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# “My Storyworld Possible Self”

## Evaluating Reader Responses to a Graphic Novel with a focus on self-transformation

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## Abstract

What happens when we read a book, watch a film, or engage with any fictional narrative resulting in the incredible experience of being carried away, often included by a strong feeling of identification with one or more characters. Reading fiction can have several benefits like a better understanding of other people and even sometimes a change in personality. Why do some readers engage strongly with a narrative while others do not? Reader engagement is widely studied and there are several theories about fundamental aspects like emotion, empathy, identification with a character, and self-transformation. However, a substantiated theory about how to measure feelings of self-transformation was lacking until recently. Martínez (2014) created the Storyworld Possible Selves (SPS) model in an attempt to explain self-transformative effects, related feelings, and the idiosyncrasy of reading experience. Using blending theory, she proposes that reader engagement increases (and results) from a "storyworld possible self", a conceptual integration of two mental spaces. Here, parts from the reader's self blend with the reader's mental representation of a perspectivising entity in the storyworld (be it a character, or the narrator). The current study tests this model empirically by using it as a tool to analyse reader responses to the graphic novel "City" from Wasco. The reader responses were elicited using a questionnaire and the answers were classified revealing the activation of self-schemas, and possible selves. The blending network activity was then used to explain self-transformative effects and related feelings. The results suggest that it is possible to shape the reader response into logically organized blending operations and selves which can be used to explain self-transformation, and to trace back emotions. These identified selves may be used in narrative therapy since they are self-conceptions. Moreover, knowledge about the linguistic representation of possible selves may help increasing sensitivity regarding language use (e.g. for therapy). Although the SPS model needs to be further validated, it offers a more operationalized approach to self-transformative feelings than previous research. The current study adds higher-order categories of identified selves to induce generalizations.

## 1. Introduction

Henry Miller once said about a book: "For me, *Siddhartha* is a more potent medicine than the new testament". What happens when we read a book, watch a film, or engage with any fictional narrative resulting in the incredible experience of being carried away, often included by a strong feeling of identification with one or more characters (Oatley, 1999, 2016; Martínez, 2014). Especially psychologists are interested in the positive effects of reader engagement with fiction, such as a better understanding of other people and even sometimes a change in personality (Oatley, 2016; Slater, et al., 2014; Djikic, et al., 2009). Among literary experts and normal readers, it is also well known that reading books can have positive effects. Not only can research provide evidence for their opinions about literature, but it can also explore *how* reader engagement works and *when* it occurs since it is believed to be a powerful tool (Martínez, 2014).

Engagement with fiction involves psychological processes where the reader enters the storyworld in his/her imagination, gives meaning to it and relates it to facets of the internal mind. Although having these processes in common, every reader responds differently to a narrative and the same scene can evoke a different mood for two individuals (Mar, et al., 2011). Similarly, one can have a self-transforming experience from a book, or identify strongly with a character, and someone else does not (Djikic, et al, 2009; Oatley, 2016; Miall, & Kuiken, 2002). In an attempt to conceptualize the phenomenon, Martínez (2014) created the Storyworld Possible Selves (SPS) model. The current study, which is a repetition of previous research, tests this model empirically to explore how readers differ in their responses to a graphic novel.

### 1.1. Reader response theory and the graphic novel

Firstly, it is important to keep in mind that only in the reader's experience the art comes to life. In research, there has been a need to consider the reader responses from the individual, "normal" reader and not only form literary experts (Schmidt, 2014; Martínez, 2018). Analysing a reader's response allows exploring the idiosyncratic experience that every reader makes while engaging with fiction. Rosenblatt (1978) suggested that the meaning of a text is built in a dynamic relationship between the reader, the text and the context. Therefore, a narrative is interpreted based on both personal experiences and socio-cultural information. For instance, a reader might sympathize with the rebel in a story when s/he once has been rebellious as well, especially when the social environment tolerates or supports this kind of behaviour. In accordance, studies revealed that people "have radically different types of

experience while reading" and "put their reading experiences in a societal context" while seeking insights into human nature (Moore, Schwitzgebel, 2018, p. 58; Curriculum, 2017 as cited in Schrijver, & Janssen, 2018). We assimilate the story into our conceptions about us and the world. Hence, analysing a reader's response can reveal something about the nature of a specific reader and his/her social environment.

A medium that fits greatly for the investigation of idiosyncratic reader experiences is the graphic novel. Jimenez and Meyer (2016) revealed that the meaning-making process within graphic novels is cognitively complex, systematic and highly reader-specific. Furthermore, graphic novels are claimed to be "more democratic notions of text, literary, and curriculum" (Botzakis, Savitz, & Low, 2017, p. 319). Supporting this claim, Meeusen (2017) wrote that they are less authorial directing with a greater degree of agency since the reader is more in control of the meaning-making process. She adds, "each representation allows for a different kind of understanding, but I would suggest that comics offer more opportunities for reader engagement, and thus perhaps a greater agency in the reading experience" (p. 127). For the current study where the individual reader experience is of interest, a graphic novel seems to be a sound tool to investigate reader engagement.

### 1.2. Reader engagement with fiction

The response to – or engagement with – a work of fiction can be a powerful resource in daily life. Harding (1962) wrote that a reader's response is empathetic and imaginative since the reader makes inferences about characters, their actions, and intentions. To shed light on this, Oatley (2016) described fiction as a simulation of social worlds that augments everyday consciousness. Just like a simulation on the computer, or a dream, the fictional world becomes a safe environment and functions as a model-like representation of the real world (although rather organized than chaotic). Here, readers can walk through and enter social contexts, also ones they might not encounter in real life. In this world, readers can be themselves but also another character in the story. They put aside their concerns and worries to engage in a process of identification with another character/another consciousness. To support this claim, brain studies revealed that mental processes involved in reading and everyday life share the same brain areas (Speer, et al., 2009). Moreover, studies revealed that reading fiction led to feelings of self-transformation, an improvement in empathy and theory-of-mind, which means "inference about what another person is thinking" (Mar, et al., 2006; Djikic, & Oatley, 2014; Oatley, 2016, p. 619). In the same way, a flight simulator helps pilots

to improve their flying skills, fiction, as a "mind simulator", helps readers to improve their social skills.

Considering the question when reader engagement occurs (or not), Oatley and Djikic (2017) propose three principles as entry points, namely emotion and empathy, character and identification, and feelings of self-transformation. Emotions can be seen as central to a fictional narrative, since these accompany the whole reading experience, even with consequences for the real world (Mar, et al., 2011). According to Miall and Kuiken (2002), those feelings can be evaluative (e.g. simply the pleasure of reading a short story), narrative (related to a specific fictional event in the form of empathy, or the vibe of a setting), aesthetic (related to the form and the general style), and self-modifying (related to the sense of self). Therefore, the reader (and writer) engages in an emotion-based exploration, which enables a better understanding of emotions with the self and others (Oatley, & Djikic, 2017; Miall, & Kuiken, 2002). For instance, a reader might experience past emotions in a new context (the storyworld), which in turn modifies them. As in real life, emotions are important because they mark what is significant in an experience (Oatley, 2016).

About the question of what mainly generates emotions, psychologists stress the role of empathy. According to Oatley (2016), "empathy can be thought of as having an emotion similar to that of another person" (p. 619). In the story world, it means to feel as if one were in the shoes of another character. Studies found that the more readers were willing to simulate the narrative, the more they had an emotional response (Johnson, et al., 2013; Mar, et al., 2011). Oatley (2016) describes this as the level of transportation, which means the extent to which readers are carried away, or dive into the storyworld. The more vivid the imagery, the more transportation occurs, which in turn leads to more empathy.

Character and identification include the notion that readers create mental models of characters and take on their perspective, emotions goals and intentions (Slater, et al., 2014; Djikic, et al., 2009, Martínez, 2016, 2018). Bortolussi and Dixon (2003) suggested that a work of fiction is a conversation in which people make inferences about what the counterpart is thinking, feeling and what personality s/he might have. Studies revealed that a third-person narrative stimulates spectating while the "first-person narrative favours identification" (Oatley, 1999, p. 445). The fact that we enter the minds of several characters during literary stories might be one of the most appealing factors for engagement because, in real life, you cannot simply get into another person's head. Finally, it is still the reader that experiences this process, which implicates the self and connections to internal processes.

What about feelings of self-transformation that people get while engaging with fiction? Self-transformative effects are recognized as a cognitive process in which people constantly regulate their idea of who they are (Slater, et al., 2014; Siegel, 1999). Those effects seem to be mediated by so-called self-modifying emotions that "restructure the reader's understanding of the textual narrative and, simultaneously, the reader's sense of self" (Miall, & Kuiken, 2002, p.223). These emotions are not prompted by the writer, but rather arise from the reader's own self-concept, although they do not seem to occur in every reader.

Some authors suggest that indirect communication and artistic properties play major roles in this phenomenon (Djikic, & Oatley, 2014; Kierkegaard, 1846). Indirect communication means that the writer does not persuade the reader to get a certain outcome, but rather provides cues and invites the reader to make his/her own inferences about a subject matter (Kierkegaard, 1846). Furthermore, studies revealed that people indicated fluctuations in their personality only if the text was judged as being artistic. It seems like the level of literariness (in terms of being artistic with complex characters) influences the degree of immersion and thus, the level of self-transformation (Djikic, & Oatley, 2014; Oatley, 2016). Moreover, studies "imply a process in which the artistic component of literature temporarily unfreezes one's [relatively stable] personality system, as its narrative components allow the person to incorporate others experiences in their own personality system and restabilize it" (Oatley, & Djikic, 2014, p. 501).

This leads to an indication of the individuality of reader responses and self-transformative feelings (Miall, & Kuiken, 2002; Oatley, & Djikic, 2014; Oatley, 2016; Martínez, 2018). There are studies in which readers gave different meanings to the same short text passage (Miall, & Kuiken, 2002). Hence, on an experiential level, the readers connect the fictional world to their own thoughts, experiences, and emotions. As Oatley and Djikic (2014) put it, "Literature can help us navigate our self-development by transcending our current self while at the same time making available to us a multitude of potential future selves" (p. 503). As already mentioned, the idiosyncrasy of the reading experience is of special interest to the current study.

Despite the above-mentioned approaches to the phenomenon of being carried away by fiction, there has been dissatisfaction in literature (it is, however, worth to mention that these approaches definitely paved the way for future research). Especially, with regard to feelings of self-transformation, some authors mention the need for a more sophisticated and operational model. A model that conceptualizes, what exactly happens, when we "immerge" from the real world into the fictional (Mar, et al., 2011; Miall, & Kuiken, 2002; Martínez,

2018). These worlds seem to blend, and with regard to the reader and fictional characters, there appears to be a blurring between the self and others (Ames, et al., 2008; Oatley, 2011). Here, only parts from the reader's self seem to be transported into the story world and, somehow fascinating, all these processes are elicited through linguistic cues presented by the writer (Mathies, 2019; Caracciolo, 2018; Martínez, 2014). Substantiated theory about how to measure feelings of self-transformation, and related processes of immersion, was lacking until recently.

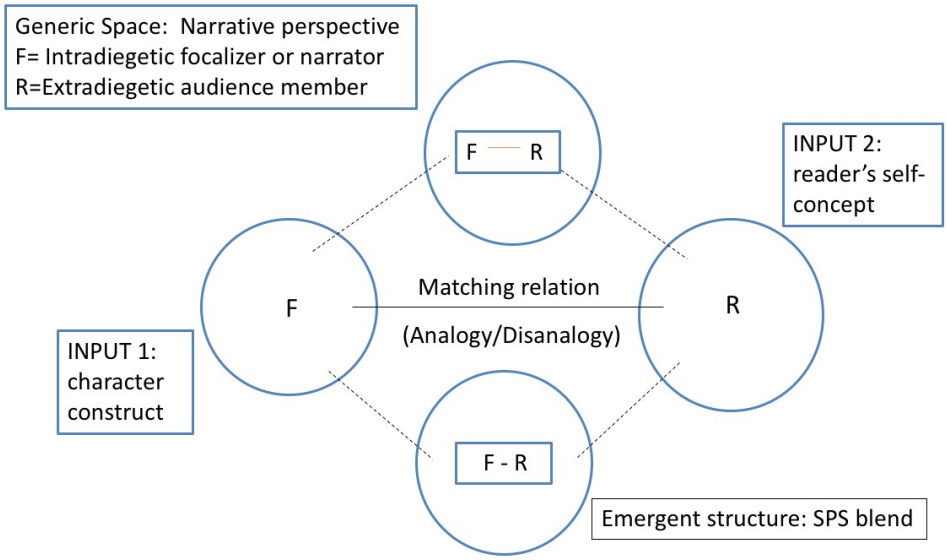
### 1.3. Storyworld Possible Selves (SPS)

Martínez proposes the SPS model to conceptualize the missing aspects of reader engagement mentioned above and to fill the gaps. According to this model, the reader projects him/herself mentally into the storyworld in the form of a so-called blend where parts from the reader's self-concept merge with parts from the character in the story. There must be at least one common feature between the reader's self and the character, otherwise, the reader is less likely to engage with the character and thus might lose interest in the story. Martínez (2018) wrote: "In its basic form, SPS blend is a construct which emerges from the conceptual integration of two mental spaces" (p. 19). The two mental spaces are the reader's self and a self in the storyworld, hence a Storyworld Possible Self (SPS) is a hybrid mental construct. A SPS blend seems to be related to what Mathies (2019) calls 'the doppelgänger function' meaning "a monitor, constantly switched on, alerted to find relations between the reader and the fictional other" (p. 13).

The SPS model is based on conceptual integration, also called blending theory. According to Fauconnier and Turner (2003), a basic blending network has four mental spaces: a generic space, two inputs, and the blend (see fig. 1). Conceptual matching features from the input spaces are projected into a new mental space, the emergent structure: the blend. Hence, the blend contains both features from the inputs, but also new distinct features. Once formed, the new features may be projected back into the inputs, thus modifying them, too. This is called backwards feature projection. The generic space holds schematic knowledge about the two inputs. According to Martínez (2014), blending theory "may serve to explain the "personal, interactive, and creative experience that narrative engagement is believed to be" (p. 116).

Figure 1.

*Basic SPS blending network (Martínez, 2018)*




The two input spaces refer to the character/focalizer and the reader's self-concept. In other words, the fictional entity that exists in the storyworld, and the "I" that exists in the real world. Therefore, character refers to the mental construct of a person in the storyworld which appears to be similar to the construction of a real-world person. Focalizer simply means the entity of whom the perspective is taken in the story (often, the point of view from several characters is described in the literature). Throughout the story event, the reader collects information about a character, and this mental picture may vary due to narrative changes, but also through the process of conceptual blending (see backwards feature projection). In the case of a graphic novel, the first input space consists mainly of outward appearances, of what a reader identifies on a certain picture.

The reader's self-concept can be described as "a complex mental structure of the self containing episodic, semantic, and procedural knowledge, built from our interaction with the physical and the social world" (Martínez, 2014, p. 117). Basically, it consists of two parts, namely self-schemas and possible selves.

Self-schemas are generalized cognitive beliefs about the self, "derived from past experience, that organize and guide the processing of the self-related information contained in an individual's social experience" (Markus, 1977, p. 63). They are, so to speak, expectations of how a person will think, act and feel in a specific behavioural domain and they are relatively stable. People have several self-schemas, i.e. the "self at work", the "self with friends", or the "self in a romantic relationship". They can include "physical characteristics, personality traits, social and professional roles, gender, ethnicity, ideology, skills, or particular interests and hobbies" (Martínez, 2014, p. 118). Hence, self-schemas are confirmed

by actual social experience and they build the general structure for possible selves which, according to Erikson (2007), are situated instantiations of the self-schema.

Possible selves are more or less specific conceptions of ourselves in future situations including a certain degree of agency. They represent peoples' "ideas of what they might become, what they would like to become, and what they are afraid of becoming" and act as incentives for future behavior, i.e. selves can be desired and undesired (Markus, & Nurius, 1986, p. 954). A desired possible self might be the "social self" (the self that sits in a room with many close friends), an undesired the "lonely self" (the self that sits alone in a room and has nobody to call). In contrast to self-schemas, possible selves are not confirmed by social experience. However, there are also past possible selves that are possible selves to the extent that they may define an individual again in the future, e.g. the "self that was bullied (in school)". There are special instances of past possible selves, called past storyworld possible selves (past SPS). These are previous blends, or projections of the self in storyworlds in the past. A blend, once established, can intervene with further blending operations and past SPSs seem to have emotion enhancing effects (Fauconnier, & Turner, 200; Martínez, 2014). Finally, possible selves are more prone to changes compared to self-schemas.

The self-concept is often labelled "working self-concept" since its parts are constantly moving. Hence, the self-schema influences possible selves and vice versa (Erikson, 2007). For instance, an environment-conscious self-schema judges the possible self of sitting in an airplane differently than the self-schema of a fast traveller that can be everywhere. The selves that are activated during a reading experience are projected into the SPS blend. Finally, the dynamic nature of the working self-concept, and the chance to represent its parts mentally, allows the connection to mental representations of features form fictional characters.

Concerning narrative immersion and self-transformative feelings, the SPS model seems to have explanatory power. Since blending structures are networks, they constantly influence each other. Through backwards feature projection, the structures of the input spaces are altered and therefore, an activated possible self can alter profound structures of the working self-concept. This may result in feelings of self-transformation, and projections back into the mental model of the character/focalizer may explain the idiosyncratic interpretations.

Other explanations for emotional responses may come from the working self-concept. Considering the previous example, the self-schema of being environment-conscious may be challenged by the possible self of flying with a plane. This can result in an unpleasant emotional response. Moreover, approaching or avoiding a desired, or an undesired self can evoke emotions as well. If I have a desired possible self of performing good music in front of

others, approaching it through practice can evoke positive emotions. To conclude, the SPS model seems to be a good tool to explore reader response, not only in linguistic analysis but also in terms of tracing back emotions and self-transformative processes. As Herman and Vervaeck put it "the storyworld possible selves approach has the advantage of not being exclusively tied to feelings *for* characters but instead embraces readers' own feelings about themselves" (pp. 203-204).

There has been previous empirical research concerning the SPS model by Herman and Martínez (2019) wo tested the model as an analytical tool. They collected reader responses to the graphic novel "City" from Wasco (see Appendix). The protagonist of the story whose appearance is neutral (in terms of gender, age, social class, or nature) is accompanied by a dog-like creature. They land in a city in what readers familiar with science fiction may identify as a spaceship. Hence, the story might be interpreted as a space exploration story Afterwards, they walk around the city and seem to explore it. This may also remind readers of tourism, especially for those not familiar with science fiction. Furthermore, they eventually arrive a place that may be interpreted as a cemetery which may trigger a feared possible self in an apocalyptic scenario. In the end, they go back to their spaceship and fly away.

The participants form the above-mentioned study answered a questionnaire and within these responses, Herman and Martínez identified several selves. Moreover, they identified primary SPSs and secondary SPSs (slipnets). Primary SPS are selves that occur frequently, they are shared by many readers. Slipnets in contrast, occur only one time which means that they are strongly personal and idiosyncratic. The selves, they found that were collectively shared, were i.e. the "traveller" self, the "tourist" self, the "lonely" self, or the "barren earth" self. Relatedly, they identified linguistic cues that may reveal the activation of selves and they connected the blending network activity to emotional responses. Their results seem promising concerning the explanation of self-transformative feelings and regarding linguistic analysis.

### 1.4. The current study

In the psychology of fiction, the SPS model intends to explain the aspect self-transformative effects (and related feelings) of reader engagement. Since the model seems to have explanatory power regarding this scope, the purpose of the current study is to test the model empirically. The model is used as a tool for analysing reader responses to a primer, namely the graphic narrative "City" from Wasco. The objectives are to get further insights into how different students respond to the narrative and to see how far the SPS model might explain

self-transformation. To get an overview, the research question and sub-questions are illustrated below.

- How do students respond to the graphic novel "City" from Wasco?
    - What interpretations from the students can be identified for the character/focalizer input space in the SPS model?
    - Which selves from the students can be identified for the reader input space in the SPS model?
    - How do the students' reader responses look like in terms of the SPS blending network?

## 2. Method

### 2.1. Participants and recruitment

For this study, 12 participants were recruited in total. However, since there were two researchers, partly collaborating, writing a paper about this study independently, the number of 12 participants was split in half, so that both had 6 participants for their analysis. Therefore, in this study, 6 participants with an age range from 20 to 25 (mean age 23) were recruited by convenience sampling from the networks of the two researchers. The inclusion criterion was to be a university student and command of the English language. The subjects participated voluntarily and signed a consent form (see appendix).
The sample consisted of 3 females and 3 males, 5 of them were German and 1 female was Ukrainian. Their fields of study are Biology, Politics, Economics, Landscape Architecture, Soil, Inland Waters & Contaminated Land, and Tourism Management.

### 2.2. Materials

#### 2.2.1. Procedure

The study has been approved by the BMS Ethics Committee and the ethical approval number is 191219. The study was conducted at the participants' houses in a quiet room without distractions. Here, it should be acknowledged that distractions may lower concentration and thus interfere with reader engagement. As the study began, it was explained that the study is about reader responses to a graphic novel and that the subjects will get the novel and a questionnaire to answer. The explanation of the study was kept vague on purpose, to avoid possible response bias. Then, the subjects received the informed consent where they also indicated their age, gender, and nationality. It was explained that there would be no time limit for the study, that it might take 40 to 60 minutes, and that the subject could ask questions for

clarification and withdraw from the study at any time. After signing the informed consent, the graphic novel and the questionnaire were given. Only after the study was finished, the whole purpose of the exercise was explained to the participants, if requested.

### 2.2.2. Graphic novel

A printed colour version of the graphic novel "City" from the author Wasco in the size of A4 was used (see Appendix). It consists of 20 pictures, each having a particular scene on it. As already mentioned, a graphic novel offers many opportunities, since there is room for interpretation and it is highly dependent on the reader. Hence, it may serve to elicit idiosyncratic reader responses.

### 2.2.3. Questionnaire

A printed version of an open-ended questionnaire, derived from Herman and Martínez (2019), was used to gather individual reader responses. It was designed to elicit responses concerning self-transformative effects and it consisted of five tasks. The first task was to retell the story using own words with a limit of 250 words. For the second task, the participant should think of speech bubbles for panel 1 to 18. The third task consisted of eight open-ended questions, such as "Have you ever felt like this? Explain", or "Write two sentences containing the word 'should' that come to your mind after reading the story". For the fourth task, the participant had to rank the likelihood of scenarios addressed in the story (tourism/space exploration/other) using a 5-point Likert scale. Finally, the fifth task asked to complete three given sentences (e.g. "In the near future I expect humans…").

### 2.2.4. Data analysis

The analysis was based on the method from Herman and Martínez (2019). In principle, the answers to the questionnaire were thought to contain information relevant for the two input spaces (see fig. 1). On the one hand, information about the character/focalizer and on the other hand, information revealing the activation of parts from the reader's individual self-concept (self-schemas, un/desired-, past-, possible selves, and past storyworld possible selves). The objective was to identify this information and to reconstruct the reading experience with regard to self-transformative effects and related emotions.

Before starting the actual analysis, both researchers tested the analysis to establish an intersubjective agreement. For this purpose, one participant was selected and both researchers independently scanned the text to identify selves. Then, the suggestions were compared and

possible misconceptions were discussed. For instance, it was noted that a clear description of the selves was required to ensure a plausible analysis and to prevent creating selves that were actually something else (e.g. simply feelings). Especially for possible selves, it was important to keep in mind that the definition should include a (more or less) specific scenario with a certain degree of agency (e.g. "the self that sees how destroyed and barren the landscape is" instead of "living on a barren earth"). Accordingly, a list with all the selves and their definitions was provided in the result section. Concerning the coding scheme, which is further elaborated below as the second step in the analysis, the process started with the selves defined by Herman and Martínez (2019). Then, the list was refined using a combination of inductive and deductive analysis and finally, clusters of higher-order categories were created to have a more manageable coding scheme.

In the actual analysis, there were four steps. Firstly, the answers were scanned for information regarding the character/focalizer input space. In other words, about how a reader interpreted the actual events in the story concerning outward appearances and perspectival alignments. This information may be the gender, the species of the character, or the fact that some participants identified a place as a cemetery, while others saw a park. According to blending theory, this input space can be influenced by the second, the reader input space.

As the second step, the reader input space was defined, which means that the activated selves were derived from the answers based on linguistic patterns. Since the relevant information could be found scattered all over the answers, the identification of selves was a relatively open approach. The starting point was some already established criteria given by Herman and Martínez (2019). With regard to self-schemas, this included *present tense assertions about the self* and/or *general wisdom* (inclusive *you*, *one*, and *we*). Therefore, if a person wrote "I love travelling so much", it was deduced that the person has the "traveller-self" as a self-schema. The same, if the person wrote "the character seems to like travelling", or "*you* always experience this while travelling". In the last sentence, the word "always" was also considered as a hint for self-schemas. Furthermore, attention was paid to the *type of open question*, i.e. Q1 asked to describe the character, which lead to assertions about the self.

Desired possible selves were identified based on the use of *counterfactual projection* and/or the word *should.* For instance, someone may write "I should travel more often", or "I expect that humans finally learn to live in balance with the earth". In the latter case, the self might be labelled the "in-harmony-with-nature" self with the definition: "the self that stands in the forest and sees how humans are living in groups in balance with nature". Here, it was sometimes necessary to find cues that indicated whether the self was desired, or undesired

(e.g. the character being sad about the barren city). Moreover, Q3 asked: "Would you like to have a similar experience? Why? Why not?", which was used as a trigger for desired, or undesired possible selves. However, when the answer included a present tense assertion about the self, it was also considered as a self-schema (e.g. "I've always been curious about travelling").

Regarding undesired possible selves, the linguistic realizations were *varied*. Here, a self was considered to be undesired, whenever the cues were present. Those cues could be counterfactual projections, (e.g. "I expect the world to collapse because it seems like everything is going to be worse") but also *assertions/statements*. A statement might be a comment about the character, i.e. "the character seems *unhappy*" when simultaneously a self was expected to be activated (e.g. the "lonely" self). The word unhappy is possibly a hint for an undesired possible self. Sometimes, it was not clear if the self was desired, or undesired. In that case, the self was simply labelled "possible self".

Past possible selves were identified through the use of *past tense* and especially, through Q4, namely "Have you ever felt like this? Explain". An answer might be "Yes, whenever I visited a foreign city". Then, the "tourist" self was considered a past possible self. About past SPSs, the linguistic realizations were mainly *lexical,* i.e. references to "a spaceship", or explicit names of a film/fictive story. Considering all the selves, the names were taken from Herman and Martínez (2019) when appropriate, as already mentioned. The outcome of this second step was a table of the coding scheme, a table of clusters of higher-order categories, and the distribution of selves. The higher-order categories were created using card-sorting (selves were printed on cards and arranged in clusters).

As the third step in the analysis, the primary and secondary SPSs (also referred to as slipnets) were determined. On the one hand, the primary SPSs are the most frequently occurring selves. These are selves that are collectively shared by many people, thus are more predictable. For instance, most people in western society at the age of 20 can easily blend with a character being an excited tourist or traveller resulting in a desired possible self. On the other hand, the slipnets are selves that occur only one time and these are more personal, strongly idiosyncratic, thus unpredictable. A reader for example, that was kidnapped during a travel, or had a near-death-experience during a city trip may react differently to a story than the majority of readers.

As the final step, the whole blending process was reconstructed for each participant. This process included the salient self-concept feature projected into the blend, the backwards feature projection into the character input and the response (see fig. 1). Firstly, the salient self-

concept features were determined. Those were the activated selves projected into the blend that obviously coloured the whole reading experience. Identifying those included looking for reoccurring themes in the answers, i.e. one participant repeatedly mentioned "disappointment". Hence, disappointment-related selves were considered as salient ones. Furthermore, the answers to Q2, which were the emotional responses to at least four panels, were used as well (these were also put in a table in the results section). Special attention was paid to P17 [character sitting on a bench] because it was considered as an operator for mental activity. Using these emotions, the salient selves were inferred.

Secondly, features from the blend are projected back, according to blending theory. Therefore, the character input space was influenced by the salient selves. To identify this backwards feature projection, the data of the first input space was scanned for obvious colours that came from the salient selves. To give an example, a salient past self that experienced social inequality may direct the reader to interpret the city as having a rich and a poor district. Finally, the response is an illustration of emotions and feelings of self-transformation using the model and the data. Here, the whole reading experience was reconstructed in the form of activated selves and corresponding emotional reactions (e.g. "the xx self that wants to travel, gets blown away by a past self that experienced disappointment, and re-lives the emotion of disappointment and sadness"). Based on these responses, general conclusions were drawn.

## 3. Results

Given the research question, how do readers respond to a graphic novel, the following section contains the summarized data for the blending process. The two input spaces, namely the character/focalizer- and the reader input space, are displayed, and finally, a reconstruction of the blending process as a whole is given with regard to feelings of self-transformation and fresh emotions.

### 3.1. Character/focalizer input space

The first input space is filled with the readers' general interpretations of the story event. As already mentioned, it is about what the readers were seeing on the pictures and how they perceived the scenery and the characters (mainly outward appearances). To give an impression, the similarities and differences are summarized below.

Most of the students describe a person and a dog arriving with a "UFO" or "Flying Saucer" in a city. S3 identifies the two coming from different parts of the city with no reference to any vehicle at all. The person is seen as a human by half of the students, while

the others see a wizard, the Sandman, or do not specify. S2 and S6 also stress that it is not possible to tell the person's gender, or that it is genderless. The city is referred to as "strange-looking", having a "weird and unnatural", "futuristic" or "impressive" architecture by most of the students.

The person and the dog walk across what looks like streets with "openings in the concrete walls and floors", when they suddenly spot a yellow bird and run after it. S3 mentions that the bird comes from another district of the city. As they move on, some students identify a gate which is, according to S3 and S5, marking the entry point to another part of the city. Afterwards, they cross a bridge described as being very high by S1 and S2. When the character stands on the bridge and looks at the city, only S1 refers to a "weird chair" that is on top of a bunker.

After the bridge, the person and the dog arrive at a place that is full of sculptures and paintings. S1 and S4 describe the place as a museum, S2 as a "park of futuristic sculptures and other modern art" while S3 refers to the other district of the city. It is also striking that S1 perceives the sculptures as "rubbish" and S6 as "impressive". Then, they look at what seems like a polluted river with dark liquid which is described as "disgusting", "toxic" and looking "like death". Afterwards, they visit a place that S2 and S4 identify as a graveyard, while the others see a park, except for S1 who describes the place as the wall of the gate. Finally, they sit on a bench which most of the students see as taking a short break, where some display an operator of mental activity. For instance, S3, S4 and S5 realize that this is not the right place to live and decide to find a better one. In the end, they go back to the spaceship and fly away.

### 3.2. Reader input space

The second input space includes data that is supposed to reveal the activation of readers' self-schemas, possible selves (desired and undesired) and past SPSs. Therefore, the identified selves and their distribution, are presented below. It is shown, which selves were found overall in general and, for each participant, which selves occurred in the individual reader response.

The coding scheme is represented in Table 1 and it includes the suggested selves, their proper definition and the linguistic realizations in the participants' answers. Some of the selves are both self-schema and a more situated possible self (here possible selves include possible-, desired-, undesired- and past possible selves). Those are *the curious self, the traveller self, the animal-lover self, the environment-conscious self, the lonely self, the tourist self, the uneasy self, the lonesome explorer self, the lost self, the helping self,* and *the art-*

*appreciating self.* To give an impression, the definitions and the linguistic realizations are listed alternately for self-schemas (SS) and possible selves (PS). For instance, *the unjust world self* shows information about a past possible self. The past storyworld possible selves (previous blends) are also included in the table. The total number of selves is 36.

Table 1.

*Selves Descriptions and Linguistic Realizations*

| Selves | Definition | Linguistic realizations |
|---|---|---|
| The "curious" self * | The self when it is curious and knowledge hungry regarding novel situations and exploring unknown places (SS) | "He doesn't seem to have a specific reason to visit the city, except his own curiosity" (S2: Q1) (SS) |
| The "traveller" self * | The self when it is travelling. (SS) | "I enjoy exploring unknown places and seeing new things. Especially unknown cultures have always been interesting to me" (S1: Q4) (SS) |
| The "animal-lover" self | The self that is vegan and stroking a dog. (PS) | "Animals should be treated with more respect, even if that meant giving up comfort for mankind" (S1: Q7) (PS) |
| The "nature-loving" self | The self when it is in nature and loves it (it believes in nature). (SS) | "P6, because there is still a bit of life in this city and it confirms my belief in nature" (S6: Q8) (SS) |
| The "environment-conscious" self | The self that is in a situation where it acts consciously regarding its environment (e.g. choosing not to travel by plane). (PS) | "People should stop putting themselves over the environment" (S1: Q7) (PS) |
| The "lonely" self | The self when it is in solitude (SS) | [P2]: "There are not so many people living in this district and I'm always lonely" (S3: Task 2) (SS) |
| The "tourist" self * | The self when it is visiting a foreign city, or place. (SS) | "It reminds me of the human activity of sightseeing in a foreign city" (S2: Q5) (SS)<br>(Q3: Have you ever felt like this?)<br>"Yes, whenever I've visited a foreign country and I've gone on a city tour, I've gone through similar range of emotions" (S3: Q3) (PS) |
| The "mortal" self | The self that is aware of its own mortality. (SS) | "P16 [standing on the cemetery]: [the character feels]: Tranquility [reason] The graveyard/monument confronts him with his own mortality"<br>"Panel 16, because it suddenly breaks up the childish excitement that characterized the panels before that" (S2: Q8) (SS) |

| | | |
|---|---|---|
| The “uneasy” self | The self when it feels uneasy in several contexts (e.g. when it is too focused on what others expect of it). (SS) | “When it comes to me, the emotion of feeling uneasy mostly has something to do with me as a person and how I see myself (…) Since I’ve always been too focused on what others expect of me” (S1: Q3) (SS) |
| The “lonesome explorer” self | The self that walks through a novel city, sees the architecture and explores it alone with a childlike curiosity. (PS) | “Cities should be explored alone, with a sense of childish curiosity” (S2: Q7) (PS) |
| The “social” self * | the self when it is in company of others and enjoys it. (SS) | “The character in red is sociable since he appears to be sad that he does not get to meet people in the unknown place” (S1: Q1) (SS) |
| The “lost” self | The self that is at a new place, looks around and realizes that it is lost and needs to find its own way. (PS) | [Q4: Would you like to have a similar experience?] “I also like getting lost. Not knowing where you are and trying to find your own way has always seem appealing to me” (S1) (PS) |
| The “city” self | The self when it is living in a city. (SS) | “It reminds me of (…) living in a city, because you can feel this alone, even if there are people around” (S6: Q5) (SS) |
| The “helping” self * | The self when it is helping others. (SS) | “The sandman is a very helpful and curious person” (S4: Q1) (SS) |
| The “ignorant” self | The self when it does not relate to reality and ignores bad things. (SS) | “He is not able to grasp, why there are no people in the cities – as he is living in his own world and can’t relate to reality. He is kind of ignoring the bad things in his and the dog’s life” (S4: Q1) (SS) |
| The “art-appreciating” self | The self when it is exposed to art, with interest and appreciation (SS) | “He seems to be interested in arts as he inspects all the sculptures and pictures that are in the city” (S1: Q1) “It reminds me of sightseeing/ going into museums/ but also living in a city, because you can feel this alone, even if there are people around” (S6: Q5) (SS) |
| The “expecting” self | The self when it has high expectations. (SS) | “He acts like an open, knowledge-hungry man. But also has big expectations” (S5: Q1) (SS) |
| The “aware” self * | The self that is exposed to polluted water and gets aware in a process of realization. (PS) | “In the near future I expect the world to get a little better because politicians start to realize how big of a problem climate change really is” (S1: Task 5) (PS) |
| The “resting” self | The self that is exhausted, sits down somewhere in order to relax. (PS) | P17 [sitting on the bench]: [the character feels] relaxed. [reason] He looks relaxed because he smiles as he sits on the bench. Furthermore, the |

| | | |
|---|---|---|
| | | long walk he took was probably very exhausting and he is happy to relax." "Relaxation also is something you feel when you are under stress or moving with your body. Biologically every human body needs rest. That's why humans sleep or people go on vacations" (S1: Q3) (PS) |
| The "adventurous" self * | The self that is walking outside in the middle of an adventure. (PS) | "He was very lonely and bored and didn't know a real life. All this adventures in life came from his friend dog" (S3: Q1) (PS) "P7 [chasing the bird]: [the character feels] excited. [reason] the lack of adventures" (S3: Q2) (PS) |
| The "belonging" self | The self that sheds a tear because it realizes that it belongs somewhere. (PS) | "P17 [sitting on bench]: [the character feels] Lost [reason] He feels that he doesn't belong to where he came from" (S3: Q2) (PS) |
| The "unjust world" self | The self that experienced inequality, e.g. seeing friends having unequal opportunities (PS) | "I also felt that some of my friends had a life that was full of challenges and very unequal" (S3: Q3) (PS) |
| The "friendly world" self | The self that witnesses a situation showing that people in general value friendship more than everything. (PS) | "In a far future I expect that people value friendship more than their social positions" (S3: Task 5) "The main point is that we live in a huge inequality that causes many problems in life and feelings of inferiority or superiority, anxiety and low self esteem" (S3: Q5) (PS) |
| The "sociable" self | The self that approaches a stranger because it wants to communicate and connect. (PS) | "Maybe the message is to communicate and connect with others, even though it takes some effort" (S4: Q5) (PS) |
| The "moderate" self | The self that lies in bed and thinks of what it has already in order to be satisfied with it. (PS) | "You should not expect so much and be satisfied with a few nice things" (S5: Q6) "I should be happy with what I have" (S5: Q7) (PS) |
| The "barren earth" self * | the self that sees how destroyed and barren the landscape of the earth is and that it is nearly impossible to live there. (PS) | "We are creating a world no one wants to live in anymore" (S1: Q5) "I think the story is kind of a dystopia of what can happen with the population when it comes to drastic climate disasters" (S4: Q6) (PS) |
| The "bored" self * | The self that is sitting at home alone, wants to do something but has no idea. (PS) | "Wizard was born in rich neighbourhood with a lot of money. He was very lonely and bored and didn't know a real life" (S3: Q1) [P1]: "My life is everyday the same, I am so tired of this" (S3: Task 2) (PS) |

| | | |
|---|---|---|
| The "excluded" self | The self that experiences exclusion from a group of people. (PS) | "No, I don't want to experience the feeling of exclusion and any inequality. Especially feeling bad for my friends" (S3: Q4) (PS) |
| The "disappointed" self | The self that gets disappointed by a person whom the self does not expect to be this way. (PS) | (Q4: Would you like to have a similar experience?) "No, the feeling of disappointment is one of the worst" (S5) (PS)<br>(Q3: Have you ever felt like this?) "Definitely. I think you can transfer the story to many life situations. Everyone has been disappointed once by a person, you thought who wouldn't."(S5) (PS) |
| The "clueless" self | The self that sits at a desk and wants to know something, but cannot. (PS) | I would find it sad to discover a place that is so deserted where one has to assume that living together might not worked out and a huge city was abandoned, but one does not know why and accordingly cannot learn from it" (S6) (PS) |
| The "disconnected-from-nature self" | The self that stands in a city surrounded by lots of technology and miles away from any nature. (PS) | "P6 [seeing the bird]: [the character feels] excitement. [reason] He discovers a bird" (S2: Q2)<br>"In the near future I expect humans to become less connected to the natural world and more dependent on technology, that will change our society completely (S2: Task 5) (PS) |
| The "changing world" self | The self that sees how people are stirred because the world is changing drastically in the face of climate change. (PS) | "In the near future I expect the world to undergo vast changes, especially ecological. The obvious reasons are climate change, the loss of habitats and biodiversity" (S2: Task 5) (PS) |
| The "space travel", "sci-fi" past SPS * | a previous blend in a sci-fi story where there has been a UFO/flying saucer | "A person, lands in a city in an UFO" (S1: Task 1)<br>"The novel describes the journey of these two characters through a strange looking city upon arriving with a flying saucer. It's not certain if the two come from a different planet" (S2: Task1) |
| The "magic" past SPS * | a previous blend in a magical story where there was a wizard | "The story is about wizard and dog" (S3: Task1) |
| The "Interstellar" past SPS | a previous blend in the movie Interstellar | "Even in movies like interstellar that became popular to a huge audience are hinting at Pollution and its consequences" (S1: Q6) |
| The "Sandman" past SPS | a previous blend with a story of the sandman | "As there were no other people or animals living in the city an UFO from another city landed with the sandman inside" (S4: Task 1) |

* *These selves were also identified in the study of Herman and Martínez (2019)*

After having the coding scheme, table 2 shows the suggested pattern among the selves and their spread (clusters and frequencies). The identified clusters are *Traveller selves, Environmental selves, Sociable selves, Expectant selves* and *Fiction past SPS.* It is striking that *Traveller selves* (n = 14) appear most frequently, followed by *Environmental selves* (n = 10) and *Social selves* (n = 9).

Table 2.
*Clusters and Frequencies of Selves*

| Selves and Cluster | Self-Schema | Possibles | Desired ps | Undesired ps | Past ps | Past SPS | Total |
|---|---|---|---|---|---|---|---|
| | n | n | n | n | n | n | n |
| Traveller | 5 | | 6 | | 3 | | 14 |
| - Curious self | | | | | | | |
| - Traveller self | | | | | | | |
| - Tourist self | | | | | | | |
| - Adventurous self | | | | | | | |
| - Lonesome explorer self | | | | | | | |
| - Lost self | | | | | | | |
| - Resting self | | | | | | | |
| Environmental | 3 | 1 | 3 | 2 | | 1 | 10 |
| - Aware self | | | | | | | |
| - Nature-loving self | | | | | | | |
| - Environment-conscious self | | | | | | | |
| - Animal-loving self | | | | | | | |
| - Disconnected-from-nature self | | | | | | | |
| - Barren Earth self | | | | | | | |
| - Interstellar past SPS | | | | | | | |
| - Changing-World self | | | | | | | |
| Social | 3 | | 4 | 2 | | | 9 |
| - Sociable self | | | | | | | |
| - Social self | | | | | | | |
| - Belonging self | | | | | | | |
| - Helping self | | | | | | | |
| - Friendly World self | | | | | | | |
| - Excluded | | | | | | | |
| - Lonely | | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Expectant | 1 | 1 | 1 | 1 | | 4 |
| - Expecting self | | | | | | |
| - Disappointed self | | | | | | |
| - Moderate self | | | | | | |
| Other | | | | | | |
| - Uneasy self | 1 | | 1 | 1 | | 3 |
| - Art-appreciating self | 1 | | 1 | | 1 | 3 |
| - Unjust World self | | | 1 | 1 | | 2 |
| - Clueless self | | | 1 | | | 1 |
| - Bored self | | | 1 | | | 1 |
| - Ignorant self | 1 | | | | | 1 |
| - Mortal self | 1 | | | | | 1 |
| - City self | 1 | | | | | 1 |
| - Magic past SPS | | | | | 1 | 1 |
| - Sci-fi past SPS | | | | | 1 | 1 |
| - Sandman past SPS | | | | | 1 | 1 |

With regard to the collectively shared, thus predictable primary SPS blends, and the personal, strongly idiosyncratic, thus not predictable secondary SPSs (slipnets), they are listed in table 3. The primary self-schemas are: *the curious self* (6), *the art-appreciating self* (3), *the traveller self* (2), *the animal-lover self* (2), *the nature-loving self* (2), *the environment-conscious self* (2), *the lonely self* (2), *the social self (2)* and *the tourist self* (2). The slipnets are: *the uneasy self, the aware self, the lonesome explorer self, the helping self, the "ignorant" self* and *the "expecting" self.* The possible selves are only slipnets, as they only occurred for 1 participant.

The primary desired possible selves are: *the environment-conscious self* (4), *the aware self* (2), *the animal-lover self* (2) and *the traveller self* (2). The slipnets are *the resting self, the curious self, the lonesome explorer self, the art-appreciating self, the adventurous self, the supporting self, the belonging self, the sociable self, the moderate self* and *the lost self.* The primary undesired possible selves are: *the lonely self* (4) and *the barren earth self* (4). Slipnets are *the uneasy self, the bored self, the excluded self, the disappointed self* and *the art-appreciating self.* The only primary past possible selves are *the tourist/traveller selves (3)* which are closely related. The slipnets are *the uneasy self, the unjust world self, the adventurous self, the disappointed self* and *the art-appreciating self.* Regarding the primary

past SPSs, there is only one, namely *the sci-fi, space travel past SPS* (4). The slipnets are *the magic past SPS, the Interstellar past SPS* and *the Sandman past SPS.*

Table 3.
*Primary SPSs and Secondary SPSs (Slipnets)*

| Idiosyncrasy +/- | Self-schemas | Possible s | Desired ps | Undesired ps | Past ps | Past sps |
|---|---|---|---|---|---|---|
| Different types | 16 | 1 | 11 | 8 | 6 | 4 |
| Number of students | 6 | 1 | 6 | 6 | 6 | 6 |
| Primary SPSs | Curious self (6), Art-appreciating self (3), Traveller self (2), Animal-lover self (2), Nature-loving self (2), Environment-conscious self (2), Lonely self (2), Tourist self (2), Social self (2) | | Environment-conscious self (4), Aware self (2), Animal-lover self (2), Traveller self (2) | Lonely self (4), Barren earth self (4) | Tourist/traveller self (3) | Space travel, sci-fi (4) |
| Secondary SPSs (Slipnets) | Uneasy self, Mortal self, Lonesome explorer self, City self, Helping self, Ignorant self, Expecting self, | Changing world self, | Curious self, Lonesome explorer self, Art-appreciating self, Resting self, Adventurous self, Helping self, Belonging self, Sociable self, Moderate self, Lost self | Uneasy self, Bored self, Excluded self, Disappointed self, Clueless self, Disconnected-from-nature self, | Uneasy self, Unjust world self, Adventurous self, Disappointed self, Art-appreciating self | Magic, Interstellar, Sandman, |

Table 4 shows the emotional responses of the character which the participants indicated in their answers. It is striking that all participants start with being curious, or excited.

Afterwards, S4 and S5 display emotions of disappointment while others show emotions like tranquility, or being confused. Since special attention was paid to Panel 17, because it is thought to be an operator for mental activity, it is striking that at least two students identify the character as being relaxed. Others seemed more emotional disrupted, i.e. S5 being disappointed and sad.

Table 4.
*Emotional Responses on Panels*

| Student | Emotions P6 | Emotions P7 | Emotions P16 | Emotions P17 | Emotions Other |
|---|---|---|---|---|---|
| 1 | Curious | Motivated | Lost | Relaxed | Uneasy |
| 2 | Excitement | Excitement/struggle | Tranquillity | Calm relaxation | Curiosity/Awe/Fascination |
| 3 | Curious | Excited | Sad | Lost | |
| 4 | Excited | Disappointed | Uncomfortable | Tired | Overwhelmed |
| 5 | Surprised and happy | Hopeful | Downcast | Disappointed and sad | |
| 6 | Excited, adventurous | Energized | Confused | Reflective, thoughtful | |

### 3.3. Reader response in the form of selves and emotions

With regard to the blending operation as a whole and related emotional responses, the suggested activity is summarized in the following for each participant. When reconstructing the activity for S1, the salient features projected into the blend are: the uneasy self-schema that activates an undesired possible lonely self fears a barren earth. This undesired barren earth self poses a threat to the environment-conscious self-schema. Moreover, a past traveller self gets activated, which in turn activates a desired traveller self, and the uneasy self thrives for a resting self.

The backwards feature projection to the character input space results in the character being confused by the strange city, the art and everything ("I really don't understand the architecture of this place. The bridge doesn't make any sense", "I don't like this place to be honest", "I don't get the pictures in this place, looks like complete rubbish to me"). Moreover, the character is sad about discovering the pollution ("this really makes me sad to see"), is exhausted by all the impressions and the walking, and is very happy to finally relax and leave the place ("Let's take a break, I'm exhausted", "the long walk he took was probably very exhausting and he is happy to finally relax", "Finally, let's get out of here").

Considering all activated selves, the reader response is constructed as follows. The social, animal-loving, curious self that wants to travel and likes getting lost feels curious and motivated. Suddenly, it starts to get uneasy as the fear of a barren earth and loneliness

threatens its environmental-conscious and social self. Suddenly, a past traveller self gets activated and the self remembers what it feels like to get lost. An art-appreciating self gets activated, but the salient uneasy self still dominates the story ("he also seems uncomfortable through the entire story"). The aware self and a previous blend with the movie Interstellar give the story an appealing tone to raise awareness about the climate. ("From my point of view the time to act is now because the world has already taken severe damage from all sorts of pollution and things need to be fixed instantly"). Here, an undesired barren earth inhabitant self wants to be avoided. Finally, the unwanted uneasy self that feels uncomfortable through the entire story, but wants to approach a resting self, finally gets relieved and feels relaxation when sitting on a bench. Especially, with the prospect of leaving the strange barren place soon.

For S2, the identified projected salient self-concept features are the curious, lonesome explorer self-schema that gets reminded of a past traveller/tourist self. Suddenly, the self-schema of a mortal being gets activated which leads to a desired possible self that is curious and a lonesome explorer somewhere. The backwards feature projection into the character/focalizer input space results in the character walking through the city as he would walk through a city as a curious, lonesome tourist ("They say this place has a nice city centre", "There aren't many people here at this time of the year. Time to take a better look at this place"). At the graveyard (Panel 26) he stops and thinks ("That's quite a lot of dead people", "[most striking panel] Panel 16, because it suddenly breaks up the childish excitement that characterized the panels before"). In the end, he says that he enjoyed the stroll and refers to "going home" ("What a nice stroll this has been.", "Time to go back home", "So what's for dinner?")

The response looks like this: the curious, lonesome explorer self that wants to travel, gets reminded of a past tourist/traveller self and enjoys walking through the streets as a tourist self. As the self loves nature, it gets excited when seeing a bird (the only life in the city). Throughout the stroll, an art-appreciating self gets activated. Suddenly, the self gets blown away by a self that gets aware of its own mortality which results in a feeling of "tranquillity". This activates an undesired possible barren earth scenario (also because there is almost no nature in the city) and in turn, an undesired future self that is disconnected from nature. However, the salient desire to be a lonesome explorer with a childlike curiosity even for everyday surroundings gives the story an undramatic tone. The mortal self-schema also reinforces the above-mentioned desire.

For S3, the identified salient self-concept features are the memory of a past self that experienced inequality, which triggers a desire for a possible self that belongs somewhere and an undesired possible self that lives in an unjust world. This, in turn, triggers a desired possible self that is helping whoever feels excluded. Due to backwards feature projection, the character experiences the city as having two districts, a poor and a rich one ("This story is about wizard and dog that were born in the same city but came from different social classes"). The character wants to see life on the other side of the social gap (where the dog comes from). In the end, the character and the dog leave the place to search for a better, just world ("Let's find the better place for both of us that would be more equal and livelier").

The whole response is: the lonely, curious self wants to avoid boredom and loneliness, and is looking for adventures as it remembers a past self that was looking for adventures, too. It feels curious and excited as an adventurous self is approached. Suddenly, the self realizes the social gap between people which evokes the feeling of sadness and activates the fear of a self that is excluded from others. The memory of a past self that experienced inequality enhances the fear of an undesired possible self that lives in an unjust world. Finally, the self feels lost and wants to approach a belonging self that is supportive.

For S4, the projected selves are an undesired possible self that lives in a barren earth, which threatens a desirable sociable self that communicates and connects with others and a social self. Finally, a desired helping self gets activated, despite the self-schema of being ignorant about the bad things in the world. The backwards feature projection leads to the character wanting to help and to connect with the dog ("let me help the dog in the other city – I hear his yelling every day"). However, the story of the two friends having a nice day turns into a dystopia and the character gets very confused by the barren earth ("what the fuck? This place looks very creepy! Why did all these people die?", "as he is living in his own world and can't relate to reality"). In the end, the character feels tired and they want to leave to find a better place ("I don't want you to be in this lonely city any longer – let's have a look if we find nicer places to stay"). The response is: the helpful, curious self ignores the problems in the world (to underline the feeling of alienation, a Sandman past SPS gets activated). It feels excited as it approaches a self that connects with others. Occasionally, it gets reminded of a self that was overwhelmed by beautiful artwork, but the social self eventually gets blown away by the fear of a barren earth scenario and of being lonely. This results in feeling uncomfortable and tired.

For S5, the salient features are: a self-schema with high expectations gets threatened by an undesired disappointed self and a past self that was disappointed. This, in turn, activates

a desired possible self that is more moderate. The backwards projection results in the character being excited first, but eventually gets very disappointed and sad ("don't know what to say. It looked so good, but…."). The self does not want to stay in the city and when it is leaving, the character feels the emptiness and loneliness of the city ("When leaving, only a feeling of loneliness and emptiness of the city is felt").

Concerning the response, it looks like this: the curious and open-minded self with big expectations explores the place, feels surprised and hopeful by discovering a bird, but gets disappointed over and over again by the barren place. This in turn, activates un undesired barren earth scenario and most significantly the memory of a past self that was disappointed by a person. The memory of the feeling of disappointment and the fear of becoming it results in a sad turn. This activates a possible moderate self that wants to be approached.

For S6, the salient self-concept features that were projected into the blend are the nature-loving self-schema that remembers a past traveller/tourist self. It gets threatened by an undesired barren earth scenario which triggers the curious self that wants to know the background. The lack of understanding activates an undesired clueless self. After backwards feature projection, the character is excited when seeing life (the bird) in a deserted place (Most striking panel: "P6 [seeing a bird]: because there is still a bit of life in this city and it confirms my belief in nature"). The character enjoys exploring the city ("There are so many things to discover!") but gets confused because it cannot find out what happened to the place ("This day was amazing, but I have so many questions"), ("I would find it sad to discover a place that is so deserted, where one has to assume that living together might not worked out and a huge city was abandoned, but one does not know why and accordingly can not learn from it").

The response is the curious self that knows what it is like to live in a city explores the place. The nature-loving self gets activated, the feeling of excitement gets evoked, and it remembers a past tourist/traveller self. Suddenly, the self gets confused by the empty and barren place which activates an environment-conscious self and an undesired lonely self that does not want a barren earth scenario. This activates an undesired clueless self because the self thrives for understanding. In the end, the self is excited by the exploration, but also thoughtful and reflective because it has many questions regarding the place and its destiny.

## 4. General discussion

The aim of this paper was to investigate students' reader responses to the graphic novel "City" from Wasco with special regard to self-transformation. Concerning this project, the

storyworld possible selves (SPS) model was tested since it is supposed to explain self-transformative effects and related feelings while reading (Martínez, 2018). When during a reading experience, parts from a reader's self-concept (self-schemas, or possible selves) get activated and blend with a character in a story (see 1.3), the reader's self-concept starts working. Hence, self-transformative effects may be explained with the activation of selves. A variety of selves were identified among the individual responses from the participants. The participants' self-concept activity shows similarities but also idiosyncratic patterns. Therefore, the results suggest that similarities and differences among the students' responses may indeed be explained by the SPS model.

In the following, the blending network is discussed, namely the character/focalizer input space, the reader input space, and the whole process regarding self-transformation (see fig. 1). Special attention was paid to the reader input space concerning the coding scheme (identified selves) and self-concept theory. Here, the results are compared with the previous study by Herman and Martínez (2019). Moreover, the strengths and weaknesses of the current study are illustrated. Then, the individual reader responses are discussed regarding the explanatory power of the SPS model when it comes to self-transformative effects and related emotions. Finally, key points of the discussion are summarized in the conclusion.

### 4.1. Character/focalizer input space results

Concerning the first input space, the readers interpreted the event and appearances differently, although more in some aspects than in others. Regarding things that were more obvious, i.e. the UFO, or the polluted water, readers' interpretations were similar. Besides, all readers identified the place as a city which might reflect the conceptual manifestation of "the urban" in the participants' heads. This manifestation seems to depend on the specific historical-geographical formation where it occurs (Hall, & Burdett, 2017). Since the vast majority of participants grew up in western, industrialized formations, the concept of the "industrialized city" might be accordingly intertwined in their brains. It would be interesting to see how readers that are not familiar with industrialized cities would interpret the environment in the narrative.

Considering places that were less obvious, e.g. the graveyard or the overall division of districts, the responses were more idiosyncratic. Of course, mental activity is also less obvious, since there is almost no direction by the author in graphic novels, except for nonverbal cues like facial expressions (Meeusen, 2017). Here, the interpretations are strongly influenced by the reader's mind and these differences may be explained by changes in the

mental blending network, as the SPS model proposes (Martínez, 2014). In the previous study, participants interpreted the story similarly. The protagonist was identified as a human, or some other entity that walks around a city with a dog. Furthermore, most students in the previous study identified the polluted water and a cemetery (Herman, & Marínez, 2019). In the current study, only two students saw a graveyard which can be of course explained by the small sample size.

### 4.2. Reader input space results, the self-concept, implications and limitations

The coding scheme for the activated selves from the second input space reveals three big clusters among the responses, namely *Traveller selves, Environmental selves,* and *Social selves*. These clusters include almost every most frequently occurring primary SPS. With regard to the story, arriving in a place and walking around seems to remind people of exploring and travelling/tourism (the participants seem to be schematic in this domain). This may also reflect the tendency of young people in western society to be adventurous travellers. For those, travelling is often related to making an experience in terms of learning something new about a culture (Thurmond, 2017). Again, it would be interesting to see how readers from different cultures would respond. Furthermore, the selves related to the environment may be triggered especially in the face of the present climate issue. Having cues such as a deserted industrial city without much nature, a black liquid that reminds of polluted water and a place that might look like a graveyard with lots of dead people seems to trigger concerns for the environment. These cues seem to blend with culture-related feelings about climate change. Regarding social selves, this cluster may reflect the incredible social abilities of human beings (Dunbar, 1998). In accordance, previous research suggests that all cognition is social cognition, and readers "put their reading experiences in a societal context" (Erikson, 2007; Moore, & Schwitzgebel, 2018, p.58). To conclude, the selves that get activated seem to reveal socio-cultural information.

Those findings are partly similar to those by Herman and Martínez (2019). The story was predominantly interpreted as a traveller/tourism activity with the concern of an apocalyptic scenario in both studies. However, in the previous study, more students interpreted the novel as a space exploration story compared to the current one. An explanation for this might be simply the low sample size of the current study (N = 6). Moreover, in both studies, selves from the higher-order categories *Traveller selves, Environmental selves,* and *Social selves* were identified (see table 1). Although Herman and Martínez did not establish a broader pattern, it appears to a certain degree that the participants responded similarly to the

novel, despite individual differences. This may stand for internal validity since the study was replicated with similar results. Concerning external validity, more data is needed. However, *Traveller selves, Environmental selves,* and *Social selves* may be collectively shared among a larger group that shares certain factors (e.g. social status, or age) in response to the graphic novel. Finally, in both studies, different slipnets were identified which makes sense since they are regarded as highly personal and idiosyncratic.

Concerning idiosyncratic slipnets in the current study, they were found among every participant and for some, they seem to have influenced the interpretation of the story. For instance, S3 had the self that experienced inequality and the desire for a friendly and just world. This may have resulted in the interpretation of the story being about social inequality where the city is divided into a rich and a poor district. Nevertheless, it may be left open whether it was mainly the selves that led to the interpretation. To discern this, one could simply ask the participant, or while reading, one could ask a reader to mark in the text (or picture) whenever a memory or a self occurs. The impact of the memory (or self) could be evaluated afterwards. The example above shows that slipnets may be used to explain idiosyncratic interpretations of a story, as Martínez (2018) proposes. To go further, a clearly identified slipnet may reflect important and personal issues. Recognising such issues may be useful in narrative therapy. A slipnet that results in a negative self-statement may be identified and reformulated for the self-narrative of the participant. Moreover, a patient that suddenly interprets a character of being beaten up by a family member (with no such hints) may be alarming.

Nevertheless, there can be difficulties concerning the identification and differentiation of selves. For instance, S5 wrote that “animals should be treated with more respect”. Is this an indication for a possible animal-lover self? Or is it an indication of a desired possible self that lives in an animal friendly world? Sometimes, it also seems difficult to tell if a specific response activated a self, or something else like a desire, or hope. Therefore, future research could focus on improving the questionnaire to aim at activating selves more precisely. Moreover, brain studies could compare the brain activity of thinking of certain selves with the activity of reading certain excerpts to validate the suggested self-concept activity.

The difficulty of coding may be a limitation of the current study. In the beginning, there was limited information about the methodology (a conference presentation) to replicate the previous study adequately. Although this was an explorative process, it is not sure whether the identification of selves was accurate (see paragraph above). Perhaps, the identification of selves could have been done more cautiously. Nevertheless, this process increased sensitivity

for nuances regarding linguistic cues for the possible activation of selves. This can be good for further research.

Another limitation may be the fact that some participants gave very short answers to some questions. A possible explanation might be a lack of concentration, or motivation. Furthermore, as compared to the participants from Herman and Martínez (2018) who were familiar with literature studies, students not familiar with it may tend to give shorter descriptions in a non-narrative way. In addition, none of the participants were native English speakers which may have led to shorter, less extensive answers. Therefore, the participants could be encouraged to give more extensive answers and to take more time.

Overall the results suggest that there are many possibilities for the classification of reader responses. This can be a difficult effort but it is nevertheless possible to gather a vocabulary to analyse the reader response in the form of selves. In accordance with Martínez (2014), this means that self-modifying effects and related feelings may be traced back by means of the SPS model and self-concept theory. In narrative therapy, it could be useful since relevant self-conceptions can be identified to work with them. Especially, since a possible self can be considered narrative in nature meaning that it "consists of a story we tell (primarily to ourselves) about our selves in hypothetical future situations" (Erikson, 2007, p. 355). Furthermore, knowledge about linguistic cues that activate selves, increases sensitivity regarding language use. Hence, measuring self-modifying effects while reading could be useful.

Despite these practical implications, measuring individual reading experiences should be done carefully, especially when the focus is on invisible mental processes. Regarding the methodology of the current study, one could say that the self-narrative (in terms of selves) is co-constructed by the researcher and the participant. When the questionnaire asks "Have you ever felt like this? Explain", the reader is invited to blend with the character. During the analysis, the researcher constructs the activation of selves based on the reader responses. Therefore, in terms of the social-constructivism theory, the SPS model may shape the reality of readers to establish blends with a suggested self-concept activity (Kukla, 2013). If this is true, the question is, whether the consequences are fruitful or not.

Considering narrative interventions, self-knowledge is important in regulating behaviour and therefore, claims about selves should be treated with caution (Markus, & Nurius, 1986). According to the possible self literature, generating self-conceptions of possibility may have a positive influence on therapy, as already mentioned (Markus, & Nurius, 1986). When a client reads a work of fiction and experiences significant self-

transformative effects, the SPS model offers a possibility to measure them, what can be incorporated into therapy. Considering the book *Siddhartha* (which was mentioned in the introduction of this paper), the protagonist walks on a spiritual path and finds happiness. If possible selves can motivate people, the safe simulation environment of this work of fiction may activate a desired spiritual possible self which leads to increased motivation. Now, the desired possible self is a feasible self-conception of possibility to work with. The current study identified several selves that might be used as self-conceptions for narrative approaches.

To sum up the strengths and weaknesses of the current study, there are some implications and recommendations for therapeutic practice and future research. The explanatory power of the SPS model is demonstrated although it needs further validation. The coding scheme is well structured and a broader pattern was established compared to previous research. However, the coding was a difficult process which might have decreased validity. Sometimes, a certain response may have been given the label "self" too hasty (e.g. the statement "animals should be treated with more respect"). Furthermore, the participants' short answers in some instances made it difficult to identify selves. Nevertheless, the critical look on the coding process increased sensitivity concerning the identification of selves which is good for future research. It is important to cautiously pay attention to a reader's linguistic nuances in his/her responses.

### 4.3. Individual responses, SPS and self-transformation

Considering the results of the individual reader responses, four aspects are discussed in the following. To start with, the analysis seems to indicate something about the nature of the participants. Next, the potential of possible selves in terms of motivation is demonstrated. Furthermore, there is a defamiliarization effect that appears to moderate the visual cue in the graphic novel and the working self-concept. Finally, the results suggest that one could trace back self-transformative effects and related feelings with the SPS model.

Considering the nature of the participants, the salient uneasy self-schema of S1 appeared to have influenced almost every mental space related to the SPS model. This may hint at a personal issue of the participant while another explanation may be the mood of the participant when he conducted the study. However, it shows how strongly a salient self-concept feature may influence the whole blending network. Furthermore, some activated selves seem to reflect the field of study of some participants. For instance, S3 who studies politics had a salient past self that experienced inequality and interpreted the story as dealing with social inequality. S6 who studies biology had a salient nature-loving self-schema. One

could conclude that a salient self reflects a participant's interest, or an important aspect in life (such as politics, or believing in nature).

Regarding the potential of possible selves, S2 seemed to have experienced motivational effects through the SPS blend with the character. In his response, possible selves of being a curious, lonesome explorer with a child-like curiosity were activated. These perhaps enhanced the motivation of the participant as he wrote about the story, "it has made me more aware of the importance of keeping a certain kind of curiosity even for your normal everyday surroundings". He experienced excitement and the positive conception of a possible self that is exploring something with a child-like curiosity. More importantly, he visualized the possible self in a way through blending with the character. Visualizing is often considered as a powerful stimulant (Packard, & Conway, 2006). This might demonstrate the power of possible selves in terms of motivation, at least as a short-term effect.

Another striking feature is a defamiliarization effect that might have occurred for S2. This reader seemed to be fascinated by the defamiliarization caused by the strange-looking city and its futuristic places. This effect can be found in art literature and it means "writing that overcomes habit and categorization, that enables us to see something as if for the first time, so that it becomes conscious" (Oatley, & Djikic, p.4). For S2, this effect might have led to or enhanced the activation of the curious and lonesome explorer selves. The participant writes about exploring unknown places that "after a while you get very used to your everyday surroundings and you forget how much there is to see in the world. It gives you a new perspective and can renew your excitement for life". Moreover, he uses the words "alienation" and "alien" and writes "perhaps it has made me more aware of the importance of keeping a certain kind of curiosity even for your normal everyday surroundings". To conclude, the defamiliarizing effect might have functioned as a moderator between the textual (in this case graphical) cue and the working self-concept. Future research could investigate distinct variables that might influence the activation of selves.

Finally, the results show that self-transformative effects can be traced back with the SPS blending network. Since parts from the participants' self-concept were activated, projected into the blend, and backwards, their self-concept was working. For instance, S4 starts the reading experience with excitement as she approaches a desired possible self that is connecting with others. Then, she "eventually gets blown away by the fear of a barren earth scenario and of being lonely. This results in feeling uncomfortable and tired" (see 3.3). Here, the self gets transformed due to the activation of an undesired possible self. Therefore, the identified selves from a participant may be used to "reconstruct" self-transformative effects

while reading. Whether these suggested selves are valid remains open for discussion and future research.

About emotional responses indicated in table 4, tracing them back to the working self-concept seems to make sense. All of them start excited, while most of them experience some kind of downcast where feared possible selves in an apocalyptic scenario are triggered. Those who did not experience an equivalent downcast appeared to have had a salient traveller/tourist self (S1, S2, and S6). S2 indicated "curiosity/awe/fascination" while having a desired possible self that it exploring a place alone with a child-like curiosity. S6 indicated being confused but reflective and thoughtful in the end while having an undesired possible self of being left behind clueless. The strong feeling of disappointment of S5 seemed to have been enhanced by a past self that has been disappointed. According to the SPS model, the remembered feeling of disappointment might define an individual again in the future (Martínez, 2014). Hence, S5 had an emotional response due to the memory and the approach to an undesired possible self that gets disappointed ("The feeling of disappointment is one of the worst"). Similarly, S3 indicated a sad emotion while having a past possible self that experienced inequality.

However, it does not seem to be entirely clear whether the experienced emotions are actually due to the working self-concept. The questionnaire asks to give adjectives for the emotions that the character feels on certain panels. Although a reader is supposed to blend with the character and thus project emotions, one cannot cancel out the assumption that some emotions are perhaps *for* the character. Here, the questionnaire should validly trigger the reader's own emotional responses. To discern this, the questionnaire could clearly ask about a reader's emotions while reading. Nevertheless, the SPS model uses empathy or sympathy as prerequisites for reader engagement. Hence, emotional responses may be traced back to both, empathy for the character and a reader's own feelings (Martínez, 2014).

### 4.4. Conclusion

The engagement with a work of fiction can lead to feelings of self-transformation. Currently, there is little research on how to measure these feelings. The storyworld possible selves (SPS) model offers a more sophisticated approach to operationalize self-transformation using conceptual blending and self-concept theory.

By using the model as an analytical tool for students' reader responses to a graphic novel, the current study suggests the model's explanatory power. The data for the SPS blending network seems to logically illustrate self-transformative effects and related feelings. A variety of selves were identified that were considered to be activated in the students' self-

concept. Moreover, the current study offers higher-order categories of selves that appear to reflect socio-cultural information of the participants. Furthermore, the analysis seems to reveal something about the nature of the participants (e.g. a significant conception about the self). Regarding self-transformation, self-concept activity like "a curious, social self that eventually gets blown away by a feared possible self in an apocalyptic scenario" seems to explain self-transformation at this point. The participants' uniquely organized self-concept activity shows that the model may explain idiosyncratic reading experiences as well.

However, it does not seem entirely clear whether a certain response triggered a self, or rather something else (e.g. hopes, wishes, or fears). The identified selves are suggestions that need further validation and should be treated with caution. In general, it should be considered that a model does not necessarily reflect reality but is an approach to it nonetheless. Furthermore, social-constructivism suggests that the conceptualization of self-transformative effects may even shape reality itself. For instance, the statement "animals should be treated with more respect" may not be necessarily considered as a possible self. It can, however, be considered as such and now it is a shaped mental representation of oneself in a possible future situation. Hence, every methodology regarding identity construction should be carefully developed and the consequences of the SPS model should be taken into account (e.g. for therapeutic practice).

If the measurement of self-transformation is valid, the current study has some practical implications i.e. for narrative therapy. Using a work of fiction, relevant self-conceptions can be identified and incorporated in therapy. Especially possible selves constitute positive self-statements of opportunity that are related to motivation. In the current study, this effect was observed as one participant showed positive emotions while having a desired possible self activated. These prospects indicate that the SPS model is worth further investigation. Future research could focus on the questionnaire's validity, or use brain studies to validate the suggested self-concept activity. Finally, understanding how reading fiction transforms the self can be used for good. A work of fiction can be a potent medicine since it influences the narrative we tell ourselves on who we are.

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# Appendix

### Informed Consent

Dear participant,

Thank you for your participation!
This study intends to investigate how students respond to a graphic novel. Therefore, you will be asked to closely look at the comic "City" by Wasco. Afterwards you will be asked to do 5 tasks which partly contain open-ended questions. This will take about 45-60 minutes but there is no set time limit. In addition, the questions require you to portray your personal impression, there is no right or wrong.

Be aware that your participation is fully voluntary which means that you are free to leave at any time if you wish to. Your answers will be treated confidentially. Your responses will be used only for the purpose of providing insight into the topic of the present study.

If you still have any questions left or if you wish to hear more about the outcomes of the study, you can email me at: m.schleuter@student.utwente.nl

With your signature you confirm that you have read the informed consent and agree to the conditions of the present study. You declare in a manner obvious to you, to be informed about the nature, method and target of the investigation.

_____
(Date, Name)

_____
(Signature)

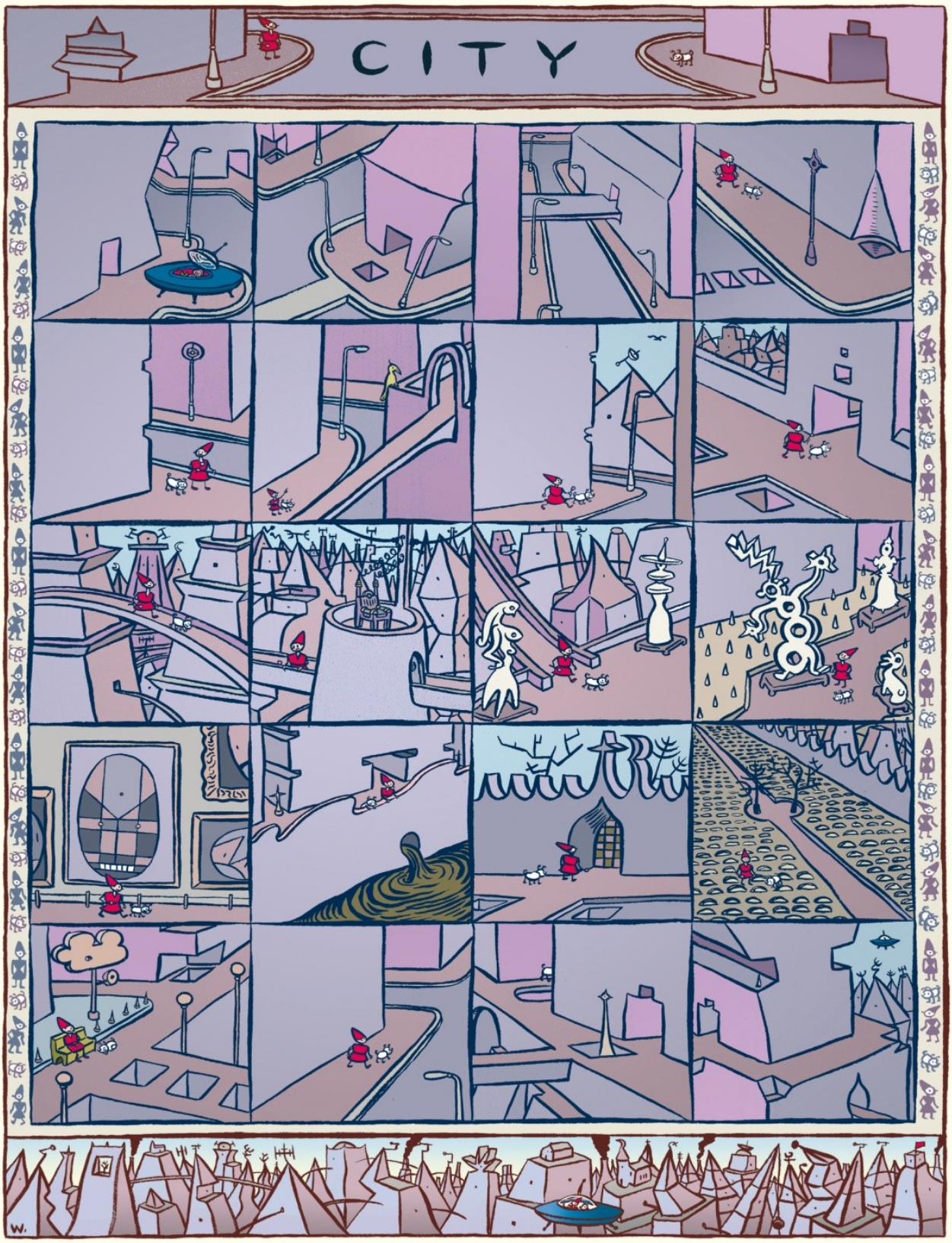
**Gender:**

**Age:**

**Nationality:**

**Field of Study:**

**Wasco's City**



**Questionnaire**

**TASK 1: RETELL**
Look at the story carefully and retell it using your own words. Length: 50-250 words.

**TASK 2: INSERT SPEECH BUBBLES**
Look at the story again. If you could insert speech bubbles, what would you write in them? (P1 = Panel 1), etc. Line length is just orientative. You may stop at P18 if you wish.
P1: "_____"

**TASK 3: OPEN-ENDED QUESTIONS**
**1**. Briefly comment on the character in red.
**2**. Use an adjective to describe how the character in red feels in the following panels:

| Slot | Feeling | Reason |
|---|---|---|
| P6 | | |
| P7 | | |
| P16 | | |
| P17 | | |
| Other | | |

**3**.Have you ever felt like this? Explain.
**4**. Would you like to have a similar experience? Why? Why not?
**5**. Does the story remind you of any sort of human activity? If so, what do you think the point/message of the story is?
**6**. Has the story triggered any sort of unexpected awareness/realizations in you?
**7**. Write two sentences containing the word "should" that come to your mind after reading the story.
**8**. Describe the panel that you found most striking, and briefly explain why.

**TASK 4: LIKERT SCALE**
Looking at the story, rank the likelihood of the following scenarios from 1 to 5, 1 being the least likely, and 5 the most:

| Scenario | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Tourism | | | | | |
| Space exploration | | | | | |
| Other | | | | | |

**TASK 5: PERSONAL EXPECTATIONS**
Bearing the story in mind, complete the following sentences with something that you believe to be true. Be as specific as you can:
- *In the near future I expect humans...*
- *In the near future I expect the world...*
- *In a far future I expect…*

and briefly explain why.