



The Development of Visual Representation of Sound in American Comics

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Abstract

This article presents a case study that was conducted in order to gather insights into how sound presentation evolved in American sequential art. The authors of this article examined 801 issues of “The Amazing Spider-Man” (1963-2018) comic books and documented every new stylistic and communicative solution regarding captions, speech balloons, and sound effects that evolved in comics media. Findings indicated what important part experimentation played in the first few decades of the medium. In addition, findings suggest that two main factors played a vital role in developing a visual representation of sounds in American comics. First, advancement in printing technology, and second – a mindset transformation. The latter is characterised by the fact that sound in comics gradually ceased to be perceived as a means of conveying information and has become a tool to tell a story.

1. Introduction

The comic medium is exclusively a visually-based art form. Thus, unlike other popular culture products, comics cannot use audio-enhanced dialogue, voiceover, sound effects, or music tracks to enrich the user experience. Therefore, this non-auditory art form was forced to find visually-based communicative solutions to allow the reader to experience sound elements in the graphic (i.e. silent) form necessary for understanding the story presented in the comics. In other words, the medium’s inability to produce sound did not diminish its need for and importance of telling compelling stories. Thus, this article aims to explore how comic book creators have tackled the challenges of portraying the various qualities of sound.

The relationship between text and images in comics is essential for a comic book reader to understand the narrative [1], [2], [3], [4], [5], [6], [7]. Therefore, sound, the way it is expressed in comics, is always an essential part of any analysis, review, or educational process. Thus, it cannot be claimed that the visual expression of sound in comics is an under-researched topic. Quite the opposite, the phenomenon of sound in visual form attracts even researchers from other fields, particularly literature, semiotics, and aesthetics. However, how does this art form (where visual

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elements play a huge role in communicating various aspects of sound) evolve? How long did refining some solutions as effective and others as inept take? The authors of this article address these questions by examining over 800 issues of “The Amazing Spider-Man” (1963-2018) comic books.

The performed analysis of the case study demonstrated how innovative graphic solutions were gradually applied in the US comics industry, which allowed the communication of additional meanings to the ones presented in the text. The case study revealed how experimental the first steps were and how much guessing was involved. Thus, there is an enormous qualitative difference in presenting various sound qualities in visual expression between the first and last issues.

In this article, the authors will first provide a general overview of the concept of sound in comic books. Then, the case study methodology used to gather data from “The Amazing Spider-Man” series to gain insights about communicative decisions used in the art form and the gradual evolution of these decisions will be presented. This will be followed by the presentation of findings and discussion about the significance of aesthetic execution in comics to produce semantic attributes to text. The article will conclude with a brief study summary and critical insights.

2. Literature Review

Will Eisner, in his book “Comics & Sequential Art” [2], famously stated that “The balloon is a desperation device”. And his sentiment is entirely accurate – even the best, the most innovative visual rendering of the sound in comics requires considerable involvement from readers to produce meaning. However, at the very dawn of the media, comic book artists realised that words can be a handy communicative tool. After all, it was evident that “some specific concepts and names can only be clearly expressed through words [7]. In other words, by using words, comic book artists can compress the story and produce more meaning and a more explicit nature than just wordless pictures.

While there are wordless comics, most comic books contain written information in the form of word balloons, captions, or sound effects [8]. Thus, the reader is provided with three types of auditory experiences that can be audible and inaudible [9]. However, it is essential to note that it took time and a great deal of experimentation before the best communicative and aesthetical approach to present sound in all of these three types of auditory experiences was found.

The earliest applied visual solutions that allowed the text additional sound features were the text size and font – these solutions can be found in the first comic strips that used text balloons. Another popular visual tool to emphasise spoken or thought text – boldface – was employed in the first “Famous Funnies” issue [10]. Finally, comic strips and books employ various text balloon shapes to indicate that the dialogue is a whisper or a shout. Thus, in the 30s, at least in the USA, sound in comics is no longer monotone (so to speak).

However, most of the early comic books suffered greatly from text-image disharmony. Specifically, most comics use very large amounts of

text, often making the text very small and, thus, hard to read. In addition, the text often repeats what is seen in the illustration, overshadowing the illustrations. McCloud argues that the (perfect) balance between words and pictures should emphasise each one's strengths [7]. Furthermore, the success of the verbal-visual blend is the most critical aesthetic criterion for judging a comic book [4]. However, Eisner [2], in his book published in the 80s, still addresses the necessity (or perhaps more precisely, the right for artists) to omit dialogue of narrative that can clearly be demonstrated visually. This notion is followed by McCloud [7], who is happy that modern comic writers (most of the time) manage to avoid textual redundancy. Thus, suggesting that the ability to achieve this word/image balance is not so simple. Or, if one looked from a different perspective, it would seem that the desire to rely on the text to communicate what is happening in comics can be really hard to resist.

McCloud [3], [7] identifies 7 distinct categories of word/image combinations:

- Word-specific: words provide all you need to know, while pictures illustrate the scene's aspects.
- Picture-Specific: Pictures provide all you need to know, while the words accentuate the scene's aspects.
- Duo-Specific. Words and pictures both send roughly the same message.
- Intersecting. Words and pictures work together in some respects while also contributing information independently.
- Interdependent. Words and pictures combine to convey an idea that neither would convey alone.
- Parallel. Words and pictures follow seemingly different paths without intersecting.
- Montage. Words and pictures combined pictorially.

These different combinations of words and pictures can have both communicational and aesthetic applications – they can help storytellers ensure that the readers can follow the narrative easily and provide a visual experience that rarely can be found outside the comic book medium.

At this point, it is worth focusing on exploring how the dialogue and thought balloons can convey various sound experiences. First, it must be addressed that words in the balloons and captions cannot be placed within the picture space or outside of it [5]. In other words, captions and word balloons do not exist in the same plane of reality as pictures presented in comics [7] – they are “visible” only to the reader. Furthermore, text in comics does not have a fixed position in space, but their position and relationship to each other contribute to the measurement of time [2]. And, unlike depicted architecture or furniture, balloons and captions usually don't obstruct characters [5]. Thus, in comics, balloons and captions perform a much more complex role than just text-based presentation of information.

The shape of the balloons can also play a role in representing some auditory elements. The most common designs are spiky outlines that indicate sound emanating from a radio, telephone, television, or any other machine, dotted outlines that mean the character speaks quietly, and non-uniform outlines that indicate a shaky voice. With time, more innovative

designs were employed. For example, icicles at the bottom of the balloon indicate that the character's speech is "cold". In other cases, the tail on the balloon can physically envelop the character as to suggest that the speaking character's voice enslaves the listener. Of course, in some cases, as McCloud [7] notices, the shape of the balloons is just a stylistic expression that does not aim to contribute any additional meaning regarding sound.

The colour can also be used to suggest various qualities of a sound. In this regard, colour can be employed in two ways – as a means to give (other than standard black) colour for text and a means to give (other than standard white) colour for the text balloon background. It is important to note that experimentation with colour regarding the text in general and balloons, in particular, started later due to considerable limitations with the printing technology [11], [12]. Thus, experimentations with colour to influence the experience of sound started relatively late – only when the innovations in printing technology allowed to ensure that (a) the text part of the comics could be read clearly and (b) that it was not expensive.

The most often used colour application for the text in the comics balloons is red to signal the importance of the dialogue (or part of it). In addition, text in red is usually larger in size, thus putting even greater emphasis on that spoken part. As for text, the balloon's background colour can be used in several different ways. First, the colour can be used as a communicative tool to help indicate who is talking (when the character details are insufficient to recognise them or when the view of them is obstructed by other objects). The second case is to imply drama or higher than usual importance of their spoken dialogue. Thus, in this case, the colouring of the text balloon would be a temporary design solution. The third case is to give some unusual auditory attributes to the character's voice. The two most popular designs for text balloon backgrounds are black to imply an unearthly, often demon-like voice and red to suggest a commanding yet very dangerous tone for the character. Of course, different colours for text balloon backgrounds in modern comics are used, but in most cases, the meaning of the colour can be decoded only through narrative. In other words, the colour blue in the text balloon could mean not that the character is calm or sad, but that he or she originated from a blue alien planet or the deep of the ocean.

Fonts, as was already mentioned a few times in this article, play a significant role in implying what vocal inflection is produced on a word-to-word basis [3]. Fonts' ability to provide unique auditory characteristics to the comic book character's speech is mentioned in every comprehensive book on comic book production [2], [3], [4], [5], [6], [7]. Eisner [2] noticed that lettering could reflect the nature and emotion of the speech, while Kaindl [13] noticed that movement, directionality, and speed could be indicated through the lettering. Abel and Madden [6] argue that lettering (i.e. drawn words by cartoonists and not produced by computer) is not only an essential part of the overall aesthetics but also provides a much better reading experience. Furthermore, Eisner [2] argues that the style of the letters strongly affects the "message". Thus, several graphic solutions can be employed to provide additional auditory meanings to words.

But speech balloons don't necessarily have to present words to illustrate sounds - dialogue balloons can employ symbols to express auditory elements (most often using “!” or “?” [5]). Three dots in the speech balloon suggest that the character is (at that moment) still comprising himself or herself to say something. Usagi Yojimbo comic book series (1984-present) is quite innovative in showing that characters are taking their last breath by placing a skull symbol in the balloon. And, of course, there are random letters and symbols, like “%\$*!@#”, that usually suggest that the character is swearing. Thus, graphic symbols are a standard tool in comic book media for visually expressing various sounds.

However, although speech balloons use graphic symbols, thought balloons are where one can find a much greater variety of expressions that, in many cases, would be hard to express in words. In the book “Comics & Sequential Art” [2], Eisner provides excellent examples of thought balloons where one character is shown to think about money (a dollar sign is presented in his balloon) while in the other presented case, two characters are shown wondering in the desert where the first's thought balloon shows the drawing of a camel while the second's balloon presents an image of a facet with running water. These examples are truly great to illustrate how comics can employ visual solutions to express ideas or moods that would require significantly more words and, what is arguably more important, less involvement from the reader to produce meaning.

And then there are sound effects. Catricala [14] identifies these three categories for sounds expressed in words:

- a) Phonomime or onomatopoeia: The words that mimic actual sounds (like an explosion)
- b) Phenomime: the words that depict non-auditory senses (like smell and taste).
- c) Psychomime: the words that depict psychological or bodily feelings (like a state of despair or confusion).

Phonomime or onomatopoeia are the most common ones in sound effects, mostly likely because it is considerably easier to communicate to the reader what sound the word represents. The other two types require agreement between the artist and the reader that the depicted words are linked with actions that (directly) do not produce sound. For example, the action of smelling is presented with the phenomime “Sniff” or the emotion of surprise with psychomim “Eeek” or “Zzoing” [15].

However, it is essential to note that while sound effects are usually onomatopoeic in Western comics, in the East (predominantly Japan), sound effects are mainly descriptive [16]. In other words, in Western comics, the sound effect of the punch would be Pow; in Japanese comics, it would be presented as Punch. Thus, different culturally-based approaches to presenting sound effects in the comic medium exist. However, in this article, the authors will focus only on the onomatopoeic approach to sound effects in comics as it is common in American omics.

McCloud [3] notices that creating great sound effects doesn't require the sort of methodical consistency that good balloon lettering needs. Quite the opposite - sound effects are one-shot inventions one can impro-

wise “like crazy”. And, from the aesthetical point of view, sound effects provide great opportunities to combine the onomatopoeia with visually based association (i.e. the text of water-based sound effects can be presented in water-mimicking shapes) and incorporate them in visually stimulating ways. Thus, sound effects are one of the auditory elements that can provide quite a unique and stimulating experience in a medium that does not produce sound.

Finally, there are captions. While captions were initially used as a means to give voice to a narrator (to provide exposition or another type of information necessary to follow the story), they are also used today for character thoughts or even dialogue. Visually, the most significant difference from speech or thought balloons was that text in captions was presented in a quadrilateral-shaped box. However, there were aesthetical variations – the lines of the caption box could be presented as wavy or mimicking a flag-like shape. Interestingly, modern comics even abandon the box shape and simply present the text. However, this visual approach is usually reserved only for information indicating a time or place shift in the latter case. “Meanwhile” being the most used word in comics when captions are employed to connect panels with the passage of time and changes in locate [2].

In summary, it should be noted that comics, being an art form exclusively based on visuals, for over a century, found innovative solutions that provide a sound experience through the text and create genuinely unique visual solutions that are only possible in this medium. Furthermore, it is very important to mention that sound in comics is expressed not only with text - symbols are also used. Thus, as Dey and Bokil [9] notice, text plays a vital role in the comics medium as a narrative element. However, only when text combines the best communicative and aesthetic qualities is a genuinely unique comics experience created.

3. Methodology

In order to answer the raised research questions, the authors of this article decided to use a qualitative approach and employ a case study methodology. A case study is one of the most extensively used strategies of qualitative social research [17]. Yin [18] defines a case study as an empirical inquiry investigating a phenomenon in its real-life context. Thus, a case study is not a method to acquire data per se but rather a research strategy or design that aims to explore phenomena in depth [17], [18], [19]. In other words, case study research allows researchers to use any (ethical) data collection method that suits their purpose [17].

The authors of this article seek to explore how the depiction of sound evolved in American comics over time, focusing on communicative execution. For this purpose, the authors examined 801 issues of “The Amazing Spider-Man” (1963-2018) comic books. The rationale for choosing “The Amazing Spider-Man” series is based on two reasons. First, “The Amazing Spider-Man” is one of the longest-running comic books in the USA [20], [21]. This creates favourable conditions for observing how stylistic and communicative solutions evolve in comics media.

Secondly, “The Amazing Spider-Man” is Marvel studio’s flagship title [22], [23]. Furthermore, “The Amazing Spider-Man” continuously broke new ground in comics and had a significant impact on the American comic book industry [22], [24]. Thus, while it does not necessarily mean that all communicative or aesthetic innovations would originate within “The Amazing Spider-Man” comic books, it is reasonable to think that most of the best new solutions (originating in other comics) would quickly appear in Marvel’s most popular series. Conversely, any effective solutions depicted in this comic would quickly be used in other comics. Thus, “The Amazing Spider-Man” series (while not representing absolutely all communicative and aesthetical solutions implemented in American comics) provides an excellent opportunity to explore how the comic art form has evolved over 55 years.

The analysis itself was carried out as follows: every time a new communicative solution was encountered in the comics, it was noted in the catalogue. Along with each identified case, the following information was marked: (i) year of publication, (ii) comic book issue number, (iii) page number, (iv) comic book authors (penciler and letterer), (v) category (speech balloon, thought balloon, or caption), (vi) short description, and (vii) print-screen of the speech balloon, thought balloon, or caption.

It is essential to address a few limitations and challenges of this study. First, some of the changes in execution found in comics were extremely minor. Thus, there were quite a few instances when the decision to include or exclude a particular design execution came to the last-minute discussions. Secondly, although the aesthetic execution is critical to the overall comic book experience, this study perceives it as a secondary (although integral) part of the communicative process. In other words, aesthetics-based decisions are examined only through one criterion - what they communicate to the reader regarding auditory experience.

4. Findings

After reviewing 801 issues of “The Amazing Spider-Man” (1963-2018), 268 unique communicative solutions were identified. After additional review and discussion, 83 entries were removed as being only minor updates to the already used communicative solutions rather than new approaches to present written information in the comics medium. The final catalogue consists of 51 entries of captions, 75 speech (and thought) balloons, and 59 sound effects.

It is necessary to note that technological advancements in the printing process played a great deal in the innovative presentation of sound in visual medium. Especially the digitalisation process that provided artists with vast new creative approaches that were unimaginable just decades before. Thus, when analysing the evolution of text presentation in comics, one must consider the role of technological advancement.

It is interesting to note that in the first decade of “The Amazing Spider-Man”, there was great experimentation. And, as an expected outcome of the experimentation process, many solutions were ineffective communication-wise. For example, there are a significant number

of experiments with colour in the early issues of the Spider-Man comics. However, the colours are used without any evident communicative purpose – the chosen colours used to fill the background of the captions and speech (and thought) balloons are there only to be used as a spectacle for the reader (see Fig. 1). It is evident, that in the sixties the understanding how the colour can be employed to produce additional meaning to the textual representation of sound is not yet gathered.

Captions are another element that was significantly experimented with in the early issues of the Marvel superhero comics. The various shapes, colours and fonts are employed to find the best way to produce



Fig. 1. Early experimentation with colour in speech and thought balloons in “The Amazing Spider-Man” (1963-2018) comic books. © Marvel Worldwide, Inc.

satisfying experiences (while providing the necessary information needed to understand the story) for the reader (see Fig. 2). It is interesting to note that while some of the experiments later evolved and became an integral part of the Spider-Man comic book series, the others were just single-shot ventures. However, it is evident that in creative artists’ hands, this communication tool can take any shape or form in order to transmit the most diverse type of information.

Special mention should be made about how captions were used to end the comic book story in every issue. There is an extreme variety of shapes, colours, fonts, and even phrases (i.e. “The end”, “End”, “Finis”, “To be continued”, “More next issue!”, „Next: (...)“, “Nuff said!“, „And you’ll regret it if you miss next ish!“, etc.) used to finish the story in each comic book. This suggests that there were internal motivations to experiment with this particular caption continuously rather than to find the best version to communicate the end of the narrative in the comic book.



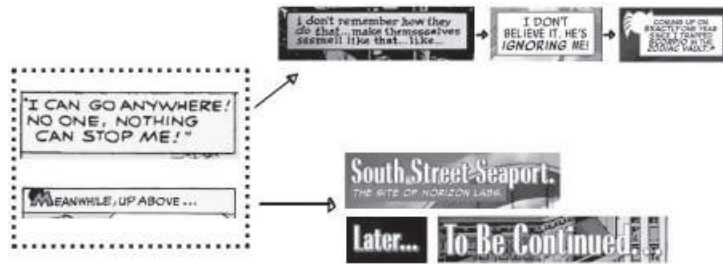
In later years, the captions went through a really colossal transformation. First, captions slowly but irreversibly become the dominant form to present the character’s thoughts. However, it is essential to note that this process was very long, as the artist had to

Fig. 2. Early experimentation with captions in “The Amazing Spider-Man” (1963-2018) comic books. © Marvel Worldwide, Inc.

work out many communicative challenges that arose from this transition. Secondly, captions – as a means to provide exposition and various data about location or time – dropped the box (surrounding frame) and became just text floating on the page. However, and it must be emphasised, the latter change happened precisely because captions became a platform for presenting the characters' inner thoughts (see Fig. 3).

It is very interesting to note that while the idea to present characters' thoughts through captions was first used in the very first issues, it took more than twenty years for an issue (#229) to come out where though

Fig. 3. The evolution of captions in “The Amazing Spider-Man” (1963-2018) comic books. © Marvel Worldwide, Inc.



balloons would be wholly absent, and all thoughts would be presented through captions. However, it will take another ten years to reach a point where captions will become the dominant form for characters' thoughts. And even from that point, the thought balloons will sparsely return to “The Amazing Spider-Man”. This suggests that even though captions provide a much better (from a communication and aesthetical point of view) vehicle to present thought on comic book pages, it's really hard to break the habit of using thought bubbles, especially when they've done their job perfectly (at least according to the artist) for years.

It is necessary to mention separately that comic book artists really struggled at first with how best to use captions when there was a need to present more than one character's thoughts. After all, the thought balloons had one great advantage – the balloon's tale could clearly indicate who was thinking what. Of course, in the latter issues, this challenge was overcome by giving captions a colour indication and, later on, a recognisable icon at the start of the thought sequences. However, it is necessary to emphasise that it took time to tame the captions-as-thoughts delivery system. On the other hand, once the caption system was perfected, it became an extremely clear and aesthetically pleasing way to deliver various types of textual information.

However, another critical element that the authors of this article noticed while conducting this case study was that there were substantial shifts in mindsets during the 800 issues of “The Amazing Spider-Man” run. During the first 300 issues, comic book artists heavily relied on thought balloons to explain what and why characters were doing (McCloud [7] referred to this type of information presentation in comics as duo-specific). This suggests that in the early days of American comic books, comics were treated more as illustrated text rather than a new

medium that aimed to use illustration and text in harmony to produce something more than the sum of their parts). Plus, it is very likely that because comics were considered a juvenile entertainment form at that time, the authors of the comic books felt the need to be very clear about what was happening story-wise. However, this trend eventually did die off.

Experimentation with speech balloons had a slow start. As mentioned before, shapes and (mainly) colour were often employed only as a spectacle element that did not add anything to the story. Quite the opposite – it often resulted in creating visual noise on a page that was already suffering from oversaturation. Still, once the comic book artist understood how balloon shapes, colours and fonts could be applied to suggest various vocal inflection, the results became very intriguing (see Fig. 4). In this case, it is necessary to note that technical advancement played a very important part in the innovative ways the way speech can be presented in the comics medium. With better printing possibilities, the artist could put more details and nuances into the speech balloons. But with the digitalisation process, artists can now employ various shapes, colours, and fonts that previously were too time-consuming or even impossible. Thus, in many cases, the innovative ways of presenting speech in comics were directly linked with technical possibilities.

However, speech balloons in comic book art forms do not always try to provide phonimime expressions of the sounds. In quite a few cases, the “The Amazing Spider-Man” comics created unique visual representations



Fig. 4. The evolution of speech balloons in “The Amazing Spider-Man” (1963-2018) comic books. © Marvel Worldwide, Inc.

of sounds that required readers’ imagination to fulfil the experience, for example, adding pink hearts to the balloon, and in such a way indicating that the person that is talking is in love with the other character. Or blurring the text and, in such a way, suggesting that the character is passing out and having trouble understanding the speech of another character. Adding tiny bubbles to the speech balloon indicates that the character speaks while drunk. There are plenty of other examples that create unique reader experiences. Thus, illustrating how this form can uniquely approach the experience of sound.

Another comic artform experience often found in comics (and thus needs to be addressed) is speech censorship. In “The Amazing Spider-Man” series, this censorship is executed in two ways – (i) by replacing curse words with random symbols (i.e. grawlix) or (ii) by covering the words by blacking them out with heavy, imperfect lines (i.e.

redaction). While speech censorship is not unique to comics (it is done in audio-visual media as well), the need to censor profanity in comics where violence is presented in such extreme presents a very peculiar value system in American comics.

Finally, the sound effects. In the comic book medium, this phone-mic experience quickly became almost a separate art form. There are numerous ways for comic book artists to express sound and, in turn, enhance the reader's experience. However, the authors of this article have noticed two aspects of sound effects that signified a qualitative change in how they were expressed in "The Amazing Spider-Man" series. The first change happened with the digitalisation process in the comic book industry – suddenly, comic book artists had opportunities to fine-tune every sound effect. The results were truly incredible from a communicative and aesthetic point of view.

The second qualitative change did not happen as suddenly as with the digitalisation process, but it was evident when going through all the 801 issues – the change in comic creators' mindset. As with the overuse of speech and thought balloons in the early issues, there was an exaggerated use of sound effects. In other words, every single action required a sound effect. However, with time, sound effects in "The Amazing Spider-Man" series become much rarer and are used only to emphasise particular actions and not to illustrate them with sound attributes. Furthermore, once sound effects ceased to be perceived as auxiliary tools, comics creators began to use them in a truly innovative way and sometimes, realising their importance to storytelling, employed them as the most critical elements in the panel.

5. Discussion

"The Amazing Spider-Man" comic book series came two decades after the birth of the American comic book industry. In other words, before the very first issue of the Spider-Man comic book hit the shelf, comics, as an independent medium, already had two decades to experiment with how best to present a compelling story in comic book form. Thus, it was interesting to observe that at that point, comic book artists were still heavily experimenting in order to find the best way to present sound in an utterly soundless medium. Furthermore, this case study showcases how much experimentation was necessary to find communicative solutions that may look elementary today.

It is essential to address that not every text in comics represents sound. An argument could be made that captions, unless they present the character's thoughts or narrator's voice, are not truly a "speech". In other words, even in the movies, when information about location or time is presented, it is not voiced out loud. Furthermore, Eisner [2] argues that "thought balloon (...) is... unspoken speech!". In other words, we read other people's minds, not hear it. Thus, should text in comics automatically be perceived as sound? Well, in the opinion of the authors of this article – yeah, sort of.

Comics are a soundless medium. There is no way around it³. But when the reader experiences comics, he or she provides meaning to every text and image. Thus, every text is attributed with context, as the sound would be. And this means that the creators of the comic do not seek to create a sound-resembling experience but simply to communicate additional meanings, as sound would do. For example, when a person suddenly starts speaking loudly or whispering, it is not the change of volume that we are interested in but what this change communicates to us about the person, his emotional state, and his reaction to the events that happened. Thus, all text in comics should be perceived as sound, as all (non-diegetic) text can provide additional meaning and, in turn, an immersive experience.

The case study revealed how long it took until comic creators could fully master communicating the desired meanings through text effectively. And how crucial technological innovation was for this process. Of course, the authors do not want to suggest that the search for new (and better) ways to communicate the auditory experience in comics medium is over. Quite the opposite - this case study demonstrates how important it is for the comic medium's development that creators would not be afraid to experiment and look for new communicative solutions. Furthermore, it should be commonly accepted that experimentation can often lead to failure before satisfactory results are achieved.

However, the truly fascinating insights that this case study provided were about the changes in the mindset. This study provided a better understanding of why Eisner [2] had such a distaste for the overuse of textual information and why McCloud [7] remarked that comic book artists of the past used words to explain what was happening in the comics to the point of redundancy – early American comic books were frustratingly disharmonious with its usage of textual information (see Fig. 5). And it negatively affects the overall comic book experience. Because as Carrier [5] and Eisner [2] argue, written words should not be employed to tell a story when it could be communicated by visual means alone.

And, as mentioned before, once the mindset changed, the artist could start to approach captions, speech balloons and sound effects not as a

means to ensure that the story is understood but as an integral part of visual storytelling. It would be an understatement to say that towards the end of the series “The Amazing Spider-Man,” some of the most aesthetically pleasing and emotionally resonating panels were provided that thoroughly used



Fig. 5. The panel on the left is from early Spider-Man comics (#25), where it was common for textual information to take up to half of the space. The panel on the right is from the late 2000s (#558), where an even more significant amount of text would be broken down so as not to dominate the illustration. © Marvel Worldwide, Inc.

³ It is necessary to note that while there are scholarly debates that challenge the premise that comics are an exclusively visual medium [25], the authors of this article hold the position that comic formats that include additional sensory elements (e.g. sound, motion, or depth) should be studied as separate (or different) experience and, thus, perceived as a “hybrid media” [26], [27].

text-based information to tell the story better. In other words, it took time, but once the understanding of how best to tell the story in comics medium was achieved, a truly masterful artwork could be produced.

Finally, the case study provided a valuable understanding of how speech balloons, captions, and sound effects evolved over time. Especially fascinating is the process of thought balloon transformation into captions. It was evident that the comic book artists understood early how thoughts presented in captions provided better communicative and aesthetic tools to present a story in a format that shows only one moment at a time. But the struggle of how to clearly connect characters with thoughts was also very visible. Thus, even the most apparent solutions need time and courage to come into existence.

6. Conclusion

This study provided insights into the development of visual representations of sound in American mainstream comics. First, it is necessary to address the limitations of this study. “The Amazing Spider-Man” series is a great case to study how the American mainstream superhero genre developed over the period of fifty years. However, it would be a mistake to assume that these series represent absolutely all successful communicative solutions implemented in the US comics industry.

It is vital to acknowledge that developing an effective and engaging representation of sound in comics took considerable time and experimentation. Furthermore, some of the visual solutions (for example, captions to communicate characters’ thoughts) took decades to develop.

Another critical insight that this study identifies is a comic artist’s mindset transformation. This transformation was vital for a medium’s growth as an art form. Only when that sound in comics has ceased to be perceived as a means of conveying (explanatory) information and has become an integral tool to tell a story has comics become an entertainment form that can truly captivate its audience.

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