IT'S

ABOUT

TIME

: Exploring the Use of Divergent Mechanics of Depicting Time in Narrative Comics

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Abstract

Comics use space to depict the passage of time. Aspiring comic artists are taught the conventional ways comics achieve this goal, the traditions of depicting time in comics. The aim of this thesis is to explore divergent and unconventional mechanics of depicting time in narrative comics which exist but are rarely discussed or taught. The thesis aims to prove that not only does the use of these methods not hinder the comprehensibility narrative comics, but that divergent methods of depicting time are an effective form of visual storytelling, the use of which can benefit narrative comics.

To prove this hypothesis, the thesis studied five narrative comics which each use a divergent mechanic of depicting time. The study used arthrology, which is a branch of semiotic research. The research found four different ways divergent mechanics of depicting time were used. These were: *to establish character, as a part of the narrative itself, as a tool for immersion and to provide metatextual commentary about the comic itself.*

The most significant limitation of this thesis is that the scope was small and that the results of this research cannot directly be used as educational material for comic artists who wish to learn how to use these mechanics in their own work. Despite these limitations, the thesis proves that divergent mechanics of depicting time can be used as a form of visual storytelling and have various types of narrative impact.

Keywords comics, time, arthrology, visual storytelling, divergent mechanics of depicting time

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Työn nimi Oli Jo Aikakin : Poikkeavien Ajan Kulun Ilmaisukeinojen Käyttö Narratiivisissa Sarjakuvissa		
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Tiivistelmä

Sarjakuvat käyttävät tilaa ajan kulun kuvaamiseen. Aloitteleville sarjakuvanpiirtäjille opetetaan ajan kulun kuvaamisen traditiot, ne tavat joilla sarjakuvat perinteisesti ilmaisevat ajan kulumisen. Tämän opinnäytteen tarkoitus on tutkia narratiivisissa sarjakuvissa esiintyviä mutta harvoin käsiteltyjä poikkeavia keinoja kuvata aikaa joita ei tavanomaisesti opeteta sarjakuvaopinnoissa. Tämän opinnäytteen tarkoitus on todistaa että sarjakuvat eivät pelkästään ole kykeneväisiä kuvaaman aikaa poikkeavilla tavoilla sen häiritsemättä sarjakuvan tarinan luettavuutta, vaan tällaiset poikkeavat ilmaisukeinot ovat tehokkaita visuaalisen kerronnan keinoja joita voidaan käyttää tarinoiden hyödyksi.

Todistaakseen tämän hypoteesin tämä opinnäytetyö tutki viittä eri sarjakuvaa joissa kaikissa käytettiin jonkinlaista poikkeavaa ajanilmaisukeinoa. Tutkimukseen käytettiin arthrologiaa joka on semioottisen tutkimuksen haara. Tutkimus löysi näistä sarjakuvista neljä eri tarkoitusta joihin poikkeavia ajanilmaisutapoja käytettiin. Nämä tarkoitukset olivat: *osoittaakseen informaatiota tietystä/tietyistä hahmosta, osana tarinaa, tapana tehostaa eläytymistä ja metatekstuaaliseen kommentointiin sarjakuvasta itsestään.*

Tämän opinnäytteen suurin puute on tutkimuksen suppeus ja se että tuloksia ei voi suoraan käyttää oppimateriaalina sarjakuvantekijöille jotka haluavat opetella soveltamaan poikkeavia ajanilmaisukeinoja omassa työskentelyssään. Näistä vajavaisuuksista huolimatta tämä tutkimus kuitenkin todistaa että poikkeavia ajanilmaisukeinoja voidaan käyttää sarjakuvissa osana visuaalista tarinankerrontaa monin eri tavoin.

Avainsanat sarjakuvat, aika, visuaalinen tarinankerronta, arthrologia, poikkeavat ajanilmaisukeinot

Thank you to my parents who taught me to love comics and thank you to my advisor Dan Berry who taught me how to make them.

This thesis is dedicated to everyone who ensured that I would become a comic artist instead of finding a real job.

I owe you all.

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Table of Contents

CHAPTER 1.

Introduction

1.1 Research question and hypothesis

"Critical to the success of a visual narrative is the ability to convey time. It is this dimension of human understanding that enables us to recognize and be empathetic to surprise, humor, terror and the whole range of human experience. In this theatre of our comprehension the graphic storyteller plies his art."

Will Eisner, p.24, 1985

I have been passionate about comics since before I was able to read, and I have been drawing them for longer than I have been able to write. It was thus perhaps inevitable that I have grown up to become a comic artist. I enjoy all forms of narrative media but there is something about the visual storytelling of comics that compels me, and most importantly, that I want to be able to master myself. I want to become the best comic artist I can possibly be, which requires study. This study has lead me to look for answers from legendary comic scholars which has in turn lead me to realize that for some questions, there are no answers – yet.

The quote at the start of this chapter is from *Comics and Sequential Art: Principles and Practices From the Legendary Cartoonist* (2008 revised edition of the 1985 *Comics & Sequential Art*) and was written by Will Eisner. Eisner was an incredibly influential comic artist, famous for his work in comics education as well as his many original stories. The passage the quote is from can be found in chapter three of the book titled "Timing" in which Eisner writes about how time moves on the comic page and how the act of conveying time can be utilized towards a narrative purpose.

Eisner's writings are one of the foundational pillars of western comic theory to this day. Though the minutia of these rules might vary slightly, nearly every single book which attempts to teach comic-making includes a similar section on how time operates in comics. This makes sense as depicting the passage of time is indeed an important part of visual storytelling that can be utilized very effectively towards narrative ends. Eisner covers this rather thoroughly in Comics and

Sequential Art. He talks about specifics, about how panels create timing and rhythm and he provides multiple examples of it. He identifies ways to make sequences seem slower or faster and offers advice on how to best convey the passage of time and to what ends. He is very definitive in what he says. For example, when talking about rhythm he writes that "when there is a need to compress time, a greater number of panels are used" (Eisner, 2008, p.30) and does not follow this up with examples of exceptions. The chapter is meant to be educational, so that by following these rules, the reader will know how time works in comics and can learn to convey it in their work.

However, Eisner is does not poses all of the answers. There is much more to depicting time in comics than what he covers. While he is indeed correct in saying that conveying time is valuable to the narrative and emotions of comics, not every comic follows his rules – or anyone else's for that matter. In fact, there are many comics that are notably divergent and in which time is presented in various unconventional ways. There are comics that obscure the passage of time on the page entirely, comics that create time loops, comics that force one to read back in time, and many, many more. The act of conveying time is still at the center of the visual storytelling of these comics, but the way it is conveyed is far more complex, nuanced and varied than what Eisner manages to cover in his writing.

Not only that, despite the fact that they arguably "break the rules" of depicting time, these comics still tell coherent narratives, and they do it well. Conveying time is a part of the visual storytelling of comics even when it is done unconventionally. This storytelling is not merely possible despite the usage of divergent mechanics. Indeed, the stories are in fact stronger due to it. Where, when and how the divergent mechanic is employed in the story can create various powerful and compelling narrative effects.

Despite this storytelling potential, divergent mechanics of depicting time are rarely discussed within the comics sphere. No books intended for comics education discuss how to purposefully use them, and despite them being potentially very effective when utilized properly there is little analysis of these techniques anywhere. While some individual works with these divergent

mechanics have been analyzed of course, the use of divergent mechanics of depicting time in narrative comics in general has not been explored.

This frustrates me. I find the topic of divergent mechanics of depicting time very fascinating, and I wish to learn how to master them. As long as there is no educational material or writing on the topic, I am unable to do that – which brings me to where I am now.

The aim of this thesis is to study the way comics use divergent mechanics of depicting time to tell stories. It is my hypothesis that divergent mechanic depictions of time are a form of visual storytelling that can be utilized towards a narrative purpose when used thoughtfully. I also believe that these mechanics can be analyzed and the findings of that analysis can be categorized. I believe that by doing so, one is able to find patterns that help to identify different uses for these various divergent mechanics.

My research question is as follows:

What kind of divergent mechanics of depicting time are used in narrative comics, and do they affect the narratives? Supplementary question: *If they do affect the narratives, how are they utilized?*

As there is little earlier writing or education about these mechanics, the goal of this research is to provide a toolkit for any comic artists who read it, to present them with various ways they can break the conventions of depicting time in comics to create narrative impact. I also hope that the findings of this research would provide me with new visual storytelling tools to aid my own comic creation. I aim to identify specific divergent mechanics and their narrative impacts so they can be isolated and adapted for use within other comics. It is my hope that the findings of this research can and will be applied by people who wish to enhance their comics by using the dimension of time in this medium of visual narrative to its fullest potential, including "breaking its rules" entirely.

1.2 Overview

This thesis will begin with theory, starting from a shortlist of important terminology. After defining the term "comics", the chapter explores multiple approaches to depicting time in comics before introducing the reader to arthrology, which is the theory basis chosen for the analysis in this thesis. The theory chapter will finish by establishing the scope and introducing the research material.

The research section consists of five sections, all of which include a unique comic sequence. Each section examines its material by using arthrology to identify the divergent mechanics at play. At the end of the research chapter, these findings will be summarized and categorized to ease further analysis.

Finally, the thesis will examine the results of the findings. It will be determined if the research question was answered and if the hypothesis is supported. The chapter then examines the possible applications of the findings, where the gaps in the research are and where further research is needed. Finally, the thesis will finish with a summary of the findings and an ending that closes the thesis and addresses any questions left unanswered.

CHAPTER 2.
Theory

2. 1 Basic terminology

Comic: *[I]nterdependent images that, participating in a series, present the double characteristic of being separated— this specification dismisses unique enclosed images within a profusion of patterns or anecdotes— and which are plastically and semantically over-determined by the fact of their coexistence in praesentia.* (Groensteen, T. 2007, p.22-23). See chapter 2.2 Defining Comics

Manga, Manhwa and Manhua: Cognate words that translate to mean "'impromptu sketches", refer to Japanese comics, Korean comics and Chinese comics respectively.

Bande dessinée: French and means "drawn strip". Refers to comics created in the French speaking regions of Europe. "*'French language' is a defining element of the bande dessinée not on account of the specifics of its grammatical structures or vocabulary, but as a container for the cultural system it carries.*" (Grove, L. 2010, p.8)

Panel: The smallest unit of comics – See chapter 2.4 Arthrology.

Inset panel: A panel which resides partly or completely "within" or laid on top of another panel.

The gutter: The blank space between panels as well as the blank space in the middle of a spread.

The margin: The blank space on the edges of the page and in the middle of the spread – See chapter 2.4 Arthrology.

A strip: An even string of panels across the entire page.

A comic strip: A collection of panels that create a comic, usually three or four but sometimes more. Often humorous in tone with little overarching narrative. Usually in newspapers or magazines or online.

An album: One long story or collection of short stories, presented in a book format.

2.2 Defining comics

The first decision one must justify when writing about comics is the act of using the word *comics* when other terms are available. There are many different names for this one art form, ranging from the French *bande dessinée* (drawn strip) to the Japanese *Manga*, Korean *Manhwa* and Chinese *Manhua*. However, these terms refer to comics from those specific geographical and cultural regions; they cannot be used to talk about comics in the general sense. For the purposes of this thesis, it makes more sense to use a general term, one which is widely understood by English speakers. For that, there is *graphic novel*, a popular term in the English speaking comics academia, but unfortunately, it is not entirely without its issues either. In her 2011 article "What's in a Name? The Academic Study of Comics and the 'Graphic Novel'", Catherine Labio argues against the usage of the term graphic novel despite its popularity among "anglophone scholars" (Labio, 2011, p.123). She asserts that, in contrast to comics, it lacks the breath to accurately describe the genre and that it "privileges . . . the literary character of comics over the visual" (Labio, 2011, p.126). Additionally, she claims that academics who prefer *graphic novel* instead of *comic* are using the term out of a desire to appear respectable in the eyes of the academic world rather than out of any real care for the artform. "'Comics' is not a perfect term" Labio admits; "[h]owever, no one now thinks of comics as referring only to works created for the funny pages of American newspapers. By being in so many ways utterly inadequate, 'comics' has become a generic term" (Labio, 2011, p.124). This is also why it is the one used throughout this thesis.

The second subject one must cover when discussing comics is defining what comics are. Defining comics is not easy; rather, as Labio states, it is; "a fraught yet obligatory first step in the process of academic disciplinary formation" (Labio, 2011, p.124). There are many different definitions of comics, as the one thing most comic scholars seem to be able to agree on is the difficulty of formulating a sufficient one. Labio herself presents two different definitions, one by Patricia Mainardi and one by Pascal Leièvre, to emphasize the differences between their two perspectives. Another comic scholar, Thierry Groensteen, spends numerous

pages discussing this problem in a section called "The impossible definition" in his seminal book System of Comics (2007). In this section, he also examines multiple different definitions of comics by authors, such as David Kunzle, Bill Blackbeard and Pierre Couperie. There are thus clearly more definitions of comics than it would be reasonable to list in any one thesis.

Finding commonalities and patterns in these definitions is a necessary first step when deciding which one to choose. Groensteen identifies two distinct methods of defining comics in System of Comics. One of these is concise and attempts to "lock up some synthetic form of the 'essence' of comics" (Groensteen, 2007, p.18). However, he argues that all definitions that fall under this category are doomed to failure, as comics are simply too varied to be defined in simplistic ways. The other approach he proposes is formulating a more articulated and long-form definition of comics. He proceeds to demonstrate this by discussing various competing definitions that fit this category. However, according to Groensteen, the problem with these definitions is that they tend to be either too narrow and they end up omitting more experimental comics, or they are too broad and include much more than would usually be categorized as comics –such as the Bayeux Tapestry or the Egyptian book of the dead. It is thus difficult to accurately define comics without omitting information that should be included or including information that should be omitted.

The comic artist and scholar Scott McCloud has also tackled this topic with mixed results. In his classic Understanding Comics(1993) McCloud spends numerous pages of the book trying to define comics, struggling with the process. During this process of formulating this definition, he discovers a significant truth; the main difference between film and animation when compared with comics is that while all can be categorized as "sequential art", in film and animation the images are juxtaposed in time, in comics they are juxtaposed in space. Yet, this revelation does not influence his final definition. The definition he chooses at the end is "[j]uxtaposed pictorial and other images in deliberate sequence intended to convey information and/or to produce an aesthetic response in the viewer" (McCloud, 1993, p.9). As it is, by his own admission the definition he settles on

could very well be describing film or animation. This makes it somewhat too broad, and thus also unusable for this thesis.

It is thus significant that Groensteen is able to formulate a definition that is both sufficiently broad and yet also specific enough to be useful. His definition highlights the way the images are simultaneously physically separated and connected through their juxtapositions. Groensteen successfully argues that when writing about this topic, "one must recognize the relational play of a plurality of interdependent images as the unique ontological foundation of comics" (Groensteen, 2007, p.22). He calls this Iconic Solidarity, and it is the basis of his definition of comics, which is as follows:

> *"[I]nterdependent images that, participating in a series, present the double characteristic of being separated— this specification dismisses unique enclosed images within a profusion of patterns or anecdotes— and which are plastically and semantically over-determined by the fact of their coexistence in praesentia."*
> (Groensteen, T. 2007, p.22-23)

Despite its merits, this definition is not entirely flawless either. Groensteen acknowledges that the definition is also broad to the point of being problematic, as it includes art that is not traditionally considered comics, such as the aforementioned Bayeux tapestry. However, for the purposes of this thesis, it is the one it will be using as it is sufficient and should help the reader to understand the basic defining features of comics and yet broad enough to encompass their many varieties

2.3 Time and paneling in comics – an overview

"The phenomenon of duration and it's experience – commonly referred to as 'time'– is a dimension integral to sequential art. In the universe of human consciousness time combines with space and sound in a setting of interdependence wherein conceptions, actions, motions and movement have a meaning and are measured by our perceptions of their relationship with each other."

　　　　(Eisner, W. 2008, p.23)

figure 1. "TIME" by Alex Norris, (2015)

In *Comics and sequential art,* Will Eisner opens the chapter "Timing" with the above quote. According to Eisner, time is an essential structural element to comics because the passage of time allows readers to experience emotions and events alongside the characters. However, he notes later in the same chapter, while it is relatively easy to create a comic in which time passes, creating a comic

with effective *timing* – which he compares to a beat or a rhythm in music – is not so simple. The rhythm of music is experienced in real time, while in comics this effect has to be achieved through "*the use of illusions and symbols and their arrangement*" (Eisner. 2008, p.24), which in practice refers to panels and how they are laid out. This means that in order to create effective timing one has to use effective paneling.

Paneling is indeed how time moves forwards (or backwards) in comics. In order to depict the passage of time, the comic artist must utilize physical (or digital) space to do so. The two are directly linked. In Understanding Comics Scott McCloud writes: "Space does for comics what time does for film"(McCloud. 1993. p7). This refers to his findings about the connection between film and comics: both are founded on the principle of juxtaposed images creating a narrative sequence. The difference is that in film and animation these images are juxtaposed in time while in comics they're juxtaposed in space. It then follows that space is inexorably linked with time within this medium.

The comic "TIME" by Alex Norris (fig.1) is provides an example of how this juxtapositioning works in practice. In panel one, the brown haired character (character one) asks the blonde character (character two) what the time is. In the next panel, both characters are in the exact same positions as character two answers the question. Because character two was already holding out her watch in the first panel and the characters stay in place, the reader could easily assume her answer is immediate. However, judging by the watch, an hour has passed. Indeed, in the third panel, character one comments on this. Panels three, four and five all depict character one berating character two for taking so long to answer. In panel four, character one even points to the panel above – the first panel –as she says "It was three o'clock when I asked". She thus breaks the fourth wall entirely by bringing attention to the comic as a physical strip. From panels two to five the time passed within the story is very short, but when it is once again character two's turn to reply, this changes. Between the fifth panel where character one comments on character two taking a whole hour to reply, and the sixth panel where character two apologizes for her behavior, the characters have stayed stationary. However, the wall calendar has a different

date. It has been over a full month since the events of the previous panel took place. The flowers on the table have wilted entirely and character one looks exhausted. The punchline of this strip is built on the juxtaposition between the reader's expectation of how much time has passed, and the actual time passed.

This comic is an apt example of how complex depicting time in comics can be. There are two distinct forms of time at play in this one short strip; the time that it takes to read it and the time that is passed within the story. During the panels from two to five, the time it takes to read the comic and the time passed within the narrative are relatively similar. The reader reads the conversation the characters have approximately at the same speed it would take for them to have it. However, between panels one and two, as well as five and six, the time passed within the narrative is drastically different from the time spent reading it. Paying attention to the difference between how the time moves for the reader and how the time moves within the story is the first step to understanding how to create effective timing within comics.

In *The Narratology of Comic Art* (2017) Kai Mikkonen discusses this topic at length. There are two distinct forms of time at play within any given story, Mikkonen writes. These two types of time are called *story-time* and *discourse-time*. Story-time refers to the order in which the events take place within the world of the story and discourse-time refers to how and in what order they are presented in the comic. For example, when a story is referred as being "non-linear", it most often refers to the order in which the events are told, not the order of the events themselves. That is, the discourse-time of the work is non-linear, not story-time. In any comic, moving from panel to panel is the most common way of implying that time has passed, but whether that time is a moment or a month is not immediately obvious. This is also why Mikkonen argues that simply equating space with time in comics is not enough to discuss this phenomenon, why we need to differentiate story-time and discourse-time. A more nuanced narratological analysis and terminology is necessary, Mikkonen argues. Thus narratology with these distinctions "allows us to investigate the basic forms of temporal structure in comics" (Mikkonen, 2017, p.33).

What makes TIME by Norris particularly interesting as an example, however, is that simply noting that the story-time takes much longer than the discourse-time is not enough to describe the complexity of its usage of time. In the case of TIME, it almost seems that story-time is being controlled by the paneling as much as discourse time is. The characters seem stuck in their positions, as if the act of the reader's eye jumping from panel to panel has rooted them on the spot and they have to stand unmoving. In this way, the characters exist within the confines of the story-time, yet controlled by the paneling and discourse-time. This, as well as the way the characters point at previous panels, also serves to both strengthen the joke and break the fourth wall. It only takes two clock arms being in the wrong position in the next panel for an hour to pass within the time of the narrative, yet it takes only a few seconds to read the entire comic. This is how comics can manipulate time very easily. The shift between two panels can mean that almost any amount of time has passed, from a few seconds to months or longer.

As it is such an important part of how time works in comics, it is important to understand what exactly happens when our eyes move from panel to panel. In Understanding Comics, McCloud refers to the act of the reader's mind filling the time between panels as "closure". This is not to be confused with the use of closure in narrative studies where it has a completely different meaning. McCloud's closure means the act of the reader automatically filling in all the events/details that are not shown in the panel, but that are implied because of context. For example, if the first panel is a wide shot of a character standing in a room and the next one is a close-up of the same character's face, the reader knows that the environment did not disappear, nor did the character's body. Both are still implied to be there despite the reader not seeing it at the moment. Closure is what allows the reader to understand that the two panels are connected and that something happened between them.

It is clear then, that the reader can interpret meanings from moving between two different panels in a sequence, but the content and type of the panels affect these meanings significantly. To create and to analyze comics, understanding the effects different panel transitions have on the narrative is vital.

One famous theory about this subject comes from Understanding Comics in which McCloud identifies six different types of panel transitions. He essentially argues that all panel-to-panel transitions can be categorized into one of these six types.
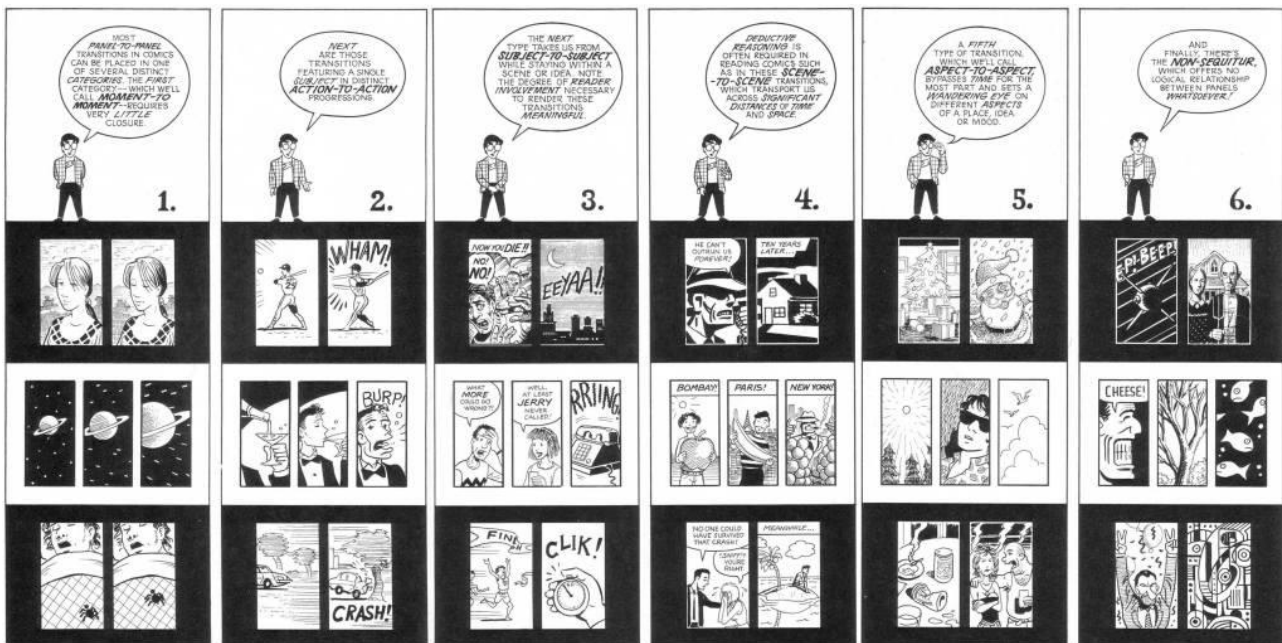

figure 2. compilation of pages 70, 71 & 72 from Understanding Comics, McCloud (1993)

The first type of transition McCloud identifies is moment-to-moment. This refers to two panels which are largely similar and the changes between them are very minor. For example, a moment-to-moment transition could be two similar extreme close-ups of a character's face, except in one panel their eyes are closed and in one opened. This, he says requires very little closure.

The next type of panel transition he identifies is action-to-action. An example of an action-to action transition could be that the first panel is a close-up shot of a character aiming a gun and the next one a wide shot of them staggering back because of the recoil. A slightly bigger change has occurred which requires a little more closure than a moment-to-moment transition. However, the subject of the two panels stays the same, signaling the connection very easily.

The third type of panel transition identified by McCloud is subject-to-subject. This refers to panels sequences staying within the same scene, but in which the focus of the panels changes. For example, one panel depicts a bow being aimed and the one next an image of an arrow hitting target. Another example could be a panels using shot and reverse shot to show two characters talking. Again, the context should be fairly easy to understand from the previous panel, but the reader involvement in meaning making is larger than before. These are not necessarily complicated connections for the reader, but they are more complicated than the previous two.

The fourth type of panel transition requires far more active reader involvement, as it is scene-to-scene. This means that the scene changes between the two panels being observed. This requires considerably more reader participation than the previous category, yet scene transitions are common in most if not all narrative media, so while it requires more closure, it is not uniquely challenging.

The fifth type of panel transition proposed by McCloud is the aspect-to-aspect transition. This refers to a panel transition which shows different aspects of the same scene. For example, a sequence of panels in which each panel shows different details of the same busy bar. It is notable that unlike the previous panel transitions, an aspect-to-aspect transition does not necessarily imply the changing of time. For example, a series of panels could be used to show the expressions of multiple characters during the same moment. The closure required for aspect-to-aspect transition is not much greater than for the previous categories as the scene stays the same, and the sequence should thus be easy to follow.

The sixth and final type of panel transition proposed by McCloud is the non-sequitur. This refers to a pair of panels with no logical relationship at all. Two seemingly completely different images. Here McCloud notes that this last category is in a way impossible, as according to him, the act of putting two images next to each other with the help of closure and a gutter, automatically become a single organism because they are being considered as a whole. This does not require closure as much as closure happens automatically. According to

McCloud, this proves in part how closure is how we can make meaning and find reasoning even in the most unreasonable, creating this closure is the entire point of comics.

Using this theory, we will return to Alex Norris' comic TIME (fig.1) again. As established previously, the punchline of the comic is created from the contrast between the story-time and the discourse-time within the strip. However, with McCloud's panel transitions in mind we can specify this further. The punchline of the comic is created by mixing action-to action panel transitions and scene-to-scene panel transitions that at first glance look like action-to action transitions. The humor is derived from playing with the reader's expectations of the type of panel transitions being used. The comic looks like one continuous scene when it actually is three.

Despite its merits, McCloud's six types of panel transitions theory is not by any means beyond criticism. McCloud himself admits that paneling is "an inexact science"(McCloud, 1993, p.74) but that his categorization can be used as a tool when analyzing comics. However, even as a tool it is somewhat limited and has been put under intense scrutiny by other comic scholars. For example, in The Narratology of Comic art, Mikkonen argues that McCloud's six type of panel transitions theory is not comprehensive enough to accurately describe the possibilities of panel transitions in comics and in fact there are many types of transitions McCloud's theory does not cover. Not only that Mikkonen also disagrees with the entire focus of the theory. He argues that meaning in comics is not derived solely from the relationship between two or three panels, but that it is about the whole page, its size, layout and panel organization included. He writes:

> *"The narratological potential of McCloud's six types of transition between the panels…is compromised by the fact that the typology does not take the context into consideration. Furthermore, the categories describe panel relations at varying levels of organisation and meaning-making"*
> (Mikkonen, 2017. p.42).

Mikkonen makes the claim that not only is McCloud's six types of panel transition theory limited in the transitions it covers, it also does not take into account the context of the whole sequence, and it is unclear. These limitations are also why I chose to not use this theory in my research. It is simply not broad enough for it.

Utilizing McCloud's six types of panel transitions is, however, only one way of analyzing paneling in comics. There are many other theories one can apply when approaching this topic. One approach that has multiple variations aims to create schemas to explain how comics operate. This involves coming up with symbols for different types of panels and sequences in order to create what are essentially equations that analyze the content of a given comic.

One such approach is Visual Language Theory, or VLT. This theory is built upon the idea that comics have their own Visual Narrative Grammar, or VNG. Proponents of VNG argue that the structure of comics can be analyzed similarly to how one would analyze a language. The theory claims that "[A]spects of meaning within images provide cues for narrative roles played by panels, and these categories organized into a canonical narrative schema." (Cohn, N. 2018. p.2). VNG posits that all panels fall into a few basic narrative categories, and that when examined together, these can be likened to syntax in any natural language. These categories are:

> "Establisher (E) e sets up an interaction without acting upon it, often as a passive state.
>
> Initial (I) e initiates the tension of the narrative arc, prototypically a preparatory action and/or a source of a path.
>
> Peak (P) e marks the height of narrative tension and point of maximal event structure, prototypically a completed action and/or goal of a path, but also often an interrupted action.
>
> Release (R) e releases the tension of the interaction, prototypically the coda or aftermath of an action." (Cohn, N. 2018. p.2-3).

To identify which narrative category a panel belongs to, one must look at the entire sequence, not just the panel itself. Much like syntactic categories which overlap (some verbs are also nouns for example), the definition of any given panel is related to the context in which it is presented. Once the panels have been arranged into narrative categories, a "phase" can be formed.
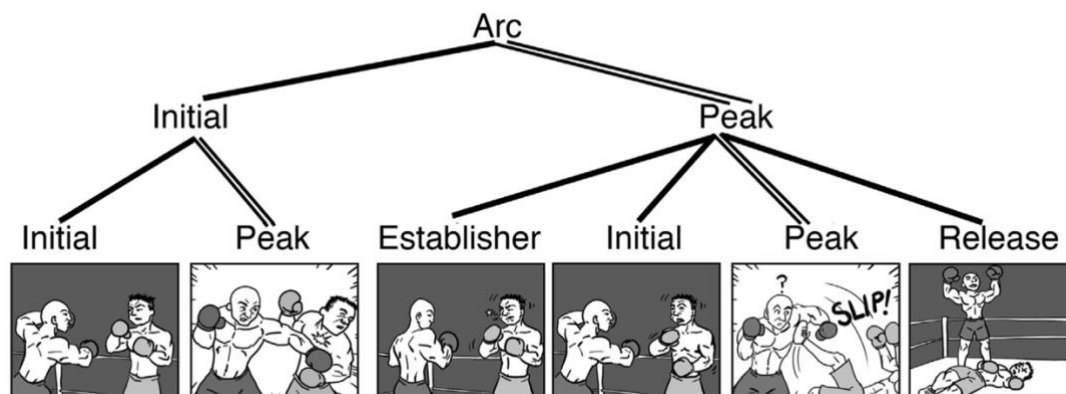

figure 3. depiction of a narrative sequence with two narrative constituents, Cohn, N. 2018. p.3

Analyzing comics with VLT can lead one to interesting discoveries, yet the model has also been criticized at length by other writers, most notably Bateman and Wildfeuer in their 2014 article *Defining units of analysis for the systematic analysis of comics: A discourse-based approach,* in which they also discuss their own discourse model designed for a similar purpose. Their theory is closer to McCloud's as it relies on categorizing the meaningful relations between images based on categories like *Narration, Parallelism, Detail,* or *Contrast*. However, unlike McCloud's panel transitions, the B&W model also aims to create hierarchical relations. However, they claim to be able to do this without using grammar terminology like the kind VNG utilizes, which they dislike (Cohn, N. 2018).

Neither VLT or Bateman and Wildfeurer's discourse model is suitable for the purposes of this essay, as they would be better suited for quantitative analysis exploring the amounts and types of panels in use, rather than qualitative which is concerned with the narrative and tone of the comics it examines. These models would be useful if the goal of this thesis was for example to compare the differences in the ways of paneling time from different comic spheres. In that

case, the equations and schemas would make the work of comparing these paneling conventions more structured and simple. However, for the purposes of this essay, which is much more interested in narrative, symbolism and tone, they are unwieldy.

This unwieldiness comes clear if we take an example. In VNG, sequences of multiple panels, which could be in theory compressed into one panel are called conjunctions. Consider a comic page full aspect-to-aspect panel transitions – to use McCloud's terminology – where the passage of time is not a crucial element between panels. VNG would ask the reader to test if the panels form an "N-Conjuction" by examining if they could be replaced with a "Mono" panel that could contain the same information (Cohn, N. 2018. p.5). If they could, the sequence would be indeed a N-Conjunction. If not, it would either be a different conjunction or then form a different part of the comics equation. Many, if not all, sequences built on aspect-to-aspect transitions would fall under what VNG considers conjunctions. Categorizing these panels this way, according to Cohn allows the theory to cover many varying types of complex sequences within comics. The different types of conjunctions included in VNG can indeed be utilized to describe many different kinds of paneling choices, which makes VNG a good tool for cataloging and comparing the types of panels and sequences in comics. This is good for a quantitative analysis that aims to explore the frequency of different panel types and then perhaps compare the results.

Yet, for a qualitative analysis that aims to examine the impact that specific sequences have on the narrative and tone of the stories they're in, rather than compare these sequences with each other in a quantitative fashion, this is not a useful theory base. The entire concept that panels could be "summed up" in some other type of panel goes against the type of analysis this essay aims for. Three panels could hypothetically be edited into one panel which would contain the same information, and this sequence could be thus labelled under one of the VNG conjunctions, yet doing thus would not take into account if summarizing these details or events into single panels has the same impact on the reader as reading them in multiple panels. Labelling these sequences as conjunctions and because they technically could be summed up in less space, can be useful for

examining the frequency at which these types of sequences appear, but not what their impact is on the story of narrative. That impact is a major part of what this thesis aims to analyze. One of the limitations of this theory is that in the process of categorizing every panel this way, it fails to consider other aspects of narrative storytelling, those being mood, tone, emotion and characterization. Additionally using this theory would require the reader to go through an entire comic book categorizing panel after panel, which is very labor intensive. As stated before, VLT and similar theories like the Bateman and Wildfeuer's discourse model work better for quantitative analysis, rather than qualitative.

There are, however, still other analysis approaches that are more suited to the purposes of this essay. Thierry Groensteen, whose definition of comics is the one I felt most comfortable with, has in his book System of Comics (2007) formulated a theory that I feel is the most applicable to the kind of analysis I am interested in writing for this essay. His theory, Arthrology, is far more flexible for narrative analysis. Arthrology can be used to discuss the passage of time and creation of meaning between two panels, but also a page, a spread, the entire album or even a series of albums. Arthrology is can be utilized to explain both how parts in the same sequence relate to each other, as well as more distant semantic relationships, which is exactly the kind of tool I require for my research. The next chapter is entirely devoted to explaining arthrology as a theory, as well as the terminology used in it, as it is the one this thesis will be using.

2.4. Arthrology

For my main theory base I have chosen arthrology, which is a branch of semiotics that aims to address the several levels of meaning-making and connectivity found in comics. The theory was created by Thierry Groensteen in System of Comics. It examines how comics tell stories through the interconnectedness of images. The term "arthrology" is borrowed from the medical field, where it refers to the study of joints and articulations. In this chapter, I aim to explain the basic ideas behind arthrology, loosely following the structure provided by System of Comics, and provide a shortlist of terms and concepts used in Arthrology that will be relevant for the reader to know.

Arthrology, unlike many other comic theories, is not concerned with the study of comics starting from the smallest unit and proceeding onto the largest one (i.e. starting with panel and progressing onto the page and then to the whole comic, and so on). Rather, it is concerned with the different levels of interactions inherent to comics. First, the interactions on a spatial level, then on the level of narrative, meaning and story, both linearly and translinearly. Arthrology is roughly divided into three levels of analysis: spatio-topical analysis which is concerned purely with the spatial interactions, restricted arthrology which is concerned with the immediate narrative interactions and general arthrology which is concerned with the translinear connections.

I will now briefly expand on each of these three levels of analysis and what they entail.

Spatio-topia is concerned with purely the physical plane of comics. It explores the multiple different functions of the frame and the parameters that define panel form. Spatio-topia is concerned with the placement of strips and gutters, how the eye moves on the page and what the layout is like. It deals with word balloon placement and how it participates in the resulting layout. It is through Spatio-topical analysis that we can define a panel's site, which refers to its physical location on the page. This is why it is a necessary part of arthrology, the site of a

panel matters for the creation of meaning and connection. Spatio-topical analysis deals with the physical reality of where and how panels are located on the page and how that configuration supports the narrative and artistic project.

The second level of analysis, restrained arthrology, is concerned with how the story moves on the page and how narrative meaning is created and established between panels. One of the key concepts of restrained arthrology is the breakdown, which refers to how the story and time move on the page. This is not to be confused with page layout which refers to the spatio-topical locations of the panels on the page (more on this distinction later). Restrained arthrology discusses both the iconic and the graphic contents of comics, as well as the various functions of the verbal components. It is concerned with both what the images show and what they say on multiple different levels of reading. Restrained arthrology recognizes that there is a vectorization of reading (a set and constant reading direction) but that there is no such vectorization in the construction of meaning.

Finally, general arthrology is concerned with the translinear connections between panels. It posits that the comic album should be considered a network where every panel exists in relation to each of the other panels in the work. Panels can be part of a discontinuous series and thus are connected to other panels beyond the immediate page or sequence. This is called Braiding. Braiding is what allows us as readers to recognize aspects and fragments of independent panels or sequences and connect them to each other. It is what allows us to recognize a series of relations within a comic even if the panels with those relations are far apart and unable to be viewed simultaneously. It is through braiding that a panel can simultaneously be a part of the sequence of the page that its site is on and be a part of a series of otherwise non-connected panels in a translinear fashion. General arthrology also discusses the panel's place (not to be confused with site, also more on this distinction later) and how that is created by the braiding. General arthrology considers braiding and its effects on the narrative an essential dimension of storytelling in comics.

Having introduced the basics ideas and concepts of arthrology, it is now valuable to explain a few terms and concepts.

The frame and the panel

The smallest reference unit that arthrology uses is the panel. When describing a panel, one must talk about its contents, which include, but are not limited to, image, story and frame. On top of that, one must consider the panel as a spatio-topical entity. When doing so, the features under scrutiny are shape, size and location on the page. The following is Goerstreen's definition of a panel:

> *"In its habitual configuration, the panel is presented as a portion of space isolated by blank spaces and enclosed by a frame that insures its integrity. Thus, whatever its contents (iconic, plastic, verbal) and the complexity that it eventually shows, the panel is an entity that leads to general manipulations."*
>
> (Groensteen, T. 2007, p.29)

The frame of the panel, Groesteen argues, is also of key importance; the act of deciding what is and is not in any given frame affects the resulting comic in various ways. The frame is capable of multiple functions. It closes the panel, defines what is depicted in it, and it separates its contents from the rest of the panels and the page. The frames create the rhythm of any given comic; they structure both the content and how it is read. In addition, Groensteen argues that the frame holds an expressive function and a potential for meaning other than structural. The frame is an "invitation to stop and scrutinize" (Groensteen, T. 2007, p.50), to pause on a detail the reader might have missed had it merely been a part of a larger frame. The frame is thus a versatile and complex aspect of comic creation, responsible for and capable of a great many things.

The hyperframe and the multiframe

The second significant reference unit is the hyperframe. In Groensteen's words*, "[t]he hyperframe is to the page what the frame is to the panel. But, in distinction to the panel's frame, the hyperframe encloses nothing but a given homogeneity, and its outline is, with exceptions, intermitten"* (Groensteen. 2007, p.32). To put it simply, the panels on any given page form a unit, and that unit is contained by what Groensteen calls the hyperframe. It is what separates the art from the margin. The hyperframe is not an unbroken line, as often the spaces between panels usually are a part of the margin, though sometimes some artists do choose to draw a line around the art on a given page, making the hyperframe clearer.

The multiframe is the largest unit of comics that arthrology uses. The multiframe, unlike the previous units, does not have "stable borders, assigned a priori" (Groensteen. 2007, p.33). The term refers to the entire work, whether the comic is a strip, a page or a 200-page novel. A multiframe of a multiple page comic book consists of multiple hyperframes, which in turn consist of panels.

The margin

The margin is space on the page outside the hyperframe, or as Groensteen puts it, it is "part of the exterior support of the hyperframe."(Groensteen. 2007, p.34). Groensteen defines the margin thusly because while it is usually empty, the margin can be utilized for narrative and pictorial purposes. The margin, like any other spatio-topical feature, can communicate ideas and add meaning to the story in various ways.

Page layout and breakdown

Page layout and breakdown mutually inform one another, but they are not the same thing. Breakdown refers to the distribution of information on a given page, how this information is expressed in the panels and how the time moves on the page. It does so by organizing the relationships of these "iconic enunciations"

(panels) with each other. It controls how the panels participate in the narration of the story and how the reader interprets them. As Groensteen puts it:

> *"The term breakdown should therefore be understood literally and with respect to two dimensions: that which is broken off are not only the moments within the narrative tissue (the narrative keys of the action), they are also partial views, selective framing zooming in on the pertinent zones, and placing certain information outside the frame."*
> (Groensteen. 2007, p.101.)

In turn, page layout organizes these kinds of chains of narratives in space and adjusts "matter already sequential to a spatio-topical apparatus" (Groensteen. 2007 p.119). It assigns each panel its form and site on the page. If the page layout tells us where the panel is physically, the breakdown is concerned with its connections and impact on the story. When creating a comic, the breakdown and page layout can precede each other in the planning process, depending on the comic in question. However, usually, the page layout is informed by the breakdown.

Notable also is gridding, which is the act of defining the comic's structure before it has been created. This refers for example tothe act of planning the amount of pages or chapters the story requires. Thus, the page layout is the improved and corrected version of gridding which has been informed by the breakdown and braiding of a given comic.

Braiding

As alluded to before, braiding is a part of general arthrology and refers to reading connections and networks of meaning between panels that are not in immediate narrative contact. Braiding is supplementary to the story in that the legibility of the events is never dependent on it (that is the area of the breakdown), but in cases where there is a graphic motif, for example, braiding becomes an essential dimension of the narrative. It allows for translinear readings and connections between these panels. Braiding proves that the panels of a comic are in a

network, that images that are physically at a distance can still communicate closely through iconic, graphic or other similarities.

Utterable, syntagm, sequence and series

These are all terms for different levels of reading and interpretation that should not be confused with each other. Utterable, syntagm and sequence all participate in restricted arthrology, while series falls into the domain of general arthrology.

Utterable refers to the meaning of an image outside of the context of the rest of the story. In essence, it refers to the meaningful contents of a single panel. When examined without the surrounding panels the meaning of a single panel is left for the reader to notice and identify on its own merits.

Syntagm is the second level of reading, and it refers to three panels joining together: current, previous and next. This triad already necessitates the reader to be involved in interpretation; the meaning of a panel can be informed by the panel that follows it as much as the one that precedes it. The syntagm travels with the reader as they move on in the story.

Sequence is the third level of reading. It is a story segment that is "characterized by unity of action and/or space". These are images directly linked by the story. Retroactive determination of meaning often happens on this level, as events at different stages of a sequence can alter the reading of other panels in the same sequence.

Finally, series is differentiated from the rest of these ways of reading because it does not require immediate connections, and it does not participate in the narrative in a similar direct way. Series as it is defined by Groensteen refers to a "succession of continuous or discontinuous images linked by a system of iconic, plastic or semantic correspondences". This is a part of braiding, and it provides a supplementary reading of the narrative outside of the chronological progression of the story.

The site of the panel and the place of the panel

The site of the panel and the place of the panel are two different things, yet some sites make it easier for panels to become "places". The "site" of a panel refers to the physical location of the panel. "A place" is the site of a panel when that panel is part of a series through braiding. Some sites on the page, like the upper left corner, the middle and the lower right corner are "privileged" in the layout due to the reading direction, and the potential for them to become places is greater. Those sites often include repetition, and the panels often contain important information. However, a less privileged site can also become a place through braiding.

Why arthrology?

As has been covered in this thesis earlier, many comic theories are either designed for quantitative analysis or they are quite restricting in how widely they can be applied. For this thesis, I am interested in the narrative impact my chosen sequences have on the stories they're found in. I am not interested simply in the minutia of how the sequences themselves work, rather I wish to know what their impact on the overall narrative and tone of the comic is. Had I chosen a theory that was more concerned with immediate panel transitions or with categorizing what specific building blocks the sequences construct from, it would have been very hard to broaden the lens and look at the impact those sequences have on the overall narrative. Arthrology, however, is essentially designed for this type of analysis.

Through arthrology, I can analyze all of my chosen comics on multiple different levels, from examining the immediate visuals to constructing complex readings of the story. Through spatio-topical analysis, I can examine the physical reality of the page and its layout: if it is regular or irregular, if it is discrete or ostentatious, how the panels function and how the eye is directed on the page. This is especially interesting to me as many of my chosen comics are unconventional in their paneling.

Through restricted arthrology and I can examine the breakdown of the page to deepen my understanding of how the narrative and time moves within the sequence. This is also especially important as all of the examples I have chosen include some form of divergent visual methods of presenting time. Finally, I can examine the overall translinear connections built by these sequences using the ideas from general arthrology. Through braiding, I can explore how and if these sequences and panels belong to series, and what those connections mean for the overall narrative of the stories.

Compared to other comic theories, arthrology is quite relaxed and open to interpretation – this can be an issue. In his book *The Narratology of Comic Art* (2017), Kai Mikkonen brought up this problem regarding arthrology. When you are free to draw relations between panels from any site in the comic, it might be hard to find the line where it makes sense to stop. This is a relevant concern, however, like Mikkonen himself points out:

> *"The point in identifying any 'tabular' or 'translinear' panel relations, or relations between larger segments of the narrative, is precisely to explain how the given relation is significant, for instance, in terms of temporal information, in contrast with a multitude of other relations that are not relevant to consider."*
>
> (Mikkonen. 2017. p.56)

Despite its shortcomings, I find that arthrology provides me with ample ground to build my research on. It gives me many tools to explore my chosen sequences, specifically because of their relation to time. A little later in the same chapter as the above quote, Mikkonen specifically points out that Groensteen's theory is especially adept in accommodating forms of temporality which are more complex than just simple linear connections. It is precisely because of this potential for temporal analysis that arthrology has been selected and will be used for the research sections in this thesis.

2.5 Scope and introduction to material

After establishing the theoretical basis, one must now discuss the research material. Referring back to the research question posited at the beginning of this thesis, there are two key aspects that all of the comics chosen for the research must include. Firstly, they need to feature a divergent mechanic of depicting time. Secondly, as the thesis is about the impact these mechanics have on the chosen stories, they need to include a narrative. In this chapter, I will examine what both of this means within relation to the chosen research material.

To establish what constitutes a divergent mechanic of depicting time, one must first establish what counts as a standard, or non-divergent mechanic. The chapter 2.3 Time in Comics explored and explained many comic theories that touch upon the progression of time, all of which were fairly traditional. I would argue that the use of time can be considered standard when the time on the page progresses in one direction, forwards, and nothing in the form or the contents of the panels disrupts this progress. To use arthrological terms: it could be stated that a standard way to depict time is one where the breakdown is clear and linear.

If a comic's usage of time is standard when its breakdown is clear, one can surmise that it is divergent when it is not. This is to say; sequences where the order of events or their length is left unclear in the breakdown utilize a divergent mechanic (or mechanics) of depicting time. These mechanics can also be found in sequences where the events themselves are clear but are presented in an unconventional reading order that affects the breakdown. Additionally, pages where the contents of the panels themselves somehow obscure the order and duration of events fall under this category. A comic utilizes a divergent mechanic of depicting time when the breakdown of a page is non-standard due to the layout or the contents of the panels.

To decide what counts as a narrative is a little more difficult, as in this case, establishing what is not a narrative is essentially impossible. Almost all forms of

sequential art include some form of progression that can be interpreted as narrative or story. Because of this, I will not attempt to use this section to define what is and is not narrative. Rather, I will aim to define what type of narrative the chosen comics should have for the purposes of this thesis and why.

In order to isolate the impacts divergent mechanics have on the chosen stories, the comics need to have a defined narrative with a clear story and distinct narrative goal. They need to attempt to immerse readers in their stories, to tell the readers something of value and impact. Because of this reason, the research will not include humorous comic strips, which often use divergent methods of depicting time but generally are not focused on the overarching narrative which this study needs. Comics with only implied or suggested narratives have also been left out of the study. If the story of the comic is vague enough to be left almost completely or even partly to interpretation, it is not clear enough so that the effects of the divergent mechanics specifically can be examined in isolation. For the purposes of this thesis, the research material chosen needs to include narratives that are purposeful, overt, and tell a story, so that the effect of the divergent mechanics on said stories can be explored.

Additionally, comics that are entirely built around a non-linear structure have also been excluded from this thesis. This might at first seem counterproductive because mechanics which obscure the vectorization of reading are one of the subjects in this thesis. Nevertheless, these types of stories have been left out because creating an entirely non-linear narrative is a form of storytelling with its own history and traditions, both within comics and other media. In comparison, a divergent mechanic of depicting time is a tool that could be used in any type of story. This thesis does not aim to examine types of stories it aims to explore types of mechanics. Ideally these mechanics could be used as tools by comic artists even if the narratives of their stories are conventional and linear.

Having established both of the main criteria for choosing material, there are still some other aspects that need to be considered. Neither the genres nor the art styles of the chosen comics matter in choosing the research material. Getting a wide variety of types of stories is be preferable, and this thesis does not focus on

artistic skill or style of drawing. However, the countries of origin of the comics chosen for this thesis do matter. As a researcher, this is where I must admit to my own shortcomings. I have grown up in Finland, and while I have read some amount of Asian comics, most of my comic experience is from European and American comics. Manga, Manhwa and Manhua are all interesting and valuable spheres of comics that should be considered in academic studies outside of Asia. However, for this thesis, which relies on the researcher's understanding of the intricacies of comic storytelling, I have chosen to leave them out of the scope. This is not because of the reading direction nor due to any perceived flaw. It is because all of these localized spheres include their own storytelling conventions that are at times very different from both the Anglophone and the Francophone comic spheres. As a researcher, I do not know these conventions well enough to comfortably make statements about their divergency or lack thereof. This lack of inclusion of comics published in Asia is an unfortunate gap in this research, one I hope another researcher could perhaps eventually fill. That being said, it is notable, however, that the impact of manga and Asian comics, in general, is still palpable in the works chosen for this thesis as many of the more recent European and American comics are heavily manga-inspired.

Finally, having established the scope, I will now briefly describe the comics chosen for this thesis. The comics have primarily been chosen for the way they combine the divergent methods they use with their respective narratives. The point of this thesis is not to prove that every use of divergent methods of depicting time in comics is to progress or enhance the narrative, but that they can be utilized for that purpose, so the material has been chosen accordingly. Four of the five chosen comics were published in Europe, two for the Anglophone market and two for the Francophone sphere. There is also one American comic that has been included in the thesis. Most of the chosen comics are genre fiction, with one exception. The included comics differ in tone, style and narrative goals, as well as the year of publication, which varies from 1975 to 2018.

Despite the rather homogenous publishing locations, the comics included in this thesis are different from each other. Though they are all either European or American comics, their contents vary greatly and it is this diversity of content that

gives the research ample ground to build on. The variety of the material enables the exploration of how versatile and complex the use of divergent mechanics really is, and how widely these mechanics can be applied towards very different narrative ends.

CHAPTER 3.

Research

3.1. Introduction to research

The goal of this thesis is to analyze how divergent mechanics of depicting time affect the overall narrative of comics. For my research section, I have chosen five different comics that fall into the scope previously established in this thesis and that include what I consider to be these divergent mechanics. All of the chosen examples are different, and the sequences in them vary greatly in length and style, which gives plenty of diverse ground to build this research on.

In the research sections, I will describe and explore how the divergent mechanics are created, as well as what their impacts on the narratives are, through the use of arthrology. Each research section will start with a brief summary of the story and a description of the style and tone, both of which are necessary to know if one wants to understand the impact of the sequence on the overall narrative. Then using the different levels of arthrological analysis, I will go through the chosen sequences and observe my findings.

At the end of the research chapter, I summarize my research by categorizing my findings of the different ways narrative can be impacted through the use of divergent mechanics of depicting time. Though they are at times wildly different, I will pinpoint the narrative goal of all of the mechanics used and categorize them under broad categories that have the same narrative purpose (i.e. as a tool for immersion). After I have categorized my findings I will move on to the analysis chapter to explore how and if these findings can be used to advance the understanding of storytelling in comics, and if they can become new narrative tools for comic artists who wish to use them.

3.2. Sequence 1: What is Left

figure 4. Page 26 of What is Left

What is Left is the second story in *Don't Go Without Me* (2019), a triptych of short comics by Rosemary Valero-O'Connell. It tells the story of a spaceship mechanic Isla who gets trapped in a "memory engine" when said engine explodes and destroys the ship. Isla, the sole survivor of the explosion, finds herself drifting through the ship's memory donor Kelo's memories until she is unexpectedly rescued by outside authorities at the end of the story. The memory engine is impossible to control, and most of the comic is spent following Isla as she experiences Kelo's life in snapshots out of order. Kelo is presumably dead, Isla never knew her before she got trapped in the engine and Isla expects to run out of food soon. The story is dreamlike, tender and contemplative and this is

emphasized by the detailed and subtle art, which is characterized by clean lines, soft pinks and lilacs interspersed with dark purple for contrast. The narrative tension comes from how desperate Isla's situation is, how doomed both of the characters are, and how bittersweet Isla finds it that she is getting to know Kelo only now after it is too late.

The page I have chosen to include in my research is page 26 of the story (figure 4.). It is the left-hand page and is thus revealed on a page turn, directly after a scene has ended on the previous spread. It is not the start of any longer sequence and on the very next page, a new scene begins again. Page 26 is located towards the end of the story and depicts Isla from the outside as she sleeps in the memory engine, as well as various moments of Kelo's life that Isla sees during that time. It is notably one of the very few pages that depict both the world outside and inside of the memory engine at the same time, most of the time the memories and the real world are visually separated on different pages.

Spatio-topia

From a spatio-topical perspective, the page is unique in the comic. Its layout is both irregular and ostentatious. It includes 19 panels, significantly more than any other layout in the comic, as the page which has the second most panels only has seven panels. The layouts of all of the pages are slightly irregular throughout the work, but most that are not splash pages have regularly sized margins on both sides of the hyperframe which this page does not have. There are no speech bubbles to denote the reading pace or even its order. The comic uses a lot of inset panels throughout most of it, but they, like the bubbles, are absent from this page as well. The frames of the panels provide closure in that they confirm the panels to a form. They also work to separate all of the different memory moments from each other as well visually separating the sleeping Isla from the memories, thus denoting the two levels of reality at play on the page. On top of that, while irregular, the panels are very clearly structured and they structure the images in them. The frames of the panels that depict the memories are laid out in a way that is decidedly not readerly as it does not seem to follow any traditional gridding designed for reading. Rather, the layout of the memories is quite rhythmic. In

comparison, on other pages in the comic, the layouts have a very clear vectorization of reading. All in all, this page layout is markedly different from all others in the comic.

Restricted arthrology

It is in the analysis of the breakdown where the divergent usage of time becomes apparent. Simply put, the breakdown does not make it clear how long the events depicted on the page take. Through the context of the story, we know what is happening: the large pink panel shows Isla from the outside as she sleeps, and the smaller purple-hued panels show all that she sees in the memory engine, but the length of these memory fragments remains unclear. Of the act of trying to analyze the length of time in comics, Kai Mikkonen writes:

> *"Nevertheless, we may be able to analyse duration and rhythm in comics in a relative sense by comparing the ratio between the length and complexity of the representation of an event—in terms of panels, strips, or pages—and the time span that is covered by that event or situation in the world of the story"*
>   (Mikkonen, 2017. p.51)

To do as Mikkonen suggests and compare the ratio between length and complexity of the representation of the events, a clear answer still eludes the reader. Some panels which depict simple moments are comparatively large, while simultaneously there are and many complex events depicted in the smaller panels. It is impossible to determine if the small panels are meant to be shorter glimpses of time than the large ones, as the reader could arguably spend more time examining the smaller panels than they would the larger panels. How long of a time Isla spends in each of these memories or even all of these memories combined is impossible to determine from the breakdown.

As the breakdown is so vague, the amount of time spent during this sequence could be expected to be deducible from the larger context of the story, but this is not the case. There are moments in the story where time has clearly passed,

which are when Isla's dress changes from uniform to more casual between scenes, as well as one scene where she notes her waning supplies, but both of these take place before page 26. Though this page takes place between two separate scenes, nothing about Isla's dress or amount of supplies is shown to have changed or not changed when the reader gets to the next scene. The reader does not have any indication of how long the time on page 26 goes on for. The reader has also been shown in the comic that sometimes the memories flicker and change between spoken sentences and sometimes they linger for long periods of time, so there is no consistent length of memory duration that they could refer to either. The breakdown is designed so that the length of time passed is not clear, even in the context of the whole story.

Because of the deliberate vagueness of the breakdown, the time passed is thus left largely for the reader to determine. Mikkonen writes that "impressions of duration and rhythm are dependent on the reader's subjective sense of time in reading. One reader may spend a lot of time with some scene, while others a lot less" (Mikkonen, 2017. p.51). That is undoubtedly the case with this particular breakdown. Because of the lack of verbal component and because nothing significant happens during the page, the reader could glance at it for only a short while and get all of the pertinent information for the story to stay legible. On the other hand, another reader could spend a long time examining the page, going through every little panel one by one and trying to understand what they depict and which parts of Kelo's life Isla gets to see in them. The experience of time spent during this sequence would no doubt feel very different for both of these readers, which would then affect the feeling of the narrative for both of them. However, despite this, both of them would still be able to tell that the time passed is in no way set in stone or clear, even if they have their own reading experience to inform their point of view.

General arthrology

Moving on to braiding, one must note that no panel on this page is a part of any significant series within the comic. There are no iconic or graphic elements on this page that repeat in the rest of the comic in a significant enough way to denote

a series. No single memory or the visual of Isla sleeping repeats enough in the comic to be completely read as braiding. Not even the colour scheme, real-life being coloured pink and the memories being coloured purple, is consistent enough of a motif in the comic to feel purposeful on this page, other than for providing visual contrast. Indeed on the very next page, a similar contrast is achieved when two panels are pink and one purple, but all three of these take place inside the memory engine. In this way, there is no significant braiding to be found on this page.

However, the lack of obvious braiding does not mean none can be interpreted. Indeed, while no single panel is a place, I would argue that the page itself has a braiding effect, albeit a more generalized one. Through the juxtaposition of Isla sleeping in the memory engine and the snapshots of memories she sees, the page can be considered a sort of a summary or a symbolic depiction of the entire story. It reflects what is happening, not only on that particular page but on every page from the moment Isla gets trapped in the memory engine onwards. In this way, it is in a network with every page and panel in the story, representing the general overview of what is happening throughout all of them. This sequence corresponds with all other panels in the comic in a way other sequences do not.

Analysis

While this symbolic summarization of the events of the comic is a nice addition, the real power and impact this sequence has on the narrative is derived from its breakdown. The lack of clarity in the duration and order of events that the breakdown achieves affects the reader and the story as a whole. Isla as a character does not have any idea of how long she spends in the memory engine, she is not in control of the events and has to just contend herself with drifting through them, unable to change or affect the world around her. The vagueness of the breakdown gives the reader a similar feeling of uncertainty. The reader, like Isla, does not know how long Isla spends in the engine, nor can we control the shifting or order of the memories she sees. In this way, the layout of the page and consequently the breakdown give the reader feelings of uncertainty which reflect Isla's experiences in the engine.

It is also notable, that while Isla experiences Kelo's life out of order and disjointed, the reader experiences the events of the story very clearly vectorized – except for this one sequence. Despite being set in a memory engine where everything is out of order, the passage of time, both story-time and discourse time, is generally very standard and linear. Then on page 26, due to the effects of the breakdown and the layout, the discourse time becomes unclear. Not only that, the vectorization disappears, so the order or memories Isla sees is also unclear. As the breakdown leaves us only with a vague sense of events and their order, so too Isla only gets a vague sense of Kelo's life and how long she has lived. Like the panels on this page which are seemingly not in any kind of readable order, Kelo's life is also out of order and disjointed, leaving Isla to try to make deductions by herself. This manages to both immerse the reader in the engine as an environment and to give them a sense of what the main character is feeling, as they are left with similar experiences of disjointedness and uncertainty. Thus, the vagueness of the order of events and their duration achieved by the breakdown is a divergent way of depicting time which emphasizes the environment the narrative is set in and how it feels to the character.

3.3. research material 2: MAMI

figures 5 & 6. Pages 11 and 13 of MAMI

MAMI (2018) is a comic by Digii Daguna, and it tells the story of detective Hayan Nieto and the art thief Goyong, who Nieto is trying to capture and bring to justice. The comic depicts their cat and mouse game which starts at their first meeting and continues all the way to when they both eventually quit their respective professions and start a noodle shop together. Though the events themselves are dramatic at times, the tone of the story is largely light and humorous as Nieto and Goyong get to know each other and realize they are each other's match. The story is not meant to be realistic, as both the emotions and the drawings are animated and exaggerated, and the concept, while not supernatural, is rather unrealistic. Despite this, the narrative is a satisfying one as these two evenly matched characters realize they would be much better off as friends instead of enemies and that they have more in common than they previously thought, most notably: a love of food.

The pages I have chosen as research material for this thesis are pages 11 (figure 5.) and 13 (figure 6.). Both of them are on the first page of their respective spreads. The scene these pages are from is a flashback located in the first half of the comic which depicts the first meeting of the characters, back when Nieto was just a night guard at a museum and not yet a detective. Notably, it is also the only actual chase scene included in the comic, all others are merely implied. However, it is made clear to the reader in the narrative that this type of chase is what most of their interactions have been like before the events of the comic take place. During these pages, Goyong first manages to evade Nieto but then is soon captured by him, which is something that has never happened to him before.

Spatio-topia

Starting from a spatio-topical perspective, it must be noted that the dimensions of the page layouts are very similar. On both pages, the page is split into three similarly sized strips, though on page 11 there are also two small insets over the bottom panel, and on page 13 the first strip is missing panel borders while the second strip is essentially functioning both as a strip, a series of insets as well as an architectural detail of the building the characters are exiting. This lack of panel borders on the first strip on page 13, as well as the fact that it does not have speech bubbles like the equivalent strip does on 11 which has an effect on the discourse time and makes the panel read much faster than the first strip on page 11. The inverse happens on the next strip, which on page 13 includes essentially three panels instead of one. The only site of any panel that is the same on both pages is the large bottom panel, though on 13 it includes slightly more area as the above strip works as an inset over it. On both pages, on top of the very basic usage of denoting, closure, structure and separating moments from each other, the panels are largely used rhythmically, to emphasize action. Some of them have what Groensteen called an expressive function, as is the case with the two insets over the bottom panel on page 11. Their inclusion doesn't truly add more information as much as it alludes to movement and emotion. Notably, the separative function of the panel borders is absent from within the first strip of page 13, and instead, there is the motif of the repeating character and the

window, latter which visually resembles a panel and seems to do so on purpose, but is not used as a panel in practice.

Restricted arthrology

Examining the breakdown of these pages, one can start to draw more concrete conclusions of the divergent mechanics of depicting time at play. There are three panels or moments where a character is drawn in multiple places at once, two of which include another character who is not. These panels are the large bottom panel on page 11. where Goyong is depicted three times and Nieto only one, the top strip/panel on page 13. which again shows Goyong three times as he climbs out of a window, and the bottom panel of page 13. which shows Goyong once but is overlaid by the strip of insets where Nieto is depicted three times and which are clearly interacting with the panel below them. On both of these pages, the breakdown is such that the top panels and strips are used for the buildup of tension and action while the bottom panel is where the most significant action happens. This smartly utilizes the size and naturally privileged site of the bottom panel in the layout. It is not necessarily universally the most effective site for all repetition in all comics, but Groensteen identifies it as particularly privileged and in this case, the last panel on both of the pages is utilized effectively for both emphasis and drama.

One could argue that Nieto is not in three places at once on page 13., but that these insets should be read three regular separate panels. I would disagree with this. The panel above these insets shows Goyong climbing out of a window, but because this moment is depicted as one panel, it also gives us the impression of a wall with three windows. The panel right below which includes the insets is depicted from the outside of the same building, and thus the three insets directly resemble the three windows Goyong just climbed from, except this time from the outside. In this way, these three inset panels become three windows, which means that Nieto is in all of them at the same time, much like Goyong just was. On top of this, in the second inset panel, Nieto is already aiming at Goyong and looking at where he is located on the page, which is the same site he is in just a moment later when Nieto's flashlight collides with his head. This gives the reader

the impression that in this moment, it is Nieto who is in three places at once, aiming and then throwing the flashlight at the stationary Goyong who is this time the one stuck in place. There is also the fact that the way the windows are spaced is irregular with one window spaced further than the other two, but the irregularity stays (almost) consistent if you consider the next panel as the outside view of the windows in question. The right side window in the strip that shows Nieto throwing the flashlight is slightly further than its equivalent, which would be the left side window above. However, I argue that this can be explained by the needs of the composition of the page and clarity of action.

Notable also for the breakdown is that on page 11. the reading speed is determined by the verbal material on the page, four speech bubbles and two interjections, but on page 13 there is no text at all, aside from one sound effect. Considering the different functions of verbal components Groensteen considers applicable in arthrological analysis, it is pertinent to note specifically what the verbal components are and what their effects on the breakdown are. Most of the verbal components serve either a rhythmic or dramatic function, with some exceptions. Goyong's speech bubbles at the start of page 11. are largely meaningless to the plot as we already know that Goyong is an art thief and that Nieto is new at his job. However, they serve to emphasize Goyong's character as someone who is overly confident and they slow down the reading speed so Nieto's appearance behind Goyong in the last panel of the top strip is not immediate. Thus the effect on reading speed affects the rhythm of the scene, which means the verbal components serve a rhythmic function. On top of that, Goyong's internal dialogue establishes his character and compliments the images chosen, which works towards the goals of the story in general. This is an informative function of the verbal component which Groensteen called a relay function. Goyong's reaction "Shit" in the second strip, combined with the dramatic colour change, works both as a rhythmic pause as well as a dramatic emphasis so it also has a dramatic function. The "too slow" in the bottom panel emphasizes what the panel and the sequence already show, and works to establish the characters and their dynamic which again means it has a relay function. The "BONK" sound effect on page 13 works as dramatic emphasis.

When looked at as a whole, the breakdowns of these pages work to emphasize the most dramatic moments on both pages respectively. These moments are when Nieto first tries to grab Goyong and fails because Goyong is too fast on page 11, and then when Nieto defeats him on page 13. Both pages do this through effective use of the layout so that the top halves of the pages are small panels that build up the tension for the dramatic large panels at the bottom of each page. Additionally, as these are both pages in the same chase sequence, the reader can also tell their different places in the chase based on how fast these pages read. Page 11. uses the rhythmic function of the verbal components to slow down the action in order to build up for the beginning of the chase in the last panel, whereas page 13. which depicts the ending of the chase and has no verbal component to slow down the reader or the action on the page, before the dramatic emphasis of the sound effect in the last panel.

General arthrology

If we move on to braiding, there is quite a bit of it present. The repeating visual motif of one character being in three places at once appears exactly three times, though last time this is achieved by a different character than the first two. The relatively similar layouts of the pages, as well as the fact that they are both on the left on their respective spreads also creates a braiding effect that makes comparing them feel natural and intentional. It is significant that the beginning and the ending of a chase sequence are so visually similar, as is the fact that the chase scene ends how it began: by a character appearing in three places at once while their opponent is seemingly stuck in one moment in time.

When one considers braiding one must also naturally consider the entire multiframe and not just one scene. Neither this particular layout nor the motif of a character appearing in three places at once repeat anywhere else in the album, which means that they are part of a series that exists only within this one scene. There are, however, other moments in the comic which work on a similar level of visual metaphor of course. For example, there is a scene where Goyong is drawn lying in a bowl of noodles, and much like in the chase scene, the reader is not supposed to take this literally, rather it is a visual shorthand that works with the

comic's particular style and tone. It can be thus stated that Daguna created a braiding effect within this one scene that does not appear elsewhere and they did so through emphasizing this visual motif of one character in three places at once.

Analysis

The next step is to examine why Daguna chose this visual motif, which is a divergent mechanical depiction of time, and what effect it has on the narrative. In The Narratology of Comics, Kai Mikkonen points out that among other similar techniques, panels that show the several positions of a person simultaneously can "*introduce a sense of duration in a single image, suggest an ambiguous relationship between a moment and duration, or undermine the idea of the panel as a distinct unit of time*" (Mikkonen. 2017, p.56). He also says that panels don't have to all be moments but that they can be "*perceptions, perspectives, thoughts, ideas, or representative scenes of action*" (Mikkonen. 2017, p.55). I agree with Mikkonen's observations here, and I find them useful when considering this particular sequence.

I would argue that the repetition in this case indeed is not meant to represent a realistic moment in time, rather it is supposed to introduce information about the character. Borrowing from Mikkonen, the panel is in this case presenting an idea. This idea is that Goyong, who has been previously mentioned to be impossible to catch, is indeed so fast that he might as well be in three places at once. The reader is meant to understand Goyong's simultaneous appearances as a visual depiction of almost supernatural levels of skill. This is why it is particularly important that this is an idea that repeats with Nieto. Nieto is established to be Goyong's equal because he too can be in three places at once. This is important because their relationship and never-ending cat and mouse chase is the entire driving force of the album. The flashback scene these pages are from is early on in the book and takes a considerable portion of it. It depicts their first meeting but it is also the first scene where we see them in action, so it also has the double duty to establish both the characters and their dynamic. What it tells us visually, using divergent mechanics of depicting time and the repetition of this mechanic

through braiding, is that Goyong is excellent at what he does and hard to catch but that Nieto is his match.

The knowledge established in this scene is a solid foundation for the rest of the story to build upon. This visual motif does not repeat, but it does not need to do so for the narrative to work. The comic is relatively short, only 63 pages, and it makes its point effectively in this one scene. The rest of the comic is spent by showing us the characters speaking and bonding in various situations. This one scene with its clever use of divergent mechanics of depicting time establishes both what makes these characters special from all of the other characters in the story, as well as what makes their relationship with each other so unique. The divergent mechanical depiction of time is thus in this case utilized to establish individual characterization as well as the dynamic between the lead characters, which are both crucial for the emotional impact of the story.

3.4. research material 3: Philémon – L'Île des brigadiers

figure 7. Page 4 of Filemon på konstaplarnas ö

*Philémon – L'Île des brigadiers (*1975) is the seventh album in the Philémon series by Fred, sixth in order of publication. The version of the comic used for research material in this thesis is the 1980 Swedish translation, Filemon på konstaplarnas ö, and for the purposes of clarity and consistency between the page I'm analyzing and the thesis text, I will be using the names of the characters used in the Swedish translation, (i.e Filemon instead of Philémon, and so on). The Filemon comics are a famous Bande dessinée series, and they tell the surreal story of young Filemon and some other recurring characters, as they use magical means to move between the rural French countryside and the islands

that spell "ATLANTIC OCEAN" on the Atlantic ocean. The islands themselves are strange and do not abide by the logic of the real world. They include everything from bottles growing on trees that are located on islands populated with wild magical creatures to characters walking on water and flying in castles. To match the tone, the drawings are loose and expressive, characters are exaggerated and at times fantastical and the colours are bright and powerful or grounded and dark depending on the requirements of the scene. Every album is full of discovery as the characters explore yet another surreal situation they have found themselves in and the imaginative sceneries and concepts inspire awe and joy in the reader.

As the seventh book in the series, Philémon – L'Île des brigadiers starts in the middle of the story. In one of the earlier albums, Filemon gets to know Bartholomeus, a well digger originally from the same village Filemon is from, who got trapped on the island of A some twenty years ago. Filemon eventually helps him escape and return to their village, only for Bartholomeus to realise that he was happier back on A. Most of the stories going forward centre around Filemon and Bartholomeus as they attempt to return Bartholomeus to the island of A with minimal luck. This is what L'Île des brigadiers is about as well. The story follows the same formula as many of the books do: it starts with Filemon and Bartholomeus attempting to use a new method of travel to return Bartholomeus to A, both getting whisked away and ending up on a wrong island instead where they have an adventure before, in the end, they manage to return to Filemon's village, but not to A. So in the end, they are essentially back where they started.

The page chosen for this thesis is page four (figure 7.). It is from the first scene of the story where Filemon's uncle Felicien tries to help Bartholomeus to return to A, but things do not go according to his plans. In it, Felicien takes Filemon and Bartholomeus down to his cellar where Bartholomeus attempts a new way of travelling to the islands, without success. Though the page is the fourth in the printed book, in reality, it is the second page of the comic proper, and the left-hand page of the first spread of the entire album. The scene it is from is rather short, only three and a half pages, and as such it confides in it a large percentage of the entire sequence.

57

Spatio-topia

From a spatio-topical perspective, the page is unique in the comic and rather noticeably so, which makes it ostentatious. The page layouts throughout the entire comic are generally irregular, though they follow the same gutter size and margin size throughout. The gutter and margin sizes are consistent here as well, except there is an empty space in the middle of the page that does not feature in any other layout in the comic. It causes the panels to create what looks almost like a large circle on the page, if not for the rectangularity of the panels determined by the rectangular form of the book. On top of closure and separation of moments, the frames on this page provide a structure to the compositions of the content within them. Particularly notable in this case is also the readerly function, where the frame borders separate a continuous image into different sections for the reader to read separately. One such sequence here is the progression from the first panel of the page to the two panels right below it. Moving on, the balloons, apart from expressing their verbal content and thus affecting the reading speed, do not seem to be doing anything significantly impactful on a spatio-topical level. There is however one panel where the bubble's tail continues between two different frames and thus guides the eye to do the same. The layout of this page, despite featuring conventional ballooning and following the margin size of the rest of the comic, stands out, which is due to the large empty space in the middle of the page, as well as the readerly usage of the panel frames.

This layout servers a very specific purpose, which is trapping the reader's eye into a loop of reading that has no clear ending. At the top of the page, the eye arrives on the first panel, the site of which is the standard top left corner. The very next movement of the eye is however already unconventional, as the continuation of the drawing separated only by the frames providing a readerly function draws the reader's eye two panels down, instead of one panel to the right where it would usually go. From here, the eye lands on the next available panel, which is situated at the bottom left corner of the page and then moves on towards the right side as it is programmed to do. However, once the reader arrives at the bottom right corner of the page, the reading direction becomes nontraditional, yet again. Instead of jumping onto the next page like it usually would from that site, the eye

moves up. This is due to the continuous drawing of the rope which travels up the entire length of the panels on the right side of the page, as well as the reader's implicit knowledge that there are panels they have not yet read, so they cannot move on. As the reader returns to the top of the page, having now read all panels, they are still unable to move on to the next page. The drawing of Felicien walking left out of the frame and into the first panel, Felicien's dialogue, as well as the fact that the eye is not used to jumping to the next page from this site, cause the eye to return to the first panel, the act of which starts the circle again.

Restricted arthrology

Moving onto the breakdown, we are able to see what impact this layout has on the time passed in this scene, and in which ways that make it divergent. Due to the circular layout of the panels and the way the eye moves within it, the reader gets effectively stuck in a time loop. The time moves forward in the scene rather traditionally and conventionally, but because of the linking created by the layout, there is no clear ending point and unless the reader forcibly breaks the flow of the scene, and moves themselves to the next page, they end up reading the scene again and again. This way, the reader experiences being stuck in a loop with the characters because in a way they truly are stuck there with them. This looping is even commented on in the first panel of the following page, where Filemon says that they have gone in a circle for a week. The reader presumably has not read in the circle for that long, but they have most likely read the page more than once, so Filemon's comment is intelligible both as a plot point and an emotional touchstone with the reader.

One of the key causes for the forming of the loop is the first panel and the consequent two panels below it which form one single image that the eye is wont to follow. In Narratology of Comics Mikkonen brings up Filemon specifically as a comic series that uses such panels and he comments "With this technique, cartoonists can deliberately ambiguate the distinction between a moment and duration, or a single image and a sequence." (Mikkonen, 2017. p.57) That is no doubt part of the effect on this page, and definitely at least partly why the

transition between the last panel in the loop and the first panel in the loop fit together. Despite this, I would argue that the main use of this technique on this page is to guide the eye into the desired direction, rather than make that particular syntagm feel ambiguous in its duration.

Of particular interest for both the breakdown and how it coincides with the layout, are the verbal components of this page. The page has 11 speech bubbles, most of which function either as a form of realism, in that it is realistic for characters who expect to be parted to say goodbye or as anchorage which clarifies the content of the panel, like when Felicien says that the rope he is carrying is magical. However, a few of Felicien's speech bubbles seem to comment directly on the layout itself and break the fourth wall entirely. These are specifically Felicien's speech bubble in panel two, and his speech bubble in panel nine, which is the last panel before the loop starts again. In panel two, Bartholomeus asks if descending the ladder is the correct way forward and Felicien responds by saying "Yes, from panel to panel… from top to bottom…and then from bottom to top… and then you come to A". This is very clearly a reference to the reading direction of the page itself, and by mentioning panels it breaks the fourth wall. In this context, Bartholomeus' question about the right way can be also read as him questioning the reading direction going down instead of right like it normally would. Then in the last panel, before the loop starts again, Felicien swears and comments that the reason why Bartholomeus has ended up back in the cellar and not on A is that the reader has mixed everything up. He then repeats his directions from earlier, saying "this page should be read from top to bottom and then from bottom to top", and that they must start again. This way he again directly breaks the fourth wall and comments on the layout, giving the reader directions on how to read better next time. However, the directions of course lead the reader's eye to follow the loop again. There is no single function of text that arthrology defines which would fit this type of verbal component perfectly, but one could argue that this text has the function of control, which refers to text intended to manage narrative time. This category usually refers to captions that read things like "meanwhile" or "that night", which is not exactly what this speech is doing, however, I find that it is the closest category of the ones used by arthrology. It can be this said then, that the text in this scene serves to further direct the

reader's eye and perception of time by encouraging them to follow the intended unconventional reading direction, as well as "putting the blame" on the reader for getting the characters and themselves stuck in this loop.

General arthrology

Exploring this page from the perspective of braiding would at first glance seem to not yield many results. The characters repeat in many of the panels of course, but this is not braiding as much as it is "iconic focalization" as Groensteen calls it. Felicien's home is a location the characters visit frequently, but there is nothing visual in the way that it is drawn which would constitute braiding. The mist Bartholomeus enters is a sign that he is trying to access the islands and a visual shorthand the comic series has used many times in the past before, but this fact is necessary for the intelligibility of the plot which immediately means it cannot be called braiding. Like arthrology specifies, braiding is a supplementary relation that creates additional meaning and connection and is never indispensable for the plot to stay legible. The mist in this case is more a visual shorthand for the purposes of the plot than for the creation of additional meaning. No panels on this page constitute a part of a series significantly enough to be considered places.

However, much like with page in section 3.2, this lack of obvious braiding does not mean that no braiding can be found at all. In fact, I would argue that the page itself could be considered a form of thematic braiding. The plot of L'Île des brigadiers follows Bartholomeus' failed attempt at reaching the island of A. This one page is in essence a summary of the events of the entire album. Bartholomeus attempts to reach A and as he enters the mists briefly it seems like he just might get there, but ultimately he returns back to where he started. As mentioned before, this is also a repeating plot in many of these albums, so I would even go so far as to say that not only is the page thematic braiding with the comic, it is also thematic braiding with the entire series of comics. In that context, Felicien blaming the reader for causing the characters to be stuck gets an extra layer of meaning as well. It is indeed the reader who keeps reading the Filemon comics, putting the characters through these ordeals, only for them to always fail in the end. On a slightly more abstract level, the breaking of the traditional rules of

comics by the way of completely altering the regular reading direction emphasizes the way the world in which these comics take place breaks the rules of our world. This page is located at the beginning of a comic, so it reminds the reader that they are entering a comic album set in a world where normal rules do not apply. This way, the page is both a sequence in and of itself, but also in conversation with the rest of the albums in a translinear way, which gives it extra layers of meaning, and means that it falls under the umbrella of braiding.

Additionally, it deserves to be mentioned that the page could be seen to be an ouroboros of braiding all by itself. In the section covering general arthrology, Groensteen writes about how no panel can be repeated without modification as the very act of repeating panels causes a citation effect that affects their reading. This is true, he argues, whether those panels are far apart or if they are contiguous. This kind of repetition is a part of braiding, and in that way, one could argue that the page creates braiding within itself. On the page, the repetition of the entire loop is contiguous, and contiguous repetition according to Groensteen manifests as a "singular insistence". In this case, the theory is somewhat lacking, however, because a part of his argument is based on the claim that panels that repeat cannot be "isotopes" as they cannot occupy the same site, though they undoubtedly do so in this case. Still, the braiding of the page within itself is the natural result of the repeating loop of panels.

Analysis

After establishing what this divergent mechanic depiction time is and how it operates, one must examine the effect it has on the story. As previously mentioned, as the page is located at the beginning of the comic, so it effectively works as an introduction to the world and its characters. Later in the album, we will see Filemon and Bartholomeus explore a world with odd rules that do not follow the ones they are familiar with, and to put the reader into the correct mind space, the comic takes the time to break the rules common with comics so the reader can experience similar feelings of wonder and confusion as the characters do. Even a reader who has never read Filemon comics before and does not know what to expect is immediately introduced to the tone and to expect the

unexpected. On top of that, because the theme of repetition is structurally so central to the Filemon series, the page creates what could be described as a meta-commentary about the entire series of comics, and the people who read them. This way, the comic not only establishes information about the world it is set in but also about the comic books themselves. It humorously points out the futility of the character's aspirations and correctly identifies the reader as the cause of this repetition, because the reader presumably wants to read the characters struggling but does not want them to reach their destination, as that would end the comic. In this way, the divergent mechanic of time being utilized has two functions for this comic: it establishes and emphasizes the world the story is set in as well as how it feels to the characters, and it serves as meta-commentary about the series of comics itself, as well as the people who read them.

3.5 GANGES #4
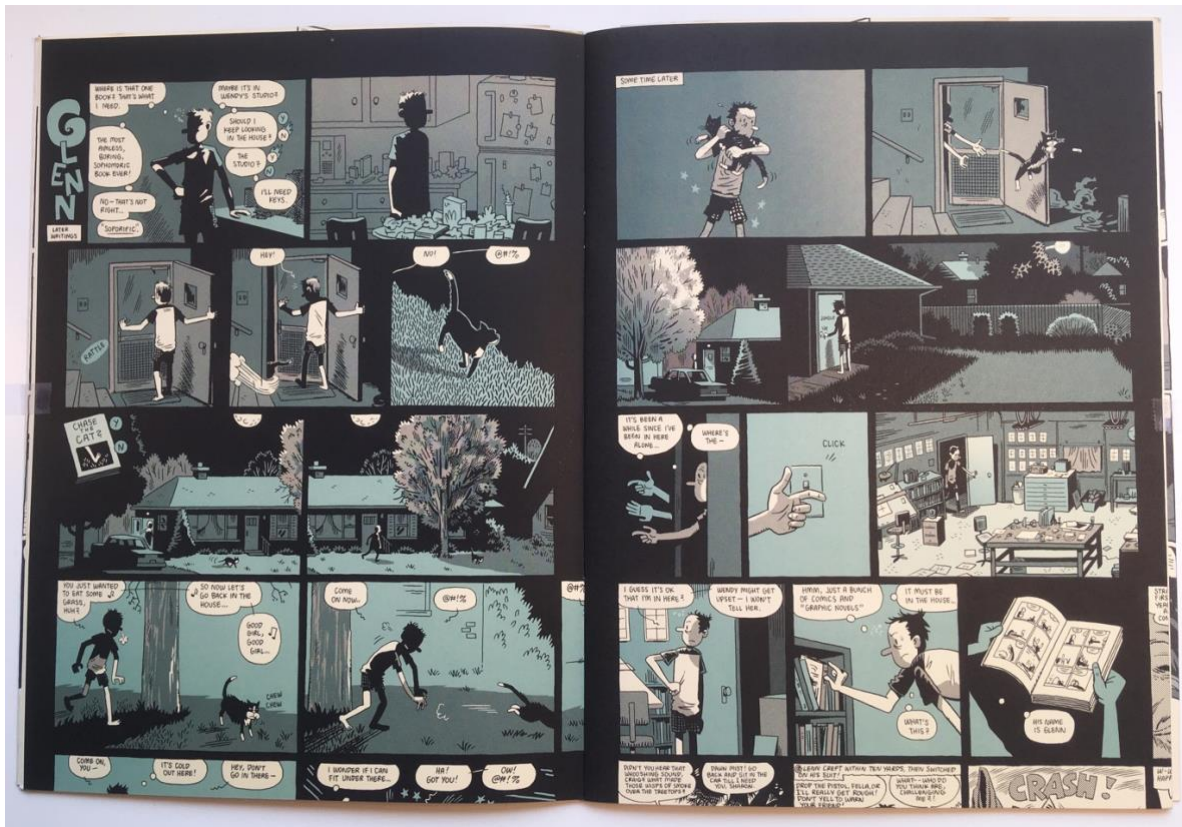
figures 8. & 9. Pages 10-11 and 12-13 of Ganges #4

Ganges #4 is the fourth book in Kevin Huizenga's Ganges series, published in 2011. It tells the story of Glen Ganges and everything that goes through his head one night when he is unable to fall asleep. Glen is a recurring everyman character in Huizenga's comics through whom Huizenga has explored various topics and ideas. Ganges #4 explores Glen's sleeplessness, and the strange, uncomfortable ideas a frustrated sleepless mind conjures up in the middle of the night. The reader is able to dive deep into Glen's psyche as they follow his thoughts throughout the night.

He takes turns wandering around the quiet dark house, reading boring books and lying next to his ever slumbering wife Wendy. The style of the art is simple, with clean lines and cartoony but not exaggerated characters. The colours consist of deep black, turquoise and off-white in varying combinations and levels of saturation. The stylization of the art allows for easy transitions between Glen's imagination and the real world, making the two sometimes hard to tell apart from each other. The comic ends when what at first seems like a scene taking place, in reality, is through the improbability of the events revealed to be a dream, signalling that Glen has finally managed to fall asleep.

For this research section, I have chosen two spreads. Spread one includes pages 10-11 (figure 8.) and spread two includes pages 12-13 (figure 9.) Spread one is the beginning of a new sequence in the story and this scene continues on spread two and beyond. On spread one, Glen at first accidentally lets the cat out of the house and then has to catch it. Once he manages to get the cat back inside, he goes into Wendy's studio in the hopes of finding a specific book but does not. On spread two he spends some time looking around Wendy's studio before going back inside and returning the studio keys into Wendy's jacket pocket without waking her up. He then continues his search for the book in the cellar where he eventually finds it. The spread ends with him reminiscing about how he first heard of the book from his old college roommate. The sequence of events does not repeat the same way in the story before or after, but Glen's meandering around the house, as well as his wandering mind, are both representatives of the general pace and structure of the entire comic.

Spatio-topia

When examining the spatio-topia of the spreads, the reader finds that they resemble each other heavily. On both spreads, there are effectively four full strips per page, a layout that follows the irregular but consistent gridding established by the rest of the pages in the comic. The panel sizes are similar, and apart from the obvious function of closure, the frames are used mostly for separating significant moments or ideas from each other. In some cases, these moments are close to each other and the time passed between the frames is shorter, creating almost a rhythmic quality to the framing. These panel transitions are: when Glen opens the door and the cat gets out as well as the two panels as he starts to chase the cat on page 10, the two panels as he notices Wendy's private notebook on page 12 and the panels where he turns on the light and grabs a box from the shelve on page 13. Finally, the balloons and captions on these pages affect the reading speed of the page as well as the pacing of it, but they mostly do not create a readerly effect that is markedly different from the one which is already enforced by the rest of the layout. Where the balloons are of crucial importance, however, is how they draw the reader's eye into the margins of the comic, where the true impact and ostentatiousness of these layouts become obvious.

Indeed, the most significant and notable spatio-topical feature of these spreads is their use of margins. Firstly, the margins are black, which separates these two spreads visually from all others in the comic. There are only two other pages that include black: the top half of page 14 which is a continuation of the same scene, as well as page 16. However, on neither of these occasions is the entire spread filled with black margins like it is on these pages, which makes these two special. Secondly, and most importantly, on both spreads the bottom parts of the margins disappear, and on spread two the right side margin of the page, so the gutter and outside margin on pages 12 and 13 respectfully, is also gone. This means that the hyperframe continues into the space that is normally reserved for the margins, seemingly unaware that the page itself ends. The result of this is that most of the content of these panels is missing. On both spreads, the reader can make out some text and bits of images that imply the content of the cut off panels, but we do not see the full panels anywhere. This layout style is unique to these two

spreads and does not repeat anywhere else in the comic. This makes the layouts of these pages highly irregular and visually striking. According to Groensteen, chaotic layouts interrupt the regular rhythm of reading and take a part of the attention that the reader would normally give to the narrative contents. Indeed in this case I would disagree and argue that they force the reader to try to pay extra attention to the narrative contents as they attempt to understand a sequence that is largely cut off.

Restricted arthrology

It is once again in the examination of the breakdown where the effects the layouts have on the time passed in the scene become clear. As the effect created by the cut off panels on each page is slightly different I shall go through all of the pages separately. However, first, there are some general notes about the verbal components on both spreads. The verbal components of the spreads largely consist of Glen's thoughts. These sometimes serve the function of anchorage, explaining the contents of the panel, and sometimes relay, which means they work together with the panel and compliment it. Occasionally they also serve a realistic function, for example when Glen swears at the escaped cat. Some panels include a caption. Some of these captions serve the purpose of control as they denote time, and some work as anchorage to again describe and help the reader interpret the panel in question. The function of anchorage of both the captions and the bubbles becomes especially necessary when used on the cut off panels. Some captions include Glen's thoughts and seem to serve a dramatic function, like "READ?!" on page 12. On page 11, notable also is the dialogue and captions from the comic Glen is reading, and on page 13, a large chunk of the page is taken by a heavily captioned section that describes Glen's memories and includes narration from a friend of his. The text here mostly serves the dual functions of anchorage and relay. The verbal components on these pages are thus mainly used to explain and help interpret Glen's thought process, inform the reader where and when the given panel takes place, and notably in the cut off panels the text serves to depict and describe a moment that would otherwise be unintelligible to the reader.

When we move on to describe how the time moves on the page, we can also make some brief overall notes. On spread one, time moves linearly and apart from the cut off panels the passage of time is clear. On spread two this is the same but the increasing number of cut off panels create a greater sense of obfuscation when it comes to the passage of time. On page 12 there is also a panel that seems to be out of context entirely. It depicts Wendy talking to an unknown person. Whether this is sleeping Wendy's current dream or awake Glen's memory is impossible to tell. On page 13, two panels are similarly "out of order". Glen is standing in the middle of the cellar wondering where the book is, and then suddenly he is back in bed. On top of those two panels, there is a caption, which has a controlling function as it reads "Some time later". However, this caption only serves to make the sequence of events more unclear as in the very next panel the caption reads "and", and it depicts Glen standing with the book in hand as if he never left the cellar. Whether Glen went to bed and then later came back to find the book again is hard to tell, as on the next page Glen is only now shown to be walking back towards the bed with the book in hand. Page 13 also includes a flashback as Glen reminisces about how he first heard of the book. The increasing number of panels cut off starting with three on page 10 and ending with seven on page 13, as well as the increasing frequency of seemingly out of context panels give the sequence a particular rhythm, one where the breakdown becomes increasingly unclear and hard to follow as the scene moves on.

Examining the effects of the cut off panels on both spreads, and indeed on every page separately further highlights the layouts' effects on the breakdown. On spread one, the first appearance of the cut off panels is at the bottom of page 10 as Glen chases the cat. The next full panel is on top of page 11 where the caption reads "Some time later" as a thoroughly scratched Glen carries the struggling cat back inside. Reading Glen's thought bubbles, which are the only things truly visible from the cut off panels, we can note the moment he both managed to grab the cat and the moment he got scratched. However, the effect produced by these panels, as well as the "some time later" is an ambiguous one. The reader does not know how long Glen spent trying to capture the cat. The speech bubbles we see could denote the moment he finally catches the cat, but they could just as

well be from a moment where he thinks he is about to catch the cat, but it scratches him and manages to escape. Thus, the cut off panels on page 10 have a concealing effect, not just on the content of the panels themselves but consequently on the length of time passed as well.

On the other side of spread one, the panels on page 11 are used for a similar, yet still slightly different effect. In the last full panel, Glen is shown to pick up a comic book. The following cut-off panels seem to be panels from this comic, the style and tone of which resembles old adventure comics. The next full panel in the story is at the top of page 12, which shows Glen already having put the comic away, and it also includes a caption "Some time later". Thus, the time Glen spends reading the comic is left unclear. Additionally, only being able to read bits of the comic text and not seeing the actual panels gives the reader an impression similar to skimming a book without actually reading it. The reader only gets the vague impression of what the comic is like, much like they would if they picked up a random book and leafed through it. On this page, the cut-off panels thus serve a dual purpose of obfuscating the passage of time, as well as giving the reader a vague impression of the content of the comic Glen is looking at, but not the actual content itself.

Moving on to page 12, the cut off panels have increased in volume and now the hyperframe continues to the right as well. On the top strip, the cut-off panel is from Wendy's unfinished comic that Glen is inspecting and on the second strip the panel is so small its contents are largely unclear. However, based on the glimpse of Glen's thought bubble and the syntagm surrounding the panel we can deduce that Glen reads Wendy's private notebook. Below that, on strip three the cut-off panel is a moment from their bedroom right after Glen has returned Wendy's keys, and underneath it on the last row we see Glen descend to the cellar, every cut-off panel is black around him. As on the previous pages, the effect created by these cut off panels is that of ambiguity. The amount of time cut off in each of these sections varies, there is no way to confidently make a definitive statement about their length. How long Glen reads Wendy's comic for, what he finds in her notebook, what happens in their bedroom and how long the descent into the cellar take are all left unclear.

On page 13, there is the same number of cut-off panels as on the previous one, but this time they include even more content. The cut-off strip on top of the page depicts the things Glen finds in his search for the book, and the panel which cuts off under it shows Glen finally finding said book. Then on the third row, the panel being cut off depicts a memory of Glen falling asleep in the past and finally on the bottom row the panel being cut off is also from a memory, and it continues the narration started by Glen's college friend couple of panels before it. Under that, we see glimpses of three panels that seem to depict the moment when Glen found and bought the book on a trip to Tokyo. Once again it is to be noted that the cut-off panels create ambiguity, they obfuscate the events taking place both in the cellar and in Glen's memories. However, in this case, another effect can be observed as well. The memories depicted in the scene are not necessary to the plot and they do not feature in the rest of the book at all. On the next page, we jump to a panel that depicts Glen walking back to bed. This lack of significant continuity between the memories and the narrative of the scene makes the memories feel superfluous. They resemble a train of thought that goes off on its own and then eventually trails off without fanfare. The page gives the impression that Glen starts to think about these events as he finds the book and then quickly lets go of the memories since they are not very important in the situation. Much like on page 11, the cut-off panels on page 13 seem to serve the dual purpose of creating ambiguity about how much time is passed, as well as giving us a vague impression of some information, but not the actual information.

General arthrology

After exploring the immediate narrative effects created by breakdown, the next step is to examine what braiding the scene has to offer. Due to the unique black margins and the cut off panels, these pages are all in a network of meaning with each other, a sequence that is also a series. This separates the spreads from the rest of the book in the reader's mind so that it forms its own entity, the cut off panels create ambiguity and their repetition emphasizes this ambiguity in the entire scene. The sequence is also in network with page 16, the only non-connected page to also feature black margins where Glen is once again in bed

unable to fall asleep. Additionally, there are also a few panels that are in a network with other panels beyond this sequence, namely, the comic is regularly interspersed with panels that show Glen, otherwise covered by a blanket but his head visible against a pillow, as he tries to sleep. This is a visual the comic returns to over and over again throughout different scenes and scenarios. All in all, the pages are mainly in a braided relationship with each other, denoting them as a separated series, but they also include some panels which are places in an overarching series throughout the whole comic.

Analysis

The divergent mechanic of depicting time in GANGES #4 is the cut off panels that create ambiguity about the passage of time, and having established that, it must now be noted how this impacts the narrative and story. The comic explores Glen's bleary frustration and sleepy confusion from many angles throughout its length. Not only that, another theme that keeps reappearing is time, namely how endlessly long the night feels to sleepless Glen. This section, with its ambiguous panelling used to obfuscate the content of some panels and create questions about the passage of time, highlights both of these themes. The reader is forced to relate to Glen emotionally as they too try to figure out what is going on and how long the events take place for. This divergent mechanic makes the pages look disjointed and confused, busy and crowded, which forces the reader to try to search and isolate the important parts from the less important, much like Glen is searching for his book. The sections with the cut off comic and the cut off memory also give the impression of lack of focus, of thoughts that are trailing off, leaving the reader only with vague impressions. Indeed, to understand the narrative of the sequence one does not have to necessarily read many of the cut off panels at all as a lot of the information is superfluous, which further emphasizes the feeling of trying to find something important in the middle of chaos. In this way, the divergent mechanic is used to depict Glen's mental state as well as put the reader into a similar headspace, which forces the reader to identify with and sympathize with his struggle.

3.6 Research material 5: L'Origine

figures 10. & 11. Pages 36-37 and 38-39 of L'Origine by Marc-Antoine Mathieu

L'Origine is a 1990 comic by Marc-Antoine Mathieu. Its story is set in a severely overpopulated world where our main character, Julius Corentin Aqfaq who works in the ministry of humor, starts getting mailed comic pages by an anonymous source. These pages are moments from Julius's life, reproductions of some of the pages in the L'Origine album itself. Indeed, Julius spends some time trying to understand what comic album these pages are from, what the title "L'Origine" means as well as how any of this relates to him. Julius' search for answers leads him to the ministry of research where he is told that their entire world is a two dimensional drawing, a comic, created by someone in the three dimensional world and that he is the main character. The album ends on page 41 when Julius opens yet another letter containing a comic page, this one depicting the comic artist deciding to end the story by burning page 42. The art is heavily stylized, characterized by stark black and white, as well as dramatic, at times almost grotesque character designs. Many of the panels are crowded and busy, which reflects the over crowdedness of the world, and makes the reading experience borderline claustrophobic. It is a surreal comic, built on an idea which by definition breaks the fourth wall, and thus forces the reader to be hyper aware of the fact that the characters are all fictional, all the while simultaneously getting immersed in the story.

For this research section, I have chosen to examine two spreads. Spread one includes pages 36-37 (figure 10.) and spread two includes pages 38-39 (figure 11.). Spread one starts from the middle of a scene, Igor Ilehack, The leading researcher the ministry of research is showing Julius around the ministry and talking to him about their findings. Ilehack says that it is possible that the "creature" which created them has torn away the last pages of the comic and suggests that they could even be capable of making a hole in it. Julius asks Ilehack about a hole in Materia and then is immediately confused he knew how to ask about it. Ilehack begins to explain that there is indeed a theory of something called the "anti-panel" which is essentially what Julius described. This discussion continues on spread two where Ilehack explains the theory and says that while no one has ever seen one, an anti-panel could function as a window in time. Then, Ilehack repeats a line about their world being a two dimensional, created by a three dimensional one. Julius is confused by this repetition, and Ilehack

realizes that the only possible way he could have repeated himself like this is, if he had just experienced an anti-panel. He then comes up with a mathematic formula for the anti-panel and declares to Julius that there is indeed a hole in the Materia of their world, which prompts Julius' question about a hole in Materia for the second time, further proving Ilehacks theory. Ilehack is gleeful that such a thing truly exists.

figure 12. The "anti-panel" on page 37-38.

Spatio-topia

From a spatio-topical perspective, these spreads are truly unique, not just within this comic, but comics in general. At first glance all of the pages seem rather simple, if irregular like the rest of the album. The margin sizes and dimensions

are consistent with the rest of the pages and every hyperframe includes three equally sized strips. The panels on the middle strip are the exact same dimensions on every page but the amount of panels on the top and bottom strips vary between one to three. This uniformity already separates these spreads from the rest of the comic, as no other pages have these exact strip dimensions. However, many of the other pages in the comic have much more chaotic and ostentatious layouts and in comparison these seem almost simple. There are quite a lot of speech bubbles, but they are rather conventionally placed and while they no doubt affect the reading speed due to their content, they do not seem to have any other spatio-topical function that would significantly change the reading of the page. It is in the middle of page 37/38 where the real spatio-topical oddity of these spreads becomes apparent.

The spatio-topical aspect that makes these spreads unique is that the middle panel of the middle strip on page 37/38 is cut off (figure 12.). This means that when reading the comic, on page 37 the reader will read the middle panel printed on page 39, and then when they turn the page, on page 38 they will read the middle panel on page 36. Due to the uniformity of the dimensions of the strips, the middle panels on pages 36 and 39 fit the hole cut out in page 37/38 seamlessly, and effectively function as panels in the strip. However, this hole means that both panels are read twice, the panel on page 36 is first read there and then again on 38, and the panel on page 39 is first read on page 37, and the again on 39. This effect is only possible due to the uniformity of the layout. Though the frames of the panels of the spreads are mostly largely functional, they mainly denote closure and separate moments from each other, this cut out panel is heavily reliant and dependent upon the structure of the entire page. The sites of the repeating panels stay completely stationary, yet they are read twice in different places during the same sequence.

Restricted arthrology

Moving on to breakdown, it is important to analyze how these layouts affect the time passed in the story. Apart from the effect created by the cut out panel, the progression of the scene is largely rather standard throughout the spread.

Nothing in the passage of time is overtly ambiguous. The characters are repeated many times and as such they are subject to iconic focalization. The verbal component serves mostly as anchorage and relay as Ilehack explains his theories about the world. The rhythm of the sequence is slightly slow as there is quite a lot of text to read. This stops the reader from being able to speed through and makes the time passed during the scene feel equivalent to a regular conversation of a similar length. It is in only in the cut out panel where the divergency of this breakdown becomes apparent.

The cut out panel, or the "anti-panel" as the characters call it, forces the reader to read two panels twice. When read through the anti-panel, panel read on page 37 is from further along in the comic, the panel on page 38 is from the previous spread which the reader has already read once before. In the scene, Ilehack theorizes that an anti-panel like this could serve as a window in time, through which one could see both into the future and into the past. This is effectively how the moment comes across to the reader, they first see a panel from the future of the comic and then from the past. Interestingly, based on consistency of Ilehacks pose after the anti-panel on page 38 and the general reactions of the characters in the syntagm surrounding the anti-panel on both sides of the page, from the perspective of the characters this effect is slightly different. They do not see into the past or future, but rather they are forced into either repeating a moment or pre-living a moment they don't yet have any context for. In essence, they just experience the same moment twice. One could say that this makes the cut out itself unnecessary and that it could be replaced with a reprint of the correct panel. However, I would argue that if the panels were simply repeated twice instead of literally being read twice, the narrative driving force in the scene would not exist. As it stands, the "anti-panel" is the entire point of the scene and it forces the reader to experience the rather literal physical act of looking into the "past" and "future" of the comic.

General arthrology

Examining these spreads from the perspective of braiding raises some significant questions, specifically, if this anti-panel can be considered a form of braiding.

Groensteen argues that no panel can be integrally repeated without modification, as the act of repeating a panel already changes its meaning. This is part of what creates the network of meaning that is braiding. This changing of meaning upon repetition is undoubtedly true here, despite the fact that the site of the panel and thus the panel itself stay literally the same. The act of reading both of these panels again, specifically the repetition of it, does not only change our reading of the panel, it is also narratively important. The characters' realization of the anti-panel's existence is what the entire narrative sequence is about. This raises the question if the repetition of these panels counts as braiding at all, since braiding is by Groensteen's definition supplementary and unnecessary to the intelligibility of the narrative. On its own, the repetition of the distant panels , which indeed are read rather far apart from each other the sequence, creates a network and a series, which would imply braiding. However, the literalness of the repetition is necessary to the intelligibility of the story, which would not be able to function without it. The fact that these images are linked by narrative, not just by resemblance, makes them by a definition a sequence, not a braided series. The anti-panel functions as a tool that lets the reader re-experience a panel with a stationary site, and the fact that it is a narrative requirement for the scene, makes it unable to be considered a part of braiding.

Again though, I would argue that the fact that these repeating panels do not constitute a series does not mean that no braiding can be found on the page. It can be argued that the anti-panel itself is part of a series, a series of all of the panels in the comic which directly break the fourth wall and bring attention to the comic as a physical two dimensional object that the reader is holding. This is a repeating visual motif throughout the comic which is achieved here as well as in the comic pages Julius receives. It takes the reader out of the story and in forces them to confront the fact that they are reading a physical comic album. The braiding comes from the emphasizing of the theme, that the characters are subjected to the whims of the physical comic album instead of creating the story in it.

Analysis

Finally, it is pertinent for the purposes of this research to examine what effect this divergent mechanic of telling time has for the narrative. The most immediate effect, and a notable exception from all of the other research subjects in this thesis, is that it is a part of the narrative, without which the story would not work. The anti-panel serves a very clear and obvious narrative purpose of making the sequence legible and understandable to the reader. Additionally, when the repeating motif of the breaking of the fourth wall in this story is taken into account, another effect is observed. One of the main themes of L'Origine is the existential dread the characters feel as they realize they are not in control and that they are merely two dimensional drawings controlled by someone in the three dimensional world. The cutting off of the panel is the most dramatic way this three dimensional world is shown to alter their two dimensional one within the album. Because of the way the page has been cut, the idea in the end that page 42 has been ripped off and burned by the creator feels more plausible. In reality this did not happen of course, the books were printed without page 42 on purpose. However, because the reader has seen the very literal tampering that the "creator" has done to the book just a few pages earlier, the concept feels more visceral and believable. It makes the characters feel more vulnerable and less in control of their own lives, as the reader is reminded of just how much the characters are controlled by the two dimensional medium. Thus it can be said that in the case of L'Origine, the divergent mechanic of depicting time is a part of the narrative sequence, and it works to emphasize to the reader how subject the characters of the story are to the literal comic format and medium, a key idea for the dramatic ending to work.

3.7. Findings

Having explored all of the material chosen for this research, I must next take the time to note and examine my findings. In each of these sequences, the divergent mechanics of depicting time were different. Some of the effects created by different divergent mechanics resembled each other while others were unique and did not reappear in other stories. Nevertheless, categorizing these mechanics based on similar narrative impact seems both possible and necessary for the purposes of further analysis and exploration.

I have chosen to divide my findings into the following categories:

Divergent mechanics of depicting time
- to establish information about the character(s)
- as a part of the narrative
- as a tool for immersion
- as metatextual commentary about the comic itself.

Some categories are for effects found only in one of the chosen sequences, others include examples from multiple sequences. It could be argued that assigning a separate category for even the types of narrative impacts which were featured only once is unnecessary as there is not enough content for a full category. I would disagree. Even the mechanics which produced a unique narrative impact not observed elsewhere served a very specific purpose. For the ease of further analysis and extrapolation, having the findings be clearly separated by the intended narrative function is necessary. Every one of the narrative impacts I have separated into categories was present in the findings, and thus every one of them should be given equal consideration.

Divergent mechanics of depicting time to establish information about the character(s)

There was one work that used divergent mechanics of depicting time to establish information about the characters. In MAMI, the divergent mechanic at play was depicting one character in three places in one panel, while another character was depicted in the same panel only once. This effectively made it seem like the two characters were moving in time at different speeds. It was used as visual shorthand to denote nearly superhuman levels of skill. The braiding caused by the repetition of this visual motif established the characters as different from the rest of the cast who were not depicted in a similar way. Because of this, it also emphasized the similarity between the two characters who were depicted this way, as they were thus effectively shown to be the only two people who could match each other. The divergent mechanic was thus used to establish information about characters' skill level as well as their relationships with other characters in the story.

Divergent mechanics of depicting time as a part of the narrative

Another category that only had one entry is divergent mechanics of depicting time as a part of the narrative. In L'Origine, the divergent mechanic is that there is a cut-out panel in one of the pages which forces the reader to read two panels twice during different parts of the same sequence. The plot of the sequence not only acknowledges this but also relies upon it; the narrative in the scene is about the hole in the page, and without it, the story would not stay intact. For this story, the divergent mechanic of time is not only a part of the breakdown but also a part of the narrative.

Divergent mechanics of depicting time as a tool for immersion

The single most common use of divergent mechanics of depicting time identified by this research was as a tool for immersion. In these cases, the use of divergent mechanics affected the reading experience in a way that reflected the world or

the character's subjective experience of it. As such, they immersed the reader deeper in the narrative.

In What is left, the divergent mechanic is the purposefully chaotic layout, which affects the breakdown so that both the time passed as well as the order of events is unclear. This leaves the reader with feelings of confusion and uncertainty, which directly reflect the main character's feelings and thus immerse the reader in her experiences.

In Philémon – L'Île des brigadiers, the divergent mechanic is also created by the layout and its effects on the breakdown. The layout paired with the breakdown directly disrupts the standard reading direction and causes a looping which forces the reader to repeat the sequence at least twice, if not more. This repetition is narratively immersive in two different ways. First, it reflects the characters' experiences as they themselves repeat the actions depicted in the loop many times. Secondly, the disruption of standard reading direction reflects the fantastical world the comic is set in, as it too goes against the laws of nature. The divergent mechanic thus immerses the reader in the surreal nature of the world of the comic, as well as the feelings of the characters in that particular scene.

Lastly, in GANGES #4 it is also the layout and its consequent effects on the breakdown which cause the divergence in the passage of time. The layout is designed so that the hyperframe continues into the margins. This results in many panels being cut off which in turn makes the passage of time in the breakdown unclear and forces the reader to try to deduce what information has been cut off and which parts of it are valuable. The confusion and warped perception of the actual events created by this mechanic reflect the main character's headspace and thus immerse the reader in his feelings and his experiences of the world.

Divergent mechanics of depicting time as metatextual commentary about the comic itself

Finally, there were also two occasions where the divergent mechanic was used as a way of communicating something about the comic album in a metatextual way. In both of these cases, this effect was largely caused by braiding, but it was achieved using different mechanics and utilized towards different goals.

In L'Origine, one of the key themes as well as the source for a significant amount of the narrative tension comes from the knowledge that the characters are physically subject to what happens to the physical artefact of the comic book. The use of the cut-off panel and its braiding with all of the other panels in the comic which also break the fourth wall emphasize this theme. This panel in connection with the braiding forces the reader to keep in mind that the characters in the story are two dimensional and that what happens to them is directly controlled by the pages they are printed on. The divergent mechanic thus engages the reader on a metatextual level and forces them to view the comic book as a physical object, which is crucial for the narrative impact of the story.

The metatextual commentary in Philémon – L'Île des brigadiers is more subtle, yet it is also present. The looping repetition of the events of the page is reflective not only of the album but also the entire series of comics. The main characters trying to travel to a specific location only to end up back where they started is a repeating narrative loop in the series, and it is also the plot of L'Île des brigadiers specifically. Additionally, the characters in the sequence blame the reader for causing the loop. This too works in the context of the entire series of comics. In a way, it is indeed the reader who keeps reading these stories, who because of this presumably doesn't want the characters to ever reach their goal, thus forcing them to effectively get stuck in a loop. This makes the sequence work as humorous metatextual commentary about the entire comic series and the people who read it.

Summary of findings

All in all, the research showed that there were divergent mechanics of depicting time in each of the chosen sequences and that these mechanics provably affected the flow of the narrative. Some mechanics aimed to immerse the reader into the story, some worked with the narrative in creating meaning and some commented on the narrative itself. Should these divergent mechanics be removed from the works, the reading experience and the narrative impact of the stories would be altered, albeit to different degrees depending on the mechanic in question. All of these mechanics thus served a narratological purpose, and their removal or alteration would have a negative effect on the flow, consistency and impact, as well as in some cases legibility of the narrative. In other words: though sometimes their effects are subtle, these mechanics are all necessary for the works they appear in.

CHAPTER 4.

Analysis

4.1 Discussion of findings

It is pertinent to now return to the beginning, to the research question and hypothesis presented in the introduction, and examine the results of the study. This chapter will analyze the findings of this research, discuss what these findings mean, how the results can be used when creating comics in the future, and what needs further study.

The hypothesis at the start of this thesis was that I believed that divergent mechanical depictions of time are a form of visual storytelling that can be used purposefully to achieve a narrative goal. The results support this hypothesis. All of the chosen sequences included a distinctly divergent mechanic that was utilized in the narrative in one way or another. Another initial hypothesis was that the mechanics can be sorted into categories. This was also proven to be true in the research. As I suspected, I was able to isolate these divergent mechanics and categorize them based on how they were utilized in their respective narratives.

Following the hypotheses, the research question at the start of this thesis was:

What kind of divergent mechanics of depicting time are used in narrative comics, and do they affect the narratives? The supplementary question was: *If they do affect the narratives, how are they utilized?*

The research found that all included sequences included a divergent mechanic that were all individually analyzed in detail in the respective chapters. All of these divergent mechanics affected the narratives of the comics they featured in. Though each divergent mechanic was unique, they also shared some commonalities. Most importantly, all divergent mechanics required the alteration of the traditional breakdown formula in some form. When answering the supplementary question, the research was able to isolate four distinct ways the various divergent mechanics were utilized in the narratives. These were: to

establish character, as a part of the narrative itself, as a tool for immersion and to provide metatextual commentary about the comic itself.

Notably, due to the nature of the mechanics in question, it is hard to pluck said mechanics out of the stories exactly as they are and use them elsewhere later. They were designed for those stories in particular. However, some generalized comments can be made about how they achieved their narrative goals. The next chapter, which analyses the potential applications of the findings of the research, will examine these in detail.

All in all, the research answered the research question. Divergent mechanics of depicting time are present in narrative comics in which they are used as a part of the visual storytelling, and as such, they are very effective. Through the use of divergent mechanics of depicting time, comics can express even complex concepts effectively and impactfully. Especially notable is that they are often used to enhance immersion. Divergent mechanics of depicting time are a form of visual storytelling. Based on the results of this study they should be explored in comic education and academia. The results of this research prove that various genres of stories with different levels of humour and tone can and do support the use of divergent mechanics. I believe that the results of this research show that divergent mechanics should be added to the general pool of knowledge of comic artists alongside other forms of visual storytelling. I believe that divergent mechanics of depicting time are tools that comic artists should be taught about and made aware of.

4.2. Potential applications of the research

Examining the potential applications of the findings of this research is perhaps the most valuable part of this entire study. There are two ways of approach, one which examines the potential applications of the type of research in general and one which examines the findings themselves. In this chapter, I will aim to first summarize the potential applications of this type of research and then, category by category, examine how the divergent mechanics can potentially be applied by comic artists who wish to enhance their narratives in the future.

I believe that this type of research is valuable, and I believe that arthrology is the best theoretical foundation for it. In this case, arthrology allowed me to examine the temporality and the networks of meaning within the chosen comics in great detail. I suggest that should one want to continue this type of research one should also utilize arthrology for this very reason.

Copying the specific divergent mechanics used in the analyzed comics would not be fruitful for other comic artists who want to create their own stories, as those mechanics were designed for the specific narratives they were found in. However, the fundamental ideas behind the mechanics can still be generalized to a point where they can be useful for other artists. I will now go through each category of findings and explore how the mechanics that fall under them could be utilized for narrative purposes.

Divergent mechanics of depicting time to establish information about the character(s)

The use of this type of mechanic can be considered when the comic author wants to emphasize and explore the differences between characters. In the one example that featured this mechanic, the characters were drawn to exist at "different speeds" in time. This was used to highlight that the characters were exceptionally skilled, matched only by each other. Indeed, depicting a character

existing differently in time compared to other people lends itself naturally to emphasizing that the character is somehow special. This can be used for various reasons. In MAMI the characters were moving "faster" than everyone else, which made them appear skilled and unbeatable. In a different context, moving faster than other people could also be used to imply that a character is detached from the world, or that they are unable to relax, to name a few possibilities. Conversely, a similar technique could be used to make the character appear slower. This in turn could potentially imply anything from depression to an introspective personality or again to denote detachment from the rest of the world. If this technique is applied to multiple characters, it can be used to establish both differences and similarities between them. This way, a character's physical relation to time can be used to establish characterization and interpersonal dynamics between characters in multiple different ways. Comic artists who want to denote a character as somehow distinct from the other characters could implement these techniques.

Divergent mechanics of depicting time as a part of the narrative

These mechanics work for stories that are about the mechanics themselves. This category is interesting as it is hard to give a generalized example of how this could work due to the very nature of the mechanic. This divergence was found in just one of the comics, one which was quite unconventional as it relied heavily upon the breaking of the fourth wall. Indeed, the only definitive thing this category requires is the breaking of the fourth wall. For the divergency to work, the characters and plot must revolve around it. Comic artists whose stories are surreal and who want to directly challenge the reader might want to consider implementing a mechanic like this.

Divergent mechanics of depicting time as a tool for immersion

These mechanics can be used when the comic artist wants to emphasize the character's uncertainty or their subjective perception of a chaotic world. Of all of the mechanics present in the research, this was the most common one. It is also

the one that is the easiest to apply to multiple different stories. An unclear breakdown can create feelings of confusion and uncertainty in the reader, which can enhance many stories where the characters are going through similar feelings. If the character is experiencing a chaotic event that leaves them unaware of how much time has passed or what even happened, it is possible to create similar feelings in the reader to encourage immersion. Chaotic and unconventional layouts or breakdowns can also be used to immerse the readers into chaotic and unconventional worlds. A comic artist who wants to emphasize their character's feelings of uncertainty or the alienness of the world their story is set in should consider using these mechanics.

Divergent mechanics of depicting time as metatextual commentary about the comic itself

These mechanics can be considered when the comic artist has something significant to say about the comic itself. This last category is again quite hard to make generalizations about. However, it was present in the findings twice, so it can be done in multiple ways and for different purposes. In both of the examples found in the research, achieving this effect required the story to engage in some form of breaking the fourth wall. A comic artist who has something to say about their comic, either as a physical object or as an example of the medium of comics or as a narrative should consider this technique.

4.3 Present flaws and further research possibilities

Though the research question has been answered in a way that supports the hypothesis, this research is still incomplete. In this section, I aim to acknowledge the current limitations and suggest possible avenues for future research.

One of the inherent flaws of this research, which was already brought up in the theory chapter, is that it focuses primarily on European comics. Not including Manga, Manhwa and Manhua in the research was intentional because of my lack of experience as a researcher, however, it is still a significant oversight nonetheless. Should someone be interested in continuing this type of research, diving into Asian comics would be necessary. Comics created in every corner of the world deserve to be analyzed and included in this type of research, though it needs to be done by people who understand their conventions and norms well enough to know when they are being broken.

This problem with the scope echoes the general major flaw in this thesis, which is that the research and thus also the results are ultimately very narrow. There is much one could still explore even within Anglophone and Francophone comic spheres separately. If this research should be continued further, it should be applied more widely and to many more comics. There were multiple cases where a divergent mechanic with the potential possibility of wider application was present in only one comic. This leads me to believe that there are comics with divergent mechanics not identified in this research. When identified, these divergent mechanics could also be added to the artists' toolkit for enhancing narratives. The aim of any further research should be to identify these mechanics and to see how often the mechanics already identified in this thesis can be found in other works.

As it stands, while the results of this thesis can be extrapolated and taken into account when creating comics, they are merely data. I believe that divergent mechanics of depicting time are largely untapped tools for visual storytelling and

that they should be taught to comic artists. However, while this research proves that they are indeed an effective form of visual storytelling, this knowledge is not enough to instruct how to do this in other comics. To do that, more research and the creation of actual educational material would be necessary. One potential avenue for future research could be to create this kind of material and educate comic artists about the topic in workshops. It would still not be the kind of wide-scale application and understanding of the potential of divergent mechanics in comics education in general that I would wish for, but I think it could provide interesting results for further exploration.

To sum up, while promising, the results of the research cannot be directly applied for comics education, which I believe should be the end goal of this line of study. Because of the size of the study, to create educational material about this topic, more research is needed. This research could be anything from more globalized and widely applied analysis to dedicated workshops. Divergent mechanics of depicting time are a form of visual storytelling in comics, but determining how they could be taught and how widely they could be applied still requires more study.

CHAPTER 5.

Conclusion

5.1 Summary

This thesis started with the research question: *What kind of divergent mechanics of depicting time are used in narrative comics, and do they affect the narratives?* The supplementary question was: *If they do affect the narratives, how are they utilized?* My initial hypothesis was that divergent mechanical depictions of time fall under the umbrella of visual storytelling and can be utilized towards narrative goals.

The thesis began properly in chapter two by introducing the reader to comic theory. The section explored the way time is depicted in comics and the various approaches to it, and the chapter continued with an explanation of arthrology, which is the main theory used in this thesis. The chapter finished with a discussion on the scope of the research and an introduction to the research material.

During chapter three, the research section, sequences from five comics were analyzed using arthrology. Based on this analysis, various divergent mechanics of depicting time were found. At the end of the research chapter, all of the findings were sorted into four categories based on the distinct ways the divergent mechanics were utilized in their narratives. These categories were: *to establish character, as a part of the narrative itself, as a tool for immersion and to provide metatextual commentary about the comic itself.*

In the fourth chapter, these findings were then thoroughly explored. It was determined that the research question had been answered and that the initial hypothesis had been correct. Chapter four also explored the potential applicability of these findings and if the results of this study could be utilized in comic creation in the future. This was done by examining the previously determined four categories in order to theorize how those mechanics could be used in varying narratives. The chapter finished with an overview of the ways in which research was lacking, what the research gaps were and what needs further research. It

was determined that there needs to be significantly more research to identify more divergent mechanics as well as how they are used. Though the thesis answers its research question and proves the initial hypothesis correct, the truth is that this research cannot be directly applied towards comic education, and if one wanted to create educational material about divergent mechanics, one would require more research. Should this research be continued, that would most likely be the most sensible direction to continue.

5.2 Final thoughts

When I started this research, one of my goals was to be able to provide material for comic artists who wish to use divergent mechanics of depicting time in their comics. As I mentioned at the beginning, I am one such comic artist. I hoped that the findings of this research would provide me with new visual storytelling tools to aid my comic creation. My attempts at categorizing and outlining possibilities were as much for myself as they were for other interested comic artists.

Now that I arrive at the end of the research, I realize that I do not know if I can use the findings of this research in such a manner. Because of this study, I now know more about divergent mechanics and how to utilize them than I did at the start. However, I do not know how much of that information has transferred onto skill. For this particular subject, testing this skill is slightly difficult as the entire point is that the story should come first. How does one then test their skills with these mechanics without inadvertently creating stories designed around the mechanics and not the other way around? I do not know the answer to this.

It is this lack of concrete knowledge on how to apply the results of the findings of this study that vexes me as a researcher. This thesis undoubtedly proves that divergent mechanics of depicting time can be utilized to enhance narrative comics in various ways. However, it does not manage to teach the reader how to apply this knowledge in their work. Chapter 4.2 provides ideas and possible applications of these divergent mechanics, which is a helpful first step towards this goal, but it can hardly be considered educational material.

There is no doubt in my mind that this thesis is a beginning as it is certainly not the end. I cannot help but feel like I have merely scratched the surface of this topic. For one, I believe that there are many more divergent mechanics of depicting time than just the ones this thesis was able to cover. It would be very enlightening if someone were to use the findings of this research to create

educational material or to keep the research going and expand on its results. I truly hope someone will do either or both of these things.

However, though I may have only scratched the surface, I have to stand by my thesis. I managed to prove what I set out to prove. Divergent mechanics of depicting time are forms of visual storytelling. They are capable of conveying complex emotions and concepts. Their use does not hinder narrative comics, and in fact, divergent mechanics can be utilized to create many emotionally resonant and narratively satisfying effects. The genre or tone of the story often has some relation to the type of divergent mechanic at play, but no one genre supports the use of divergent mechanics – many do. The use of divergent mechanics can be observed and studied. That information can then be applied when creating comics in the future. All in all, divergent mechanics of depicting time are versatile tools for comic artists who wish to enhance their narrative in various ways, and their study is valuable for anyone who wishes to deepen their understanding of comics and their particular form of visual storytelling.

CHAPTER 6.

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FIGURES

figure 1. Norris, A. (2015). *TIME*. Dorris McComics. Retrieved September 10, 2021 from: https://www.dorrismccomics.com/post/116398863863

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figure 4. Valero-O'Connel, R. (2019), *Don't Go Without Me*, United Kingdom: Short Box

figures 5 & 6. Daguna, D. (2018), *MAMI,* Europe: Peow

figure 7. Page 4 of Filemon på konstaplarnas ö by Fred.

figures 8. & 9. Huizenga, K. (2011*), Ganges #4.* Seattle, United States: Fantagraphics Books and Cococino Press

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