0.81)   | 4.72 (0.79)   | 4.53 (0.98)   | 3.80 (1.11)    | 3.30 (1.10)       | 4.80 (0.79)          | 4.63 (1.09)             | 5.26 (0.79)    | 5.67 (1.01)       |

*Note.* The 'P.' next to a dimension of the SWAS indicates that the score has been retrieved from Pianzola and colleagues' (2019) study.

The descriptive statistics showed that the story with the highest SWAS score was Story 1 with an  $M = 5.52$ ,  $SD = 1.43$ . The story with the lowest SWAS score was Story 6 ( $M = 3.87$ ,  $SD = 0.94$ ). Compared to Pianzola's (2019) results, the study results showed that out of the 10 stories, five stories (S1, S2, S4, S9, S10) scored higher than the benchmark, and five stories (S3, S5, S6, S7, S8) scored below the benchmark for the SWAS overall scores. Additionally, out of the 10 stories, four stories (S1, S2, S7, S10) were situated above the benchmark, and six stories (S3, S4, S5, S6, S8, S9) scored below the benchmark for the dimension of *attention*. Eight stories (S1, S2, S3, S4, S5, S8, S9, S10) scored above the benchmark, and two stories (S, S) scored below the benchmark for dimension *transportation*. In the dimension *emotional engagement*, seven (S1, S2, S3, S4, S5, S9, S10) out of 10 stories were above the benchmark, and three stories (S, S, S) were below the benchmark. In the dimension of *mental imagery*, only one story was above the benchmark (S1).

### **Semi-structured Interviews**

To answer the main research question '*To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?*' a thematic analysis was conducted on the responses collected in seven follow-up interviews in line with previous work by Braun and Clarke (2015). The interview responses were processed manually by one coder, who later coded the subsequent thematic analyses. In the first place, all responses were coded for comments expressing any information related to the participants' willingness to engage in discussions about the futures of Europe after reading the stories. After this coding pass, a total of 42 comments remained for the thematic analysis. All comments were assigned to the following main themes: absorption experience, futures' plausibility, willingness to engage, and perceived capabilities. An example of a comment in the absorption experience



was: “Well, it seems a lot like what is happening now these days. You know, with the subject of COVID, and also with the mask. I was very much in the story” (P1). A comment classified as a willingness to engage was: “Of course, I feel like it. If I can do something to make the future better and correct it, of course, I will”.

Once all the comments were spread over the four main themes, they were divided into smaller sub-themes (see Appendix H). The main theme ‘absorption experience’ was divided into two sub-themes: absorption through the characters (AC) and absorption through the story world attributes (ASW). All participants (e.g., P2, P7) expressed feeling absorbed into the story world facilitated by the description of the fictional world. An example of a comment within the absorption through the story world sub-theme was: “Everything that is said about Europe. And about the ancient ideas of how the man thought he was the, so to speak, the God of the earth.” (P2).

The main theme ‘futures’ plausibility’ was divided into two sub-themes: plausible future (PF) and implausible future (IF). Most participants (e.g., P3, P4) expressed that they found the future described in the story plausible. A comment within the plausible future was: “After this pandemic that we still have, and according to scientists and what the world health predicts, it will not be the last pandemic suffered by humankind” (P4).

The main theme, ‘willingness to engage,’ was divided into the following sub-themes: willing to engage (WE) and unwilling to engage (UE). Most participants (e.g., P2, P4) stated their willingness to engage in discussions about the futures of Europe. For instance, a participant willing to engage in the discussion said: “Yes, of course. I would take part, maybe small, but as small any other person, right?” (P4).

The main theme, ‘perceived capabilities’, was divided into the following sub-themes: self-assessment of preparedness (SP) and self-awareness of agency (SA). Some participants (P5, P6, P7) addressed that they did not feel like they had enough knowledge to contribute to discussions about the futures of Europe. An example comment in the self-assessment of preparedness sub-theme was: “I don’t understand much about economics, politics either, so I don’t know what I could contribute on this issue because I’m not very prepared.” (P5).

### **Summary of findings**

This study aimed to answer the research question *‘To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?’*. Two sub-questions were proposed to help answer this research question. First, sub-question 1 aimed to explore the kinds of stories that average citizens would write during story completion. In total, there were six main categories divided into 21 sub-categories. These categories served as an overview of the types of design fiction the story completion participants wrote, which mainly described dystopian scenarios based on present-day events (e.g., pandemic, overpopulation, wealth inequality) that evolved to develop new models (e.g., production, health system). The physical world and feel of the ambiance, and the characters thoughts and emotions were recurring elements in the stories.

Secondly, sub-question 2 aimed to investigate whether average citizens were able to write absorbing stories. The SWAS scores ranged from  $M = 5.52$ ,  $SD = 1.43$  (Story 1) to  $M = 3.87$ ,  $SD = 0.94$  (Story 6). According to the SWAS scores, five out of the 10 stories written by the participants scored higher than the benchmark.

Lastly, the main research question was also addressed through semi-structured interviews that obtained key insights about the participants’ willingness to engage in discussions about the

possible futures of Europe after reading the design fiction. Out of the seven participants, six expressed that they would be willing to engage in these discussions about the futures of Europe. Additionally, three out of the seven interviewed participants expressed that the lack of knowledge about the topic was a drawback for engaging in discussions about the futures of Europe.

### **Discussion**

This thesis aimed to answer the research question: *‘To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?’*. In order to answer this research question, two sub-questions were proposed: *‘What kind of stories do average citizens write regarding the different futures of Europe?’* and *‘Are average citizens able to write absorbing fictional stories?’*. The SWAS was used as a quantitative measure in combination with the qualitative methods of story completion and the follow-up interviews. This type of combination was helpful since: (1) the story completion activity showed that ordinary participants with little or no professional writing experience were able to use the story stems to generate diverse design fictions; (2) the SWAS results offers an indication that the resulting design fictions offered a sufficient degree of story world absorption; (3) the follow-up interviews helped in further understanding whether design fiction might prove a valuable method of engaging ordinary citizens in discussions about the possible futures of Europe. The qualitative nature of the methods of story completion and the interviews indicates that the results should be interpreted cautiously and cannot be generalized.

This study serves as exploratory work for future research that uses these methods (i.e., story completion and design fiction probes) for encouraging meaningful and productive discussions on possible futures of Europe. The following paragraphs will discuss to what extent

the research questions and sub-questions can be answered through the obtained results, followed by limitations and recommendations.

### **Findings Regarding Story Completion**

In this research, the collaboration of the public to create design fictions was a potential tool to enhance willingness to engage in discussions. Hence, a sub-question was proposed: *'What kind of stories do average citizens write regarding the different futures of Europe?'* Based on previous literature, it was expected that the participation of non-experts in crafting design fiction would potentially introduce broad societal themes (Prost et al., 2015). The findings from the thematic analysis of the stories showed that, in general, the stories contained elements of present-day societal issues. For instance, participants often wrote about the appearance of pandemics (S1, S3, S4, S10) or made explicit reference to the COVID-19 pandemic (S4, S5) that was happening during this research. These kinds of topics that appeared in the stories were classified as 'world crisis' (e.g., pandemics, the plunge of the economy, extreme climates, massive migrations). The theme of 'world crisis' encompassed the various crises that the story completion participants imagined might be occurring in Europe by 2050.

Moreover, stories often took current issues to new extreme situations. While Europe is currently experiencing events such as mass migration, climate change, pandemics, in the stories, these events triggered a significant change in the lives of European citizens, such as the dissolution of the EU (S6), elimination of borders (S1), robust control over the population (S6). These future changes in the stories were included under the theme 'new models' (e.g., work and production models, new governmental structures, a new healthcare system). The 'new models' category gave an overview of how the writers of the stories imagined Europe might become

reorganized and how the different systems (e.g., societal, healthcare, economic) may change by the year 2050.

Stories often used storytelling elements (i.e., characters and setting) to build the world of the story. The characters were described in more depth by giving background information about them (e.g., their jobs, likes, and dislikes) and sharing what they thought and felt. This information was included in the ‘characters’ attributes’ theme. In addition, the technology in use in that future, the environment or ambiance of the world were described in some stories, and two stories (S7, S9) introduced new characters. This information fell under the theme of ‘story world characteristics’.

The participants wrote design fiction that varied in tone, *arc*, and stem. The stories were either dystopian (i.e., negative tone), utopian (i.e., positive tone), or mundane (i.e., neutral tone). Moreover, the chosen *arcs* were Transformation, Collapse, and Growth. The given story stem could be set at home, the doctor’s office, work, school, and transport. The different possible combinations between the arc and the story stem allowed participants to create 10 different design fictions that showed the various possible futures they imagined. These findings suggest that through story completion, non-experienced writers (i.e., ordinary participants) could create diverse design fictions.

### **Findings Regarding the SWAS Scores**

Additionally, this research aimed to explore the capabilities of average citizens to write absorbing stories through the following sub-question: ‘*Are average citizens able to write absorbing fictional stories?*’. The study results showed that out of the 10 stories, five stories (e.g., S1, S9, S10) scored higher than the benchmark for the SWAS overall scores. Additionally, out of the 10 stories, four stories (e.g., S2, S7, S10) were situated above the benchmark for the

dimension of *attention*. Eight stories (e.g., S3, S4, S5) scored above the benchmark for dimension *transportation*. In the dimension *emotional engagement*, seven (e.g., S4, S5, S9) out of 10 stories were above the benchmark, and in the dimension *mental imagery*, only one story was above the benchmark (S1). These findings suggest with some confidence that average citizens were able to write sufficiently absorbing stories, which indicates that participatory methods potentially benefit from the use of non-expert writers (i.e., average citizens).

### **Findings Regarding the Follow-up Interviews**

The main research question in this study was: *‘To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?’*. This question was proposed to explore if a participatory design fiction was an appropriate method to engage people in discussions. The data collected from the interviews showed that six (P1, P2, P3, P4, P6, P7) out of the seven interviewed participants were willing to engage in discussions about the futures of Europe. However, three (P5, P6, P7) out of the seven participants explicitly said they did not feel prepared enough to contribute to such a discussion in a meaningful way. These findings suggest that to potentially increase citizen engagement in discussions about the different futures, feeling well-prepared and having previous knowledge about the topic might be a prerequisite to facilitate the citizens’ participation in public deliberations.

Furthermore, two participants (P1, P4) expressed their awareness of their agency regarding the type of futures they desired or wished to avoid after reading the stories. One of the participants (P1) said that discussing the futures of Europe was necessary because the lack of discussion could lead to undesired events happening. Another participant (P4) expected that discussing the futures of Europe led to developing better models of society and accessible fair

systems of education, justice, and healthcare. These findings are in line with the suggestion that fictional narratives about possible social and political futures help the readers realize the power they have to achieve desired futures (Hanna & Ashby, 2016).

In line with previous findings (Auger, 2012), the design fictions created in this study might have provoked critical thinking amongst the participants, as they expressed in the interviews. One participant (P1) stated that reading the story “opened her eyes,” prompting her to reflect on the kind of future contemporary society should aim for. Another participant (P2) realized after reading the story that we will not survive on Earth unless humans live in tune with nature. These findings suggest that average citizens could create potentially effective design fictions since the stories made the readers reflect critically about the practices in their culture.

Additionally, previous research on the use of participatory design fiction has suggested that a participatory method allows creating more relatable and plausible futures (Nägele et al., 2018). Six out of the seven participants interviewed (P1, P2, P3, P4, P5, P6) stated that the scenarios presented to them seemed plausible. Four of the participants (P1, P4, P5, P6) said that based on the current events (i.e., COVID-19) and predictions made by scientists, they foresee more pandemics happening in the future. These findings suggest that the stories written by the participants were indeed perceived as plausible, in line with previous findings.

### **Implications of the Findings**

This study shows a direction for the appropriateness of using participatory design fictions to elicit willingness to engage in discussions about the futures of Europe. It can be concluded that a participatory approach to design fiction in collaboration with average citizens is potentially a good method to elicit the people’s willingness to engage in discussions. Additionally, it was observed that average citizens could write relatable and sufficiently absorbing stories through a

participatory approach. Nonetheless, the findings of this thesis are exploratory and should thus be regarded as preliminary observations.

### **Limitations and Recommendations for Future Research**

The study findings are based on fictional stories and their analyses. The analysis of the story's content is based on subjective interpretations, which are influenced by the researcher's background. Other researchers may derive different conclusions and themes from the collected data from the story completion activity. Additionally, the same thing can be said about the thematic analysis of the follow-up interviews. Other researchers who analyze the same interviews may derive different conclusions and themes.

The population of the participants consisted of Spanish citizens whose native language was Spanish. In addition, it should be considered that the findings cannot be generalized over the whole existing population of European citizens with this small sample size. Future research could reproduce the study with a heterogeneous population of participants with various European nationalities to get different perspectives.

Due to inadequate planning, only three stories were analyzed through the interviews since the participants who agreed to do the interviews did not read all the 10 stories. Future studies could investigate if the stories that were not further analyzed in the follow-up interviews yielded new insights into the participants' willingness to engage in discussions.

Moreover, participants did not express their willingness to engage in discussions about the futures of Europe before reading the stories and the SWAS survey. Future studies should assess peoples' relative willingness to discuss these topics before and after reading the story to understand better whether or not the stories influenced the participants' willingness to engage in discussions. A follow-up study could investigate if the participatory design setup – or the stories



themselves – made it harder for the survey participants to feel more inclined to discuss possible futures of Europe.

Furthermore, future studies should also consider the participants' personality traits, such as shyness, confidence, and self-assurance. These qualities might also influence the participants' willingness to engage in public discussions about the futures of Europe and should be controlled to avoid any confounds. Other individual differences should be considered, such as the participant's interest in politics and in solving problems, which could also make some participants feel more inclined to engage in public discussions about the futures of Europe regardless of having read a design fiction.

### **Conclusion**

The main purpose of the present thesis was to explore *'To what extent are participatory design fictions an appropriate method to get citizens to engage in discussions about the futures of Europe?'*. In order to answer this research question, two sub-questions were proposed: *'What kind of stories do average citizens write regarding the different futures of Europe?'* and *'Are average citizens able to write absorbing fictional stories?'*. A combination of quantitative (SWAS) and qualitative (story completion and interviews) methods was used. The experiment was divided into three parts: the co-creation of the stimuli (i.e., stories), exploring the SWAS scores for the stories, and assessing the participants' willingness to engage in discussions. A set of 10 stories were co-created through the story completion method by the first set of participants. The collected stories were coded into different themes. A different set of 40 participants read those stories and self-reported their absorption level with the story world through the SWAS. The resulting scores were compared with a benchmark to judge whether the stories were

sufficiently absorbing or not. Additionally, follow-up interviews were carried out and recorded, and the collected data was coded into different themes.

The stories gave an overview of what types of futures citizens of Europe imagined for the year 2050. The written stories were based on present-day societal issues and described how European standard systems, organizational models, and social behaviors might have changed by 2050 due to different world crises. Half of the stories were dystopian, meaning that the valence of the story was negative, and these dystopian stories were written using a *Collapse arc*. In addition, the scores for the SWAS suggested that average citizens were able to write absorbing stories, which indicates that participatory methods potentially benefit from the use of non-expert writers. Lastly, the follow-up interviews showed that to possibly increase citizen engagement in discussions about the different futures, feeling well-prepared and having previous knowledge about the topic might be a prerequisite to facilitate the citizens' participation in public deliberations.

This thesis serves as an exploratory work to address the appropriateness of participatory design fictions to elicit willingness to engage in discussions about the futures of Europe. Addressing the limitations of this study, future studies could further assess whether the method used in this thesis works to engage people in discussions or if other factors may affect people's willingness to engage in discussions.

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## Appendix A. Story Completion Survey

### Part 1: Consent form

¡Bienvenido/a a mi estudio y gracias por participar en él!

Querido/a Participante,

Gracias por su interés en el estudio “Diseño participativo de ficción y absorción en el mundo de la historia”. Este cuestionario es parte de mi tesis para el Master en Ciencias de la Información y la Comunicación en la Universidad de Tilburg. A continuación, se le informará sobre lo que implica este estudio.

Propósito del estudio: Se le presentará un ejercicio de *continuación de una historia*. Puede que usted esté familiarizado o no con esta técnica de escritura. Por este motivo, se le darán instrucciones sobre cómo desarrollar una historia con esta técnica. El objetivo de este estudio es obtener una breve historia de ficción escrita por usted.

Procedimiento y duración del estudio: Completar el cuestionario y escribir la historia debería llevarle de 10 a 15 minutos. Como parte del cuestionario, recibirá instrucciones sobre los criterios para escribir la historia. Me gustaría pedirle que lea la información y las preguntas proporcionadas con mucha atención. Por favor, recuerde que no hay respuestas "correctas" o "incorrectas".

Posibles riesgos y beneficios: Los datos recopilados están destinados únicamente a fines de investigación. La participación no conlleva ningún riesgo físico o psíquico. Adquirirá experiencia participando en investigaciones experimentales y su participación es muy apreciada, ya que ayuda a la investigadora a obtener su título de Master.

Privacidad y confidencialidad: Tenga la seguridad de que sus respuestas se mantendrán completamente confidenciales y los datos se procesarán y almacenarán de forma anónima. En ningún momento será posible vincular las respuestas dadas a sus datos personales. Los datos solo se utilizarán para la redacción de la tesis del Master de la investigadora, y solo la investigadora

tiene acceso a los datos. Además, los datos se eliminarán una vez que la investigadora se haya graduado.

Participación voluntaria: Su participación en este estudio de investigación es voluntaria. Tiene derecho a retirarse en cualquier momento durante el estudio por cualquier motivo, sin ningún juicio. Sus datos se eliminarán si decide abandonar el estudio. Si decide participar en este estudio, tiene derecho a solicitar el acceso a sus datos personales que se han recopilado. Para obtener más información, visite las Declaraciones de privacidad de la Universidad de Tilburg.

Contacto: Tenga en cuenta que este estudio ha sido aprobado por el “Comité de Ética en Investigación y Gestión de Datos” de la Escuela de Humanidades y Ciencias Digitales de Tilburg. Si tiene alguna pregunta, comentario o queja relacionada con este estudio, también puede comunicarse con el Comité a través de [tshd.redc@tilburguniversity.edu](mailto:tshd.redc@tilburguniversity.edu) (número de referencia 2020.067). Si desea comunicarse con la investigadora con preguntas o comentarios, envíe un correo electrónico a [l.beamuzmingote@tilburguniversity.edu](mailto:l.beamuzmingote@tilburguniversity.edu).

Quiero agradecerles de antemano su participación.

Saludos cordiales,

Laura Beamuz Mingote

Por favor, continúe a continuación para dar su consentimiento.

Al hacer clic en el botón de abajo, reconoce:

- Tiene más de 18 años.
- Ha leído la información anterior.
- Acepta voluntariamente participar en este estudio.
- Sabe que puede optar por cancelar su participación en cualquier momento y por cualquier motivo.

☐ Sí doy mi consentimiento, comenzar el estudio. (1)

☐ No doy mi consentimiento y no deseo participar en el estudio. (2)

## **Part 2: Demographic Questions**

Este estudio comienza con unas preguntas demográficas sobre usted.

Q2: ¿Con qué género se identifica?

☐ Mujer (1)

☐ Hombre (2)

☐ No binario (3)

☐ Prefiero no decirlo (4)

☐ Prefiero autodescribirme:

(5) \_\_\_\_\_

Q3: ¿Cuál es su edad? (Por favor, indíquelo en años)

\_\_\_\_\_

Q4: ¿Cuál es el nivel educativo más alto que ha completado?

☐ Ninguno (1)

☐ Educación primaria (2)

☐ Educación Secundaria Obligatoria (ESO) (3)

☐ Bachillerato (4)

☐ Formación profesional (FP) (5)

☐ Grado Universitario (6)

☐ Máster Universitario (7)

☐ Doctorado (8)



☐ Otro, por favor especifique:

(9) \_\_\_\_\_

Q5: ¿Cuál es su ocupación actual?

☐ Estudiante (1)

☐ Desempleado (2)

☐ Empleado a tiempo parcial (3)

☐ Empleado a tiempo completo (4)

☐ Jubilado (5)

☐ Otro, por favor especifique:

(6) \_\_\_\_\_

Q6: ¿Cuál es su nacionalidad?

☐ Española (1)

☐ Otra, por favor especifique:

(2) \_\_\_\_\_

Q7: ¿Tiene experiencia previa a este estudio con la escritura creativa?

☐ Sí (1)

☐ No (2)

Q8: En caso de haber respondido "Sí" en la pregunta anterior, explique brevemente en qué consistió su experiencia con la escritura creativa.

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### Part 3: Instructions for story completion

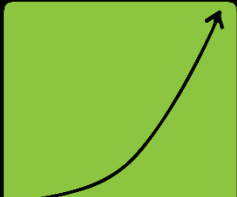
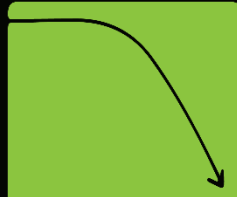
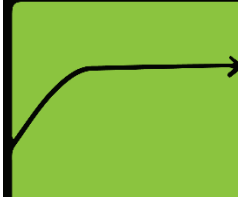
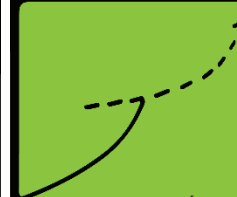
A continuación, se le va a presentar el comienzo de una historia que usted deberá completar.

Primero deberá elegir entre cuatro opciones (*crecimiento, colapso, disciplina y transformación*) el contexto de la historia. Tenga en cuenta que el tema de la historia es cómo se imagina Europa en el año 2050. Tiene de 10 a 20 minutos para escribir el resto de la historia. Recuerde, no hay una manera “correcta” o “incorrecta” de completar la historia, así que puede ser lo creativo/a e imaginativo/a que quiera.

Continúe a la siguiente página.

### Part 4: Arc selection

Estos son los cuatro contextos para la historia que va a escribir. Por favor, **lea atentamente las descripciones** de cada uno de ellos y **seleccione el que vaya a utilizar** en su historia.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>CRECIMIENTO*</b></p> <p><b>Crecimiento</b> es un tipo de futuro en el que todo y todos siguen aumentando.</p> <p><b>Ejemplos:</b> la población sigue creciendo, la producción sigue creciendo, el consumo sigue creciendo...</p> <p><small>*Tener en cuenta no como un escenario en sí, sino como una categoría de escenarios que pueden ser positivos o negativos.</small></p> |  <p><b>COLAPSO*</b></p> <p><b>Colapso</b> es un tipo de futuro en el que la vida tal y como la conocemos ha colapsado, o se está desmoronando.</p> <p><b>Ejemplos:</b> puede haber sido causado por una explosión económica, un asteroide que ha impactado en el planeta, un apocalipsis zombie...</p> <p><small>*Tener en cuenta no como un escenario en sí, sino como una categoría de escenarios que pueden ser positivos o negativos.</small></p> |  <p><b>DISCIPLINA*</b></p> <p><b>Disciplina</b> es un tipo de futuro en el que los habitantes son gobernados por un grupo organizado con unos determinados valores y objetivos.</p> <p><b>Ejemplos:</b> puede ser un orden jerárquico (de más poder a menos) totalitario (1984, <i>Los Juegos del Hambre</i>) o una colaboración entre iguales.</p> <p><small>*Tener en cuenta no como un escenario en sí, sino como una categoría de escenarios que pueden ser positivos o negativos.</small></p> |  <p><b>TRANSFORMACIÓN*</b></p> <p><b>Transformación</b> es un tipo de futuro en el que se ha producido una profunda transición histórica, ya sea de naturaleza espiritual o tecnológica.</p> <p><b>Ejemplos:</b> la inteligencia humana ha sido eclipsada por los robots, ha habido un cambio global en la mentalidad judeo-cristiana...</p> <p><small>*Tener en cuenta no como un escenario en sí, sino como una categoría de escenarios que pueden ser positivos o negativos.</small></p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- ☐ Crecimiento (1)
- ☐ Colapso (2)
- ☐ Disciplina (3)
- ☐ Transformación (4)

#### **Part 5A: Exposure to ‘Hogar’ (Home) stem**

Instrucciones: Tiene **de 10 a 20 minutos** para escribir la historia. Completar la historia no

debería llevarle más de 20 minutos, así que intente mantenerse dentro de esa franja de tiempo.

No se juzgará cómo está escrito el texto, así que no se preocupe si el resultado no es "perfecto".

Por favor, **escriba la historia en un documento de Word (o similar) y luego cópiela en la caja de texto que hay a continuación**, ya que así se evita perder los datos en caso de fallo de la encuesta. Conserve el documento hasta que la investigadora le informe de que sus datos han sido guardados. Hay un límite de 20.000 caracteres.

Este es el comienzo de la historia que debe desarrollar. Recuerde que el tema es el futuro de Europa que usted imagine en el año 2050 y cómo se desarrollará en el contexto que ha elegido:

*Es el año 2050. Alex regresa a su casa en una ciudad europea del trabajo. Alex entra en la sala de estar donde Zuri espera. La situación en Europa...*

Escribir aquí

Una vez haya terminado de escribir, haga click en la flecha para avanzar al final del estudio y guardar sus datos (esta flecha aparecerá una vez transcurrido el tiempo mínimo de 10 minutos).

**Part 5B: Exposure to ‘Médico’ (Doctor’s office) stem**

Instrucciones: Tiene **de 10 a 20 minutos** para escribir la historia. Completar la historia no debería llevarle más de 20 minutos, así que intente mantenerse dentro de esa franja de tiempo. No se juzgará cómo está escrito el texto, así que no se preocupe si el resultado no es "perfecto". Por favor, **escriba la historia en un documento de Word (o similar) y luego cópiela en la caja de texto que hay a continuación**, ya que así se evita perder los datos en caso de fallo de la encuesta. Conserve el documento hasta que la investigadora le informe de que sus datos han sido guardados. Hay un límite de 20.000 caracteres.

Este es el comienzo de la historia que debe desarrollar. Recuerde que el tema es el futuro de Europa que usted imagine en el año 2050 y cómo se desarrollará en el contexto que ha elegido:

*Es el año 2050. Alex está en la consulta del médico en un hospital europeo con Zuri, su pareja, para un chequeo anual. La situación en Europa...*

Escribir aquí

Una vez haya terminado de escribir, haga click en la flecha para avanzar al final del estudio y guardar sus datos (esta flecha aparecerá una vez transcurrido el tiempo mínimo de 10 minutos).

**Part 5C: Exposure to ‘Colegio’ (School) stem**

Instrucciones: Tiene **de 10 a 20 minutos** para escribir la historia. Completar la historia no

debería llevarle más de 20 minutos, así que intente mantenerse dentro de esa franja de tiempo.

No se juzgará cómo está escrito el texto, así que no se preocupe si el resultado no es "perfecto".

Por favor, **escriba la historia en un documento de Word (o similar) y luego cópiela en la caja**

**de texto que hay a continuación**, ya que así se evita perder los datos en caso de fallo de la

encuesta. Conserve el documento hasta que la investigadora le informe de que sus datos han sido guardados. Hay un límite de 20.000 caracteres.

Este es el comienzo de la historia que debe desarrollar. Recuerde que el tema es el futuro de

Europa que usted imagine en el año 2050 y cómo se desarrollará en el contexto que ha elegido:

*Es el año 2050. Alex está a punto de empezar el segundo año de instituto en un nuevo instituto en Europa, y siente nervios por conocer a sus nuevos compañeros. La situación en Europa...*

Escribir aquí

Una vez haya terminado de escribir, haga click en la flecha para avanzar al final del estudio y guardar sus datos (esta flecha aparecerá una vez transcurrido el tiempo mínimo de 10 minutos).

**Part 5D: Exposure to ‘Trabajo’ (Work) stem**

Instrucciones: Tiene **de 10 a 20 minutos** para escribir la historia. Completar la historia no

debería llevarle más de 20 minutos, así que intente mantenerse dentro de esa franja de tiempo.

No se juzgará cómo está escrito el texto, así que no se preocupe si el resultado no es "perfecto".

Por favor, **escriba la historia en un documento de Word (o similar) y luego cópiela en la caja de texto que hay a continuación**, ya que así se evita perder los datos en caso de fallo de la encuesta. Conserve el documento hasta que la investigadora le informe de que sus datos han sido guardados. Hay un límite de 20.000 caracteres.

Este es el comienzo de la historia que debe desarrollar. Recuerde que el tema es el futuro de Europa que usted imagine en el año 2050 y cómo se desarrollará en el contexto que ha elegido:

*Es el año 2050. Alex entra en una sala de reuniones de su trabajo en una compañía en Europa.*

*El resto de sus compañeros ya están reunidos para su reunión semanal. La situación en Europa...*

Escribir aquí

Una vez haya terminado de escribir, haga click en la flecha para avanzar al final del estudio y guardar sus datos (esta flecha aparecerá una vez transcurrido el tiempo mínimo de 10 minutos).

#### **Part 5E: Exposure to ‘Transporte’ (Transit) stem**

Instrucciones: Tiene **de 10 a 20 minutos** para escribir la historia. Completar la historia no debería llevarle más de 20 minutos, así que intente mantenerse dentro de esa franja de tiempo.

No se juzgará cómo está escrito el texto, así que no se preocupe si el resultado no es "perfecto".

Por favor, **escriba la historia en un documento de Word (o similar) y luego cópiela en la caja de texto que hay a continuación**, ya que así se evita perder los datos en caso de fallo de la

encuesta. Conserve el documento hasta que la investigadora le informe de que sus datos han sido guardados. Hay un límite de 20.000 caracteres.

Este es el comienzo de la historia que debe desarrollar. Recuerde que el tema es el futuro de Europa que usted imagine en el año 2050 y cómo se desarrollará en el contexto que ha elegido:

*Es el año 2050. Alex y Zuri están cogiendo el metro en una estación europea para volver a casa del trabajo. La situación en Europa...*

Escribir aquí

Una vez haya terminado de escribir, haga click en la flecha para avanzar al final del estudio y guardar sus datos (esta flecha aparecerá una vez transcurrido el tiempo mínimo de 10 minutos).

### **Part 6: Debriefing**

La intención de este estudio es medir cómo afecta el diseño de ficción participativo al nivel de absorción en el mundo de la historia en un texto narrativo ficcional. Para ello, es necesario crear textos narrativos mediante técnicas participativas como la *continuación de una historia* que usted acaba de realizar.

El diseño ficción participativo es un método que se usa para la investigación, y que puede resultar en un incremento de compromiso político y cívico por parte de la población que participa de ello. Sin embargo, al ser un campo de investigación relativamente nuevo todavía no se conocen todos los factores que pueden influir en que este compromiso sea mayor. Mediante

este estudio quiero explorar si el nivel de absorción en el mundo de la historia puede ser uno de los factores que determinen el efecto de este método de investigación.

Por favor, le pido que no comparta este estudio y su propósito con otras personas para evitar que sean influenciadas.

Gracias por su tiempo, su respuesta es muy apreciada.

Saludos cordiales,

Laura Beamuz Mingote.



**Appendix B. Five Stems in Spanish**

|                   |                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hogar</b>      | Es el año 2050. Alex regresa a su casa en una ciudad europea del trabajo. Alex entra en la sala de estar donde Zuri espera. La situación en Europa...                                        |
| <b>Médico</b>     | Es el año 2050. Alex está en la consulta del medico en un hospital europeo con Zuri, su pareja, para un chequeo anual. La situación en Europa...                                             |
| <b>Colegio</b>    | Es el año 2050. Alex está a punto de empezar el segundo año de instituto en un nuevo instituto en Europa, y siente nervios por conocer a sus nuevos compañeros. La situación en Europa...    |
| <b>Trabajo</b>    | Es el año 2050. Alex entra en una sala de reuniones de su trabajo en una compañía en Europa. El resto de sus compañeros ya están reunidos para su reunion semanal. La situación en Europa... |
| <b>Transporte</b> | Es el año 2050. Alex y Zuri están cogiendo el metro en una estación europea para volver a casa del trabajo. La situación en Europa...                                                        |

## Appendix C. Survey with a Story and SWAS

### Part 1: Consent form

¡Bienvenido/a a mi estudio y gracias por participar en él!

Querido/a participante,

Gracias por su interés en el estudio “Diseño participativo de ficción y absorción en el mundo de la historia”. Este cuestionario es parte de mi tesis para el Master en Ciencias de la Información y la Comunicación en la Universidad de Tilburg. A continuación, se le informará sobre lo que implica este estudio.

Propósito del estudio: Se le presentará una historia que deberá leer. La historia está basada en un contexto del futuro de Europa. Tras leer esta historia deberá responder a una serie de preguntas sobre el nivel de absorción en el mundo de la historia que usted ha experimentado. El objetivo de este estudio es medir su nivel de absorción en la historia que ha leído.

Procedimiento y duración del estudio: Completar el cuestionario y leer la historia debería llevarle de 5 a 10 minutos. Me gustaría pedirle que lea la historia y las preguntas proporcionadas con mucha atención. Por favor, recuerde que no hay respuestas "correctas" o "incorrectas".

Posibles riesgos y beneficios: Los datos recopilados están destinados únicamente a fines de investigación. La participación no conlleva ningún riesgo físico o psíquico. Adquirirá experiencia participando en investigaciones experimentales y su participación es muy apreciada, ya que ayuda a la investigadora a obtener su título de Master.

Privacidad y confidencialidad: Tenga la seguridad de que sus respuestas se mantendrán completamente confidenciales y los datos se procesarán y almacenarán de forma anónima. En ningún momento será posible vincular las respuestas dadas a sus datos personales. Los datos solo se utilizarán para la redacción de la tesis del Master de la investigadora, y solo la investigadora

tiene acceso a los datos. Además, los datos se eliminarán una vez que la investigadora se haya graduado.

Participación voluntaria: Su participación en este estudio de investigación es voluntaria. Tiene derecho a retirarse en cualquier momento durante el estudio por cualquier motivo, sin ningún juicio. Sus datos se eliminarán si decide abandonar el estudio. Si decide participar en este estudio, tiene derecho a solicitar el acceso a sus datos personales que se han recopilado. Para obtener más información, visite las Declaraciones de privacidad de la Universidad de Tilburg.

Contacto: Tenga en cuenta que este estudio ha sido aprobado por el “Comité de Ética en Investigación y Gestión de Datos” de la Escuela de Humanidades y Ciencias Digitales de Tilburg. Si tiene alguna pregunta, comentario o queja relacionada con este estudio, también puede comunicarse con el Comité a través de [tshd.redc@tilburguniversity.edu](mailto:tshd.redc@tilburguniversity.edu) (número de referencia 2020.067). Si desea comunicarse con la investigadora con preguntas o comentarios, envíe un correo electrónico a [l.beamuzmingote@tilburguniversity.edu](mailto:l.beamuzmingote@tilburguniversity.edu).

Quiero agradecerles de antemano su participación.

Saludos cordiales,

Laura Beamuz Mingote

Por favor, continúe a continuación para dar su consentimiento.

Al hacer clic en el botón de abajo, reconoce:

- Tiene más de 18 años.
- Ha leído la información anterior.
- Acepta voluntariamente participar en este estudio.
- Sabe que puede optar por cancelar su participación en cualquier momento y por cualquier motivo.

☐ Sí doy mi consentimiento, comenzar el estudio. (1)

☐ No doy mi consentimiento y no deseo participar en el estudio. (2)

## **Part 2: Demographic Questions**

Este estudio comienza con unas preguntas demográficas sobre usted.

Q2: ¿Con qué género se identifica?

☐ Mujer (1)

☐ Hombre (2)

☐ No binario (3)

☐ Prefiero no decirlo (4)

☐ Prefiero autodescribirme:

(5) \_\_\_\_\_

Q3: ¿Cuál es su edad? (Por favor, indíquelo en años)

\_\_\_\_\_

Q4: ¿Cuál es el nivel educativo más alto que ha completado?

☐ Ninguno (1)

☐ Educación primaria (2)

☐ Educación Secundaria Obligatoria (ESO) (3)

☐ Bachillerato (4)

☐ Formación profesional (FP) (5)

☐ Grado Universitario (6)

☐ Máster Universitario (7)

- ☐ Doctorado (8)
- ☐ Otro, por favor especifique:

(9) \_\_\_\_\_

Q5: ¿Cuál es su ocupación actual?

- ☐ Estudiante (1)
- ☐ Desempleado (2)
- ☐ Empleado a tiempo parcial (3)
- ☐ Empleado a tiempo completo (4)
- ☐ Jubilado (5)
- ☐ Otro, por favor especifique:

(6) \_\_\_\_\_

Q6: ¿Cuál es su nacionalidad?

- ☐ Española (1)
- ☐ Otra, por favor especifique:

(2) \_\_\_\_\_

### **Part 3: Story to read**

A continuación, se le presentará una breve historia creada en el contexto de Europa en el año 2050 en un área de la vida cotidiana. Por favor, tómese el tiempo que necesite para leer la historia con atención.

Una vez la haya leído, haga click en la flecha para continuar con el estudio.

### **Part 4: SWAS**

A continuación, tiene una lista de afirmaciones sobre su experiencia leyendo la historia. Por favor, indique cómo de acuerdo está con las siguientes afirmaciones respecto a la historia que acaba de leer.

Q1: Cuando terminé de leer la historia me sorprendí de lo rápido que había pasado el tiempo.

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q2: Cuando estaba leyendo la historia estaba concentrado/a en lo que pasaba en la historia.

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q3: Me sentí absorbido/a en la historia

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q4: La historia me atrapó de tal manera que pude evadirme de las cosas que estaban sucediendo a mi alrededor

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q5: Estaba leyendo de manera tan concentrada que me olvidé del mundo a mi alrededor

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q6: Cuando estaba leyendo la historia a veces parecía que yo estuviese dentro el mundo de la historia

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q7: Mientras leía la historia había momentos en los que sentí que el mundo de la historia se superponía con mi propio mundo

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q8: A veces sentía el mundo de la historia más cerca de mí que mi propio mundo

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q9: Cuando acabé de leer la historia, sentí que había viajado al mundo de la historia

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q10: Como toda mi atención estaba puesta en la historia, a veces sentí como si no pudiese existir fuera del mundo de la historia

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q11: Cuando leía la historia, me podía imaginar cómo sería estar en la piel del personaje principal

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q12: Sentí simpatía por el personaje principal

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q13: Me sentí conectado con el personaje principal de la historia



|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q14: Sentí lo que el personaje principal sentía

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q15: Sentí por lo que pasó en la historia

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q16: Cuando estaba leyendo la historia tenía la imagen del personaje principal en mi mente

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q17: Cuando estaba leyendo la historia, podía visualizar los hechos que pasaban en la historia  
delante de mí

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O                                     | O                      | O                              | O                                             | O                        | O                   | O                                    |
| 1                                     | 2                      | 3                              | 4                                             | 5                        | 6                   | 7                                    |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

Q18: Me pude imaginar cómo era el mundo en el que sucedía la historia

|                                       |                        |                                |                                               |                          |                     |                                      |
|---------------------------------------|------------------------|--------------------------------|-----------------------------------------------|--------------------------|---------------------|--------------------------------------|
| O<br>1                                | O<br>2                 | O<br>3                         | O<br>4                                        | O<br>5                   | O<br>6              | O<br>7                               |
| No estoy de<br>acuerdo en<br>absoluto | Estoy en<br>desacuerdo | Estoy algo<br>en<br>desacuerdo | No estoy de<br>acuerdo ni<br>en<br>desacuerdo | Estoy algo<br>de acuerdo | Estoy de<br>acuerdo | Estoy<br>completamente<br>de acuerdo |

**Part 7: Would you like to take part in a follow-up interview?**

Q19: ¿Le gustaría participar en una entrevista sobre la historia que acaba de leer?

- ☐ Sí. (1)
- ☐ No. (2)

**Part 8: Debriefing**

La intención de este estudio es medir cómo afecta el diseño de ficción participativo al nivel de absorción en el mundo de la historia en un texto narrativo ficcional. El nivel de absorción en el mundo de la historia se mide mediante el cuestionario que usted acaba de completar.

El diseño ficción participativo es un método que se usa para la investigación, y que puede resultar en un incremento de compromiso político y cívico por parte de la población que participa de ello. Sin embargo, al ser un campo de investigación relativamente nuevo todavía no se conocen todos los factores que pueden influir en que este compromiso sea mayor. Mediante este estudio quiero explorar si el nivel de absorción en el mundo de la historia puede ser uno de los factores que determinen el efecto de este método de investigación.

Por favor, le pido que no comparta este estudio y su propósito con otras personas para evitar que sean influenciadas.

Gracias por su tiempo, su respuesta es muy apreciada.

Saludos cordiales,

Laura Beamuz Mingote

## **Appendix D. SWAS**

### **Story World Absorption Scale by Kuijpers et al., (2014)**

#### Attention

A1: When I finished the story I was surprised to see that time had gone by so fast

A2: When I was reading the story I was focused on what happened in the story

A3: I felt absorbed in the story

A4: The story gripped me in such a way that I could close myself off for things that were happening around me

A5: I was reading in such a concentrated manner that I had forgotten the world around me

#### Transportation

T1: When I was reading the story it sometimes seemed as if I were in the story world too

T2: When reading the story there were moments in which I felt that the story world overlapped with my own world

T3: The world of the story sometimes felt closer to me than the world around me

T4: When I was finished with reading the story it felt like I had taken a trip to the world of the story

T5: Because all of my attention went into the story, I sometimes felt as if I could not exist separate from the story

#### Emotional Engagement

EE1: When I read the story I could imagine what it must be like to be in the shoes of the main character

EE2: I felt sympathy for the main character

EE3: I felt connected to the main character in the story

EE4: I felt how the main character was feeling

EE5: I felt for what happened in the story

Mental Imagery

MS1: When I was reading the story I had an image of the main character in mind

MS2: When I was reading the story I could see the situations happening in the story being played out before my eyes

MS3: I could imagine what the world in which the story took place looked like

## **Appendix E. Consent Form and Survey for the Interviews**

### **Part 1: Consent form**

¡Gracias por aceptar participar en la entrevista!

Querido/a Participante,

Gracias por su interés en el estudio “Diseño participativo de ficción y absorción en el mundo de la historia”. Este cuestionario es parte de mi tesis para el Master en Ciencias de la Información y la Comunicación en la Universidad de Tilburg. A continuación, se le informará sobre lo que implica este estudio.

Propósito del estudio: Se le van a realizar una serie de preguntas basadas en los resultados obtenidos en la parte previa del estudio donde se midió su nivel de absorción en el mundo de la historia mediante un cuestionario. El objetivo de este estudio es obtener más información sobre los factores que han influido en su nivel de absorción narrativa.

Procedimiento y duración del estudio: La duración de la entrevista ronda los 15 minutos. Como parte del estudio, su audio será grabado para ser analizado posteriormente. Me gustaría pedirle que responda con la mayor sinceridad que le sea posible a las preguntas. Por favor, recuerde que no hay respuestas "correctas" o "incorrectas".

Posibles riesgos y beneficios: Los datos recopilados están destinados únicamente a fines de investigación. La participación no conlleva ningún riesgo físico o psíquico. Adquirirá experiencia participando en investigaciones experimentales y su participación es muy apreciada, ya que ayuda a la investigadora a obtener su título de Master.

Privacidad y confidencialidad: Tenga la seguridad de que sus respuestas se mantendrán completamente confidenciales y los datos se procesarán y almacenarán de forma anónima. En ningún momento será posible vincular las respuestas dadas a sus datos personales. Los datos solo se utilizarán para la redacción de la tesis del Master de la investigadora, y solo la investigadora

tiene acceso a los datos. Además, los datos se eliminarán una vez que la investigadora se haya graduado.

Participación voluntaria: Su participación en este estudio de investigación es voluntaria. Tiene derecho a retirarse en cualquier momento durante el estudio por cualquier motivo, sin ningún juicio. Sus datos se eliminarán si decide abandonar el estudio. Si decide participar en este estudio, tiene derecho a solicitar el acceso a sus datos personales que se han recopilado. Para obtener más información, visite las Declaraciones de privacidad de la Universidad de Tilburg.

Contacto: Tenga en cuenta que este estudio ha sido aprobado por el “Comité de Ética en Investigación y Gestión de Datos” de la Escuela de Humanidades y Ciencias Digitales de Tilburg. Si tiene alguna pregunta, comentario o queja relacionada con este estudio, también puede comunicarse con el Comité a través de [tshd.redc@tilburguniversity.edu](mailto:tshd.redc@tilburguniversity.edu) (número de referencia 2020.067). Si desea comunicarse con la investigadora con preguntas o comentarios, envíe un correo electrónico a [l.beamuzmingote@tilburguniversity.edu](mailto:l.beamuzmingote@tilburguniversity.edu).

Quiero agradecerles de antemano su participación.

Saludos cordiales,

Laura Beamuz Mingote

Por favor, continúe a continuación para dar su consentimiento.

Al hacer clic en el botón de abajo, reconoce:

- Tiene más de 18 años.
- Ha leído la información anterior.
- Acepta voluntariamente participar en este estudio.
- Acepta que la investigadora grabe el audio de su conversación.
- Sabe que puede optar por cancelar su participación en cualquier momento y por cualquier motivo.

- ☐ Sí doy mi consentimiento, comenzar el estudio. (1)
- ☐ No doy mi consentimiento y no deseo participar en el estudio. (2)

**Part 2: Participant's email**

Gracias por acceder a participar en la entrevista. Por favor, escriba su dirección de correo electrónico a continuación para que la investigadora se ponga en contacto con usted y puedan concertar una fecha y hora para la entrevista:

---

La entrevista durará de 10 a 15 minutos y se hará de manera online mediante Zoom. La investigadora grabará el audio de la entrevista para poder analizarlo posteriormente. Se le harán unas preguntas sobre el texto que acaba de leer para explorar qué factores han influido en su nivel de absorción en el mundo de la historia y cuál es su opinión actual sobre participar en conversaciones acerca del futuro de Europa.

**Part 3: Story title**

Seleccione el **título de la historia que acaba de leer** y que previamente ha tenido que apuntarse:

- ☐ Historia 1 (1)
- ☐ Historia 2 (2)
- ☐ Historia 3 (3)
- ☐ Historia 4 (4)
- ☐ Historia 5 (5)
- ☐ Historia 6 (6)

- Historia 7 (7)
- Historia 8 (8)
- Historia 9 (9)
- Historia 10 (10)

#### **Part 4: Link to Zoom meeting**

Buenas tardes,

Soy Laura Beamuz, y primero quiero agradecerte tu participación en mi estudio y el que quieras participar en la última parte de mi investigación que consiste en una entrevista.

La entrevista durará unos 10 minutos y en ella te haré preguntas relacionadas con la encuesta que has completado y cómo afecta a tú posición respecto a mantener conversaciones sobre el futuro de Europa. La entrevista se llevará a cabo online en Zoom, y el audio será grabado para poder analizarlo posteriormente. Tus respuestas serán anónimas y no habrá forma de vincularlas contigo.

Respecto a cuándo hacer las entrevistas, sería a finales de la semana que viene (a partir del jueves 13). Mi horario es flexible, así que si tienes preferencia por algún día y hora dímelo y concretamos.

¡Muchas gracias por formar parte de mi estudio y ayudarme con mi investigación!

Le adjunto el link que debe utilizar para unirse a la reunión con la investigadora donde se desarrollará la entrevista:

<https://tilburguniversity.zoom.us/j/9971600966?pwd=ZkZXcnMwM2tTRU5oNi9YQnZpOVNqdz09>

Gracias por su participación.

Saludos cordiales,

Laura Beamuz Mingote.



## **Appendix F. Interview Questions**

### **Questions for Story 1 readers:**

Q1: En la historia se presentan dos personajes, Alex y Zuri. ¿Qué características e información de Alex y Zuri hicieron que te sintieras más o menos absorbido en el mundo de la historia? ¿Por qué?

Q2: ¿Qué características del mundo de la historia te hicieron sentir más o menos absorbido en él? (ej., mención de inteligencia artificial, descripción de la atmósfera) ¿Por qué?

Q3: El mundo de la historia está constituido por una nueva sociedad en la que los individuos viven aislados en todos los ámbitos de su vida y dependen de la tecnología para socializar, trabajar, etc. ¿En qué medida la descripción de este mundo ayudó o no a que te sintieras absorbido en él? ¿Por qué?

Q4: La historia describe varias crisis mundiales como pandemias, incremento de la desigualdad entre países, o aislamiento individual. ¿Te parece plausible que suceda alguna de ellas en el futuro o no? ¿Por qué?

Q5: El desenlace de la historia describe un futuro positivo y esperanzador para los personajes. ¿En qué medida crees que se asemeja o no al futuro de Europa en el año 2050? ¿Por qué?

Q6: ¿Cómo de bien o mal preparado te sientes después de haber leído esta historia para mantener conversaciones con otras personas sobre los posibles futuros de Europa? ¿Por qué?

### **Questions for Story 3 readers:**

Q1: En la historia se presenta un personaje, Alex. ¿Qué características e información de Alex hicieron que te sintieras más o menos absorbido en el mundo de la historia? ¿Por qué?

Q2: ¿Qué características del mundo de la historia te hicieron sentir más o menos absorbido en él? (ej., descripción de la atmósfera) ¿Por qué?

Q3: El mundo de la historia está constituido por una nueva sociedad en la que los individuos sufren un virus mundial que les hace buscar el bien común y modera sentimientos como la envidia, el egoísmo, y el rencor. ¿En qué medida la descripción de este mundo ayudó o no a que te sintieras absorbido en él? ¿Por qué?

Q4: La historia describe una crisis sanitaria mundial (una pandemia) que hace que todo el mundo busque el bien común. ¿Te parece plausible que suceda en el futuro o no? ¿Por qué?

Q5: El desenlace de la historia describe un futuro positivo y esperanzador para el personaje. ¿En qué medida crees que se asemeja o no al futuro de Europa en el año 2050? ¿Por qué?

Q6: ¿Cómo de bien o mal preparado te sientes después de haber leído esta historia para mantener conversaciones con otras personas sobre los posibles futuros de Europa? ¿Por qué?

### **Questions for Story 8 readers:**

Q1: En la historia se presenta un personaje, Alex. ¿Qué características e información de Alex hicieron que te sintieras más o menos absorbido en el mundo de la historia? ¿Por qué?

Q2: ¿Qué características del mundo de la historia te hicieron sentir más o menos absorbido en él? (ej., descripción de la atmósfera) ¿Por qué?

Q3: El mundo de la historia está constituido por una nueva sociedad en la que los individuos viven en sintonía con la naturaleza, lo que lleva a iniciar un proceso de despoblación del planeta. ¿En qué medida la descripción de este mundo ayudó o no a que te sintieras absorbido en él? ¿Por qué?

Q4: La historia describe una crisis mundial demográfica que consiste en la despoblación del planeta. ¿Te parece plausible alguna de ellas en el futuro o no? ¿Por qué?

Q5: El desenlace de la historia describe un futuro positivo y esperanzador para los personajes. ¿En qué medida crees que se asemeja o no al futuro de Europa en el año 2050? ¿Por qué?

Q6: ¿Cómo de bien o mal preparado te sientes después de haber leído esta historia para mantener conversaciones con otras personas sobre los posibles futuros de Europa? ¿Por qué?

## **Appendix G. The Ten Unedited Stories**

### **Historia 1 – Story 1**

Es el año 2050. Alex regresa a su casa en una ciudad europea del trabajo. Alex entra en la sala de estar donde Zuri espera. La situación en Europa ha cambiado mucho en los últimos 25 años. Después de la pandemia que sufrió el mundo en los años 2020 y 2021, la vida en el continente europeo, y en el resto del planeta, fue cambiando poco a poco, casi imperceptiblemente. Alex, al llegar a casa se quita la mascarilla, que ya forma parte de su atuendo, y se desinfecta con una pequeña lluvia de líquido desinfectante que cae al atravesar la puerta de entrada. Al fondo del salón está Zuri, su gran conexión con el mundo exterior, con un gesto de la mano la activa y la pantalla le ofrece gran cantidad de posibilidades, comunicarse con su familia, ver un programa, o encargar la comida para la cena, o también poner en orden la cocina para preparárselo él mismo. Elige ver un vídeo casero de su abuelo, en el que aparece su madre y el resto de su familia en una celebración. Le parece mentira, que existiera este contacto físico tan estrecho entre ellos. Ahora, las relaciones personales son cada día más difíciles. Después de la pandemia quedó en la gente un sentimiento extraño de desconfianza hacia el otro. Había miedo de que alguien no estuviera vacunado y pudiera contagiarte cualquier cosa. Eso hizo que los trabajos cambiaran y se fueran haciendo más individuales, el desarrollo de los medios audiovisuales y técnicos posibilitó que no fuese tan necesaria la interrelación personal. Incluso los trabajadores más físicos en la construcción, en las fábricas, se aislaban en sus trajes con sus móviles o música. Este aislamiento se trasladaba también a los países europeos. En un primer momento todos unidos hicieron frente a lo desconocido, pero cuando el problema se cronificó y cada país tuvo que enfrentarse a su propio desarrollo, una vez más y como siempre los poderosos salieron adelante mucho mejor que los pobres. Sin embargo, pasados unos años por fin comprendieron que tenían que seguir unidos, eso los hacía fuertes. Ahora, en 2050 no había fronteras, todo era una Europa y todo estaba conectado. Alex pensó en cómo sería pertenecer a un país determinado, pero le pareció que eso no tendría mucho sentido en los tiempos actuales. Estaba feliz con la vida que tenía, le pidió a Zuri una película, se conectó con su mejor amigo y se abrió una cerveza. La mejor noche que podía pasar.

## Historia 2 – Story 2

Es el año 2050. Alex y Zuri están cogiendo el metro en una estación europea para volver a casa del trabajo. La situación en Europa está comenzando a estabilizarse después de las series de graves crisis que azotaron el planeta en el siglo XXI. Empezando por las económicas de principios de siglo, la crisis sanitaria del coronavirus y sobre todo la crisis medioambiental de mediados de los años 30 que provocó un colapso mundial y que obligó a los países a replantearse la estrategia política, social y económica para salvar a la humanidad. Los continuos extremos climáticos provocaron hambrunas, enfermedades, inundaciones, reducción de los límites costeros, etc que llevó a colapsar la economía mundial a unos límites peores que la crisis del 29 del siglo pasado ya que esta última fue a nivel global. Capitaneados por las dos superpotencias económicas EEUU y China se decidió hacer una transición a una economía de reparto de riqueza, penalizando a las grandes fortunas y lobbies empresariales con el fin de que redujeran su riqueza y redistribuirlas al resto de la humanidad. Era el fin del capitalismo neoliberal que primaba la producción, los beneficios continuos hasta límites que dieron lugar a dicha crisis. Se decidió eliminar aquellos sectores productivos que primaban la producción continua por otros de economía circular apoyándose en la inteligencia artificial para redistribuir la riqueza. Hubo mucha presión por parte de los lobbies empresariales y las grandes fortunas para parar esto ya que estaban perdiendo riqueza e influencia internacional pero los estados, capitaneados por unas NACIONES UNIDAS reformadas consiguieron atenuar estas presiones. Alex y Zuri como otros muchos ciudadanos del mundo, estaban comenzando a vislumbrar un futuro más halagüeño donde dejaban de pensar en una vida de subsistencia para cambiar a una vida de estabilidad y tranquilidad. Las condiciones climáticas parecían mejorar y la distribución de las actividades gracias a la inteligencia artificial hacían que hubieran conseguido un trabajo planificado hacia el bien común. Si bien muchos amigos y familiares no tenían trabajo, recibían una asignación económica que les hacía vivir de forma holgada sin las estrecheces de antaño. El ambiente era de optimismo y se miraba al futuro con esperanza e ilusión, se estaban planteando tener un hijo y así lo solicitarían para conseguir los permisos, ya que la natalidad estaba planificada para tratar de reducir la sobrepoblación mundial. Eran tiempos de paz, de alegría y de transformación. La humanidad había conseguido superar uno de los retos más duros en la su corta historia y que podían haber llevado a su extinción.

### **Historia 3 – Story 3**

Es el año 2050. Alex está a punto de empezar el segundo año de instituto en un nuevo instituto en Europa, y siente nervios por conocer a sus nuevos compañeros. La situación en Europa es fabulosa desde que se propagó el virus que incide en las partes del cerebro que generan el rencor, el egoísmo, la envidia y el mal humor y las modera. Atrás quedaron ya los tiempos en los que las novatadas y los malos rollos estaban a la orden del día. No puede comprender cómo era la vida antes. Se ve en las pelis y series antiguas, pero no entra en su cabeza que hubiera personas que se decidieran por hacer daño a propósito a otras personas simplemente porque podían... Realmente, es una suerte haber nacido en esta época en la que todo el mundo procura el bien común. ¡Y menos mal que el virus se propagó a velocidades antes nunca vistas! ¡Y que fue una pandemia! Si la cosa no hubiera sido tan rápida y tan por sorpresa, seguramente los poderes fácticos de entonces hubieran tenido tiempo de reacción para neutralizarlo. ¡Pero no sucedió! Y se pudieron desarrollar fármacos que lo potenciaran, que es lo mejor de lo mejor. Ahora la sociedad es realmente como buscaban todas las religiones del mundo: un lugar donde desarrollarse y buscar la felicidad sin impedimentos malintencionados. Con malos momentos, naturalmente y con tropezones en el camino, que hacen que cada persona crezca, pero que no son provocados por nadie a propósito. Y todo el mundo está dispuesto a contribuir a que todo el mundo tenga la mejor vida posible. Realmente está satisfecho. Además de nervioso y emocionado: hoy conocerá a nuevas personas que van a contribuir a su desarrollo personal de forma muy positiva, aunque él, naturalmente no lo enunciaría de esta manera... Simplemente sabe que hoy comienza el resto de su vida: una vida plena y llena de buenas posibilidades.

### **Historia 4 – Story 4**

Es el año 2050. Alex regresa a su casa en una ciudad europea del trabajo. Alex entra en la sala de estar donde Zuri espera. La situación en Europa es decadente. Bill Gates tenía razón, no íbamos a experimentar una sola pandemia sino que, tras el COVID-19, vinieron más y con el tiempo la población ha descendido en un 50%. La crisis económica y social es el pan de cada día... Y, hablando de pan, la comida escasea y el dinero no llega, estamos al borde del colapso mundial y todavía hay gente preocupada por el papel higiénico. Ahora ya no nos preocupa la extinción de los animales o el calentamiento global, lo que preocupa ahora es la extinción de la raza humana. Estamos terminando nuestro tiempo en la Tierra, y nos hemos condenado nosotros solitos, ahora

tenemos que enfrentarnos a las consecuencias de nuestra avaricia y nuestra ignorancia. Es tarde para nosotros.

### **Historia 5 – Story 5**

Es el año 2050. Alex entra en una sala de reuniones de su trabajo en una compañía en Europa. El resto de sus compañeros ya están reunidos para su reunión semanal. La situación en Europa va empeorando exponencialmente. Nunca se había presentado una situación tan complicada desde el 2020, con la crisis del Covid-19. Todos los presentes en la reunión tienen muy mala cara, la situación es crítica. Hace un par de meses, apareció en África un “objeto” no identificado que asesinó a más de mil personas en un instante. Aunque las fuentes dicen que estas personas fueron asesinadas, lo cierto es que ninguna de ellas fue hallada en la escena donde se encontraba este extraño objeto. Es como si las personas se hubiesen esfumado sin ningún tipo de explicación. Este no fue un caso aislado, ya que con el paso de los días fueron apareciendo más de estos objetos, repartidos por todo el mundo, y que hacían desaparecer cada vez a más personas. Nadie sabía cómo explicar este suceso, las personas que se encontraban en los alrededores sólo sabían decir que, en un sólo segundo, la vida que se encontraba en ese lugar desaparecía sin dejar rastro. Actualmente, han “desaparecido” más de un millón y medio de personas en estos dos meses, de todos los lugares del planeta Tierra. Alex, temeroso de cómo iba a transcurrir la reunión, bebió agua para aclararse la garganta. Su departamento era uno de los más importantes de la sede que se encargaba de investigar este tipo de sucesos. Incluso el gobierno del país había contactado con ellos por la desesperación que estaban viviendo. Las desapariciones de personas no eran normales, cada vez ocurría en un rango de tiempo más corto. En la reunión se explicó que no había tiempo para pensar, había que buscar una solución y actuar. Hace unos días, y gracias a unos drones, habían encontrado una especie de base militar en la Antártida. Nadie sabía cómo había aparecido ese inmenso edificio en aquel lugar, ya que anteriormente no se encontraba allí. En esta reunión se decidió enviar a las fuerzas armadas de las potencias mundiales actuales. Ya no había marcha atrás, había que ir con la fuerza y entender de una vez por todas por qué estaban ocurriendo aquellas desapariciones y cómo había aparecido ese edificio allí. ¿Extraterrestres? Podría ser. Nadie estaba preparado para ello, pero con la tecnología y armas actuales habría que combatir contra ello.

### **Historia 6 – Story 6**

Es el año 2050. Alex está en la consulta del médico en un hospital europeo con Zuri, su pareja, para un chequeo anual. La situación en Europa se encuentra en un momento delicado. Mientras ciudadanos como Alex, residentes de los países de la recién formada comunidad de defensa europea (CDE), siguen teniendo los privilegios humanitarios que se asentaron en la sociedad en el siglo XX y principios del XXI, los ciudadanos de las naciones opuestas a la unión, lideradas por los gobiernos militares impuestos en sus capitales, han perdido la mayoría de los derechos y privilegios que se tenían en la Europa de principio de siglo. La consecución de golpes de estado de la década de 2040 había finalizado con la unión europea, y había sumido en el caos la economía internacional. Alex y Zuri, residentes en la recién formada CDE, pasaban el chequeo anual médico impuesto por la junta a todos los ciudadanos que busca de evaluar a nivel personal los pensamientos de cada ciudadano. La medida, propuesta en un principio como método de asegurarse que la población no apoyaría los ya comunes golpes de estado, tenía cada vez más críticas, ya que los resultados de cada individuo se hacían públicos. La ciudadanía tenía miedo a cualquier tipo de represalia, y es que, aunque la CDE había mantenido los principales derechos como la sanidad y la alimentación, las libertades de pensamiento se habían reducido a mínimos que recordaban a épocas pasadas. Alex era consciente de que los resultados de su estudio seguramente no fueran los deseados, y es que, siendo un veterano político regional, no era capaz de apoyar ni los golpes de estado, ni la unión de la CDE. Alex recordaba con nostalgia tiempos pasados en los que ser ciudadano europeo implicaba un bienestar del que ya no se disponía.

### **Historia 7 – Story 7**

Es el año 2050. Alex está en la consulta del médico en un hospital europeo con Zuri, su pareja, para un chequeo anual. Los resultados de las pruebas no eran nada esperanzadores. Al igual que a otros muchos ciudadanos, a Alex le diagnosticaron una enfermedad cuyo nombre me es imposible de reproducir, de la que apenas se tiene conocimiento. Puede parecer extraño, pero todo tiene su explicación en la crisis que llevan acarreado varios años todos los habitantes de la Tierra. La situación en Europa ha cambiado drásticamente durante los últimos 10 años. Todo empezó aquel 14 de noviembre de 2040 en la que todos los telediarios, periódicos, programas de radio y redes sociales estaban repletos de la imagen del científico Alex Stuart. Rara vez se retransmite a estas escalas un suicidio, por temor de un efecto llamada, pero lo que más alarmaba de la historia tristemente no era la muerte de este señor, si no sus motivos. En un comunicado

horas antes de su muerte Cameron dijo ‘‘Sirva mi muerte como advertencia para las grandes esferas de este mundo. Si no frenáis la crisis climática de inmediato la humanidad conocerá una muerte mucho peor que la mía’’. En su momento causó una gran conmoción, científicos de todo el mundo apoyaron sus palabras y hubo algún que otro que también se quitó la vida para dar más fuerza al movimiento. Pese a este sacrificio, la conciencia con el problema duró pocos años. Las grandes empresas decidieron optar por la vía del dinero en lugar de la vía del futuro. ¿Y los políticos?... bueno ya he dicho lo que hicieron las empresas.... La alarma regresó en 2047, cuando se informó de la inesperada inundación de varios pueblos del sudeste asiático. El mundo occidental estaba pendiente aunque siendo sinceros no estaba especialmente preocupado. Hasta que esas inundaciones no fueron más que el comienzo de una reacción en cadena de diferentes catástrofes. El 90% del sudeste asiático quedó completamente inundado, la zona del Cinturón de Fuego sufrió la mayor actividad volcánica de la historia, en Centroáfrica olas de calor arrebatan la vida de cualquier ser vivo en cuestión de minutos, Sudamérica fue arrasada por terremotos, y Norteamérica padeció las mayores tormentas huracanadas que cualquiera puede recordad. El mundo estaba del revés, el número de muertos se contaban por millones. Pero como es bien sabido, este tipo de crisis no vienen solas... Europa se convirtió en el único lugar en el mundo a salvo de estas catástrofes. Al principio la gente comparaba el continente con el Arca de Noé, el único sitio del mundo donde podrían salvarse. No se esperaban que en realidad Europa se había convertido en un matadero. Estos desastres condujeron a una gran crisis migratoria. La mayoría de países casi doblaron su población. Con esta mezcla de gentes procedentes de todo el mundo, el rápido desabastecimiento, el colapso de todos los servicios, era cuestión de tiempo que la gente empezase a enfermar de enfermedades procedentes de otros lugares. Falta de investigación, recursos, adaptación de nuestro cuerpo... la medicina pasó a ser una herramienta para informar a la gente de qué se iba a morir. Alex es uno más de estas personas. Él y Zuri vuelven a su piso, si es que así se le puede llamar, y en lo único en lo que puede pensar es en ese preciso 14 de noviembre de 2040 en la que nadie puso el grito en el cielo por nuestro planeta. Todos son conscientes que ya lo que queda es esperar a la muerte, ya que cualquier intento de cambiar esta situación llega 10 años tarde.

### **Historia 8 – Story 8**

Es el año 2050. Alex está a punto de empezar el segundo año de instituto en un nuevo instituto en Europa, y siente nervios por conocer a sus nuevos compañeros. La situación en Europa parece



haber dejado atrás la incertidumbre que caracterizaba el comienzo del milenio. Parece que en el viejo continente el mundo ha comenzado a entenderse como un espacio finito y ecodependiente. Las comunidades europeas hace veinte años que formaron el Pacto de Gaia para poner límites a un sistema económico desfasado y a una forma de organizarnos totalmente independiente. Desde entonces la única guerra que se ha librado en Europa ha sido la de restablecer el orden que hay implícito en las relaciones que establece la naturaleza. Ya era hora de que los seres humanos al fin nos involucráramos en la misma categoría que ocupa la Naturaleza; al fin hemos roto con esa trastornada idea dualista en la que nos hemos creído como una sustancia ajena a los bosques, el agua o las demás especies que pueblan este planeta. Sin duda el mayor logro que hemos alcanzado como civilización puede haber sido este punto de giro en el que nos hemos reconocido y hemos dado un vuelco al protagonismo que ejercíamos en nuestros ecosistemas. Hemos dejado de llenar el mundo para comenzar una tarea que aún nos llevará siglos: vaciarlo lenta y progresivamente. Lo mejor de todo es que Alex y Zuri son dos jóvenes como otros cualquiera, y eso no les excluye de pensar en la capacidad de agencia que tienen sobre el estado de su comunidad y el planeta. Cuando yo era joven estas cosas las pensaban los zurdos más quejicas y reaccionarios. Hoy la idea de cambiar el mundo ya no es una idea, es un ritual instalado en el día a día de todas.

### **Historia 9 – Story 9**

Es el año 2050. Alex entra en una sala de reuniones de su trabajo en una compañía en Europa. El resto de sus compañeros ya están reunidos para su reunión semanal. La situación en Europa había empeorado notablemente en el último cuatrimestre. De por sí era duro que una empresa sobreviviera más de un año, pero este había sido particularmente duro. Desde que entró en vigor el Tratado de Sarajevo de los estados miembros de la nueva unión europea, cualquier tipo de regularización privada había sido reducida a la decisión del CEO. Esto creó un tumulto de fraude, evasiones, falsas quiebras y un número de ilegalidades a los que Alex ya estaba acostumbrado; al fin de al cabo este era su 9o trabajo en lo que llevaba de año y era sólo Junio. Esta vez se le notaba optimista, para no estarlo había conseguido llegar a una reunión con los más altos ejecutivos. En su última empresa quedó de barrendero algo curioso, daba igual cuáles fueran tus aptitudes te ponías a trabajar de lo que pudieras. No tener un flujo de dinero era algo inconcebible, los pagos se amontonaban y Alex sabía que no conocía a nadie en Vienna donde residía de hecho no conocía a nadie en general todos sus amigos y familiares cercanos no

paraban de moverse a donde podían para poder sobrevivir había perdido totalmente el contacto. Pero la presión es algo a lo que Alex ya estaba hasta acostumbrado, entro en la sala de reuniones que hace no tanto era una sauna que el antiguo magnate usaba. La empresa se había movido ahí hace dos semanas y ni siquiera lo habían remodelado, no decía nada bueno acerca del nuevo CEO Bertrand que estaba sentado en uno de los bancos de madera. Su cara vieja y arrugada no parecía prestar ninguna atención a lo que Alex le presentaba: una múltiple inversión en algunas empresas locales. Según terminaba la reunión Alex vio que el interés en sus ideas era simplemente falso y burocrático. Muchas veces había visto como sus jefes asentían y después le llegaría una carta explicando que la empresa cerraría. Alex salió del alto rascacielos y pudo pararse a pensar ya no iba a poder hacer más en ese día. Echó unas monedas para poder sentarse en un banco. -Tengo que volver a mudarme a las 16 - pensó mientras leía los mensajes de la empresa que se encargaba de su alquiler. Y para intentar ahorrar tiempo se levantó y fue en dirección a su piso.

### **Historia 10 – Story 10**

Es el año 2050. Alex y Zuri están cogiendo el metro en una estación europea para volver a casa del trabajo. La situación en Europa mostraba que conforme iban pasando los años, la población iba en aumento. La población de los continentes iba creciendo y el espacio para los seres vivos cada vez iba siendo más pequeño. Se originaban proyectos para que los habitantes del planeta pudieran vivir en los mares y océanos. Eso conllevaba un desembolso económico que los distintos países tendrían que estudiar a fondo. El lado negativo de estos estudios es que debido a las pandemias sufridas en años anteriores habían dejado las arcas muy débiles. Era necesario que todos los países integrantes del planeta fueran en una misma dirección y que cada uno de ellos aportara lo que sus arcas permitieran. Según la demografía de los países así tendrían que aportar, si fuera posible. Hay que pensar que el beneficio sería global. El objetivo sería que todos pudieran vivir con buenas expectativas

## Appendix H. Thematic Analysis of the Interviews

| Theme                        | Description                                                                                   | Quotes Interviews                                                                                                                                                                                                                                                                                                                                              | Participants | Story    |
|------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|
| <b>ABSORPTION EXPERIENCE</b> |                                                                                               |                                                                                                                                                                                                                                                                                                                                                                |              |          |
| AC                           | The reader experiences absorption through the character's description and attributes.         | <i>"Well, it seems a lot like what is happening now these days. You know with the subject of COVID, and also with the mask. I was very much in the story. Because of course, that is also happening to us right now"</i>                                                                                                                                       | P1           | Story 1  |
|                              |                                                                                               | <i>"Possibly when he misses or compares the way of relating to people [...], that difference of interrelation or relationships. One, more physical and closer contact, and the other, which is the one that lives at that time as more of a distance and using technological means "</i>                                                                       | P4           | Story 1  |
| ASW                          | The reader experiences absorption through the attributes and descriptions of the story world. | <i>" The technical possibilities "</i>                                                                                                                                                                                                                                                                                                                         | P1           | Story 1  |
|                              |                                                                                               | <i>"Everything that is said about Europe. And about the ancient ideas of how man thought he was the, so to speak, the God of the earth. And now we are realizing that if we do not integrate, we will perish with that"</i>                                                                                                                                    | P2           | Story 8  |
|                              |                                                                                               | <i>" That we have to be in tune with the planet, with the species, both with all-natural species and with the planet itself as well as geologically "</i>                                                                                                                                                                                                      |              |          |
|                              |                                                                                               | <i>" I believe that how the continents were growing as well as the living beings. The space for living beings was getting smaller and smaller and then that about the coffers, because I felt like listening to the news from Spain, like the money from the coffers is non-existent. There is no money for retirees anymore and Europe is sending money."</i> | P3           | Story 10 |
|                              |                                                                                               | <i>" They are current problems "</i>                                                                                                                                                                                                                                                                                                                           |              |          |
|                              |                                                                                               | <i>" It describes what shocks him and he sees a bit of contrast. And I consider it important in society not to depend so much on technical means to communicate and interact, and more so to participate in contact and physical and close relationships."</i>                                                                                                 | P4           | Story 1  |
|                              |                                                                                               | <i>"That we all go in the same direction."</i>                                                                                                                                                                                                                                                                                                                 | P5           | Story 10 |
|                              |                                                                                               | <i>"We live in a society where we all have to be with the same objective to achieve common benefits"</i>                                                                                                                                                                                                                                                       |              |          |
|                              |                                                                                               | <i>"It is something that as we are now can happen. I know that the population is increasing."</i>                                                                                                                                                                                                                                                              | P6           | Story 10 |
|                              |                                                                                               | <i>"We are going to have to adapt to other kinds of lives."</i>                                                                                                                                                                                                                                                                                                |              |          |
| <b>FUTURES' PLAUSABILITY</b> | PF                                                                                            | <i>"Perhaps because of the fact that we are in right now in this pandemic situation."</i>                                                                                                                                                                                                                                                                      | P7           | Story 3  |
|                              |                                                                                               | <i>"The year that we have been in a pandemic has perhaps brought out many more things, from my point of view, positive or good"</i>                                                                                                                                                                                                                            |              |          |
|                              |                                                                                               | <i>"Well, we already have pandemics, right?"</i>                                                                                                                                                                                                                                                                                                               | P1           | Story 1  |
|                              |                                                                                               | <i>"It seems to me that it is the only possibility there is that human beings continue to live on Earth"</i>                                                                                                                                                                                                                                                   | P2           | Story 8  |
|                              |                                                                                               | <i>"Right now, it is a current problem and it is no longer the media, but rather specialized people the ones foreseeing that this is going to increase"</i>                                                                                                                                                                                                    | P3           | Story 10 |
|                              |                                                                                               | <i>"For the journey we have taken in society and after this pandemic that we still have, and according to scientists and the world health world predict, it will not be the last pandemic suffered by humanity"</i>                                                                                                                                            | P4           | Story 1  |

|                               |                                                                                                      |                                                                                                                                                                                                                              |    |          |
|-------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------|
|                               |                                                                                                      | <i>"With COVID now, I think there may be more pandemics, more viruses in the future"</i>                                                                                                                                     | P5 | Story 10 |
|                               |                                                                                                      | <i>"It is possible to compare the only thing that each country has to contribute according to what is possible. It is true that, due to the pandemic, there is not enough money to cover everything"</i>                     |    |          |
|                               |                                                                                                      | <i>"I think more pandemics."</i>                                                                                                                                                                                             | P6 | Story 10 |
|                               |                                                                                                      | <i>"Our Earth has tendencies. It has a tendency to defend itself. We are going through with it, well, that kind of pandemic thing is to maintain a little balance."</i>                                                      |    |          |
| IF                            | The reader thinks that the described future is implausible.                                          | <i>"I think that in Europe, we will not see any borders in many, many years. Maybe that can also happen. But now I think it cannot happen. At the moment I do not think that they will, as they say, unite the borders "</i> | P1 | Story 1  |
|                               |                                                                                                      | <i>"It's a bit difficult. I was thinking more about the language, because there are a lot of people who speak differently [...] so I think that it will be very difficult to join borders we can't speak among us "</i>      |    |          |
|                               |                                                                                                      | <i>"Man, these two together seem a bit incongruous to me too, huh? Because if there are pandemics it means that people die, if there are people dying, there is not so much overcrowding."</i>                               | P6 | Story 10 |
|                               |                                                                                                      | <i>"We are in the middle of a pandemic and there are still wars and massacres"</i>                                                                                                                                           | P7 | Story 3  |
|                               |                                                                                                      | <i>"There are some inequalities and they will continue to occur."</i>                                                                                                                                                        |    |          |
| <b>WILLINGNESS TO ENGAGE</b>  |                                                                                                      |                                                                                                                                                                                                                              |    |          |
| WE                            | The reader expresses his/her intention to engage in discussions about the futures of Europe.         | <i>"Because I think it's still quite important to talk about these issues and this is just from reading this story. Well. That has opened my eyes a bit."</i>                                                                | P1 | Story 1  |
|                               |                                                                                                      | <i>"Of course, I feel like it. If I can do something to make the future better and correct it, of course I will. But I really see it so, so difficult. I'm very sceptical."</i>                                              | P2 | Story 8  |
|                               |                                                                                                      | <i>"Let's see, I could give my opinion, but I don't think I had to be the person who gives his/her opinion, because I have no idea about this."</i>                                                                          | P3 | Story 10 |
|                               |                                                                                                      | <i>"Yes, of course. I would take part, maybe small, but as small any other person, right?"</i>                                                                                                                               | P4 | Story 1  |
|                               |                                                                                                      | <i>"Yes, I could get into any conversation. Now, if it is very specific and very political and very data-oriented, no, because I don't have it, I'm not very specific about it, nor am I interested."</i>                    | P6 | Story 10 |
|                               |                                                                                                      | <i>"I can speak maybe a mini part that I know a little more of, but about everything, I think that is too broad to be able to carry it out"</i>                                                                              | P7 | Story 3  |
| UE                            | The reader expresses his/her lack of intention to engage in discussions about the futures of Europe. | <i>"I don't know what to tell you, because it is not a subject that I have not talked about much and I have not considered. The future of Europe I have not considered."</i>                                                 | P5 | Story 10 |
| <b>PERCEIVED CAPABILITIES</b> |                                                                                                      |                                                                                                                                                                                                                              |    |          |
| SP                            | The reader is aware of his or her level of preparedness to deliberate about the futures of Europe.   | <i>"I feel well prepared because I believe that a good part of the problem we have is common sense. [...] If you apply common sense, the solutions you arrive at will be good."</i>                                          | P2 | Story 8  |
|                               |                                                                                                      | <i>"Let's see, I feel prepared because I have a higher education and an interest in reading."</i>                                                                                                                            | P3 | Story 10 |

|    |                                                                               |                                                                                                                                                                                                           |    |          |
|----|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------|
|    |                                                                               | <i>"Well, I don't know either, but I think I consider that as a European citizen or citizen of the world, we all feel, we all have parts to contribute in a society."</i>                                 | P4 | Story 1  |
|    |                                                                               | <i>"The problem is that I don't understand much about economics, politics either, so I don't know what I could contribute on this issue because I'm not very prepared."</i>                               | P5 | Story 10 |
|    |                                                                               | <i>"I don't feel well or badly prepared. I just give my opinion."</i>                                                                                                                                     | P6 | Story 10 |
|    |                                                                               | <i>"Now, if it is very specific and very political and very data-oriented, no, because I don't have it, I'm not very specific about it,"</i>                                                              |    |          |
|    |                                                                               | <i>"Well, let's see, I think I'm not a person who has a lot of knowledge of everything that is handled in Europe, on a specific topic maybe I can do my bit"</i>                                          | P7 | Story 3  |
| SA | The reader is aware of his or her level of agency to achieve desired futures. | <i>"And I think that, if we don't talk and if in the end nobody talks about the future of Europe, then things can happen anyway. Things we don't like."</i>                                               | P1 | Story 1  |
|    |                                                                               | <i>"That they are going to allow development of Europe towards better models of society, participation and of access to, well, even to an education, to justice, to a health system that is for all."</i> | P4 | Story1   |

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