

Storyboardgraphy

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VISUAL ESSAY

Storyboardgraphy

SAMER ANGELONE 

Throughout the history of filmmaking, storyboarding has been used to pre-visualise films and help with production. Here I propose a new film visualisation tool to complement storyboarding, which I call 'Storyboardgraphy' and define as a 'film pre- and post-visualization tool showing shot sizes and lengths along a timeline'. A storyboardgraphic consists of two axes, with the X-axis representing the scene timeline, the Y-axis the size of the shots, and the characters depicted as recognisable curves. Storyboardgraphy is an excellent way of visualising a) shot sizes/lengths in a simple graphic; b) shot pacing (changes in the lengths of shots over the film timeline); and c) the dynamic of shot sizes (the order of shots along the scene timeline), which are not easily perceived on a conventional storyboard. Therefore storyboardgraphy is of huge interest, not only for pre-visualisation and production, but also for post-visualisation when editing, teaching film-making and studying film.

INTRODUCTION

A storyboard consists of illustrations or images presented in a sequence that act as a tool for pre-visualising a motion picture (Glebas 2008; Pallant and Price 2015). Storyboards are not only used in film but also in the theatre, novels, comic books, animations, photometric, business and architectural studios, interactive media, software and scientific studies. The storyboarding concept, as we know it today, was developed by Walt Disney Productions during the early 1930s (Miller 1957).

A film storyboard helps film directors and cinematographers visualise scenes and predict whether or not they can convey the intended information and emotion of the film to the audience. They are also used to detect potential creative or production problems

before they occur, to save producers' time, and to estimate the overall cost of the production.

Storyboards are a very powerful tools for pre-visualising a film and planning its shots but in some cases are too long and complex, and the overview of the whole scene is lost. Another limitation of a storyboard is that it does not intuitively visualise the pacing of the shots (changes in the lengths of the shots over the film timeline) or the dynamic of shot sizes (the order of the shots on the scene timeline). Both shot pacing and size dynamics affect how audiences perceive information and react emotionally to a film. To overcome these limitations, I present here a complementary tool, which I call 'Storyboardgraphy'.

STORYBOARDGRAPHY

I define storyboardgraphy as 'a film pre- and post-visualization tool showing shot sizes and lengths over a film timeline'. A storyboardgraphic consists of two axes, the X-axis representing the scene timeline and the Y-axis the sizes of the shots; the different characters in the film are recognisable by the colour, size and shape of the curves; shots are numbered as S1, S2 ... etc. (Figure 1). The X-axis can use seconds or frames as units. For the shot sizes on the Y-axis, I use the classification of shot sizes defined by Katz (1991); Extreme Close-up, Medium Close-up, Full Close-up, Wide Close-up, Close Shot, Medium Close Shot, Medium Shot, Medium Full Shot, Full Shot, Wide Shot, and Extreme Wide Shot. The distances between Extreme Close-up and Full Shot are scaled relatively, while the distances between Full Shot and Extreme Wide Shot are simply indicative and reduce the size of the Y-axis. This can be adjusted to satisfy the needs of the scene and the workspace preferences of the 'storyboardgrapher'.

Storyboardgraphy has some limitations: 1) storyboardgraphy is difficult to apply for scenes with

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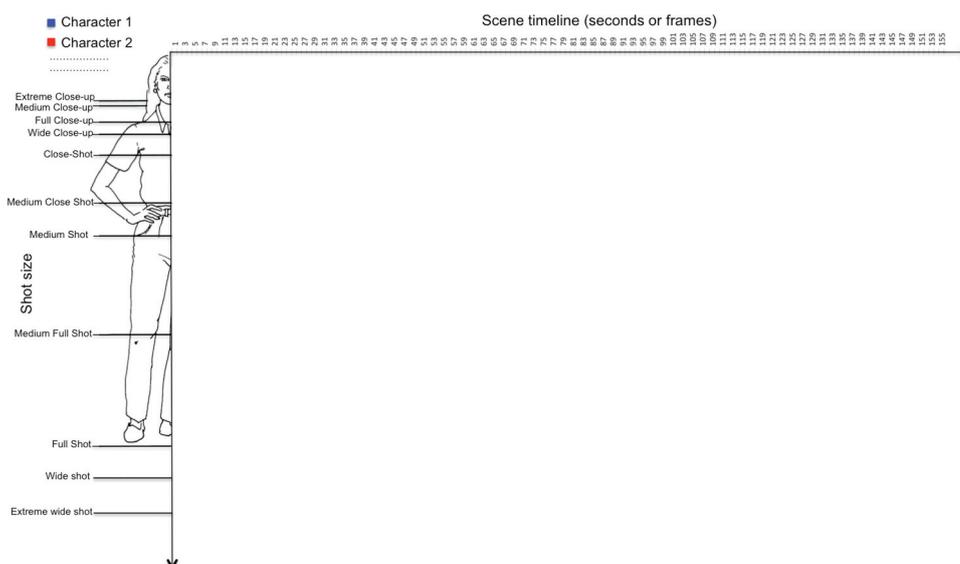


FIGURE 1. A storyboard graphic template: the X-axis represents the scene timeline (seconds or frames) and the Y-axis the shot sizes. Characters are represented by different curves (recognisable by colour, size or shape); shots are numbered S1, S2, etc.

special framing; 2) the reading of a storyboard graphic could be confusing when many characters are involved in the scene; and 3) some details such as camera height and angle, and the exact positions of the characters in the scene are not shown in the storyboard graphic. Nevertheless, storyboard graphic is not designed to replace the use of a storyboard but rather to complement and facilitate it and, despite these limitations, is an extremely useful tool if properly employed.

SOME APPLICATIONS OF STORYBOARD GRAPHY

Visualising an Overview of Shot Sizes/lengths in a Simple Graphic and the Possibility of Quick Comparisons between Scenes

Using a simple storyboard graphic, filmmakers and crew can gain an overview of the number of shots, their lengths and their order along the timeline, which is sometimes difficult to capture on a conventional storyboard. The simplicity of storyboard graphic makes it even possible to compare two or more scenes by simply looking at their respective storyboard graphics.

Visualising Shot Pacing (Changes in the Lengths of the Shots along the Film Timeline)

Pacing is defined basically as how much time is given to each shot. In other words, it means knowing when to end a certain shot and go on to the next in order to create an engaging dynamic rhythm. These ups and downs help prevent monotony (Hullfish 2017). Fast-

paced films have many fast cuts, whereas a slow-paced film is more likely to have longer scenes with fewer cuts (Murch 2001). Pacing guides viewers and their emotional response to the scene. On the one hand, frequent cuts and short shots quicken the pace, heighten viewers' state of awareness, express stress and nervousness, and make time advance more quickly, although they can also prove exhausting after a while; slower pacing, on the other hand, engenders a more relaxed and thoughtful tone.

Visualising the Dynamics of Shot Sizes (The Order of the Shots along the Film Timeline)

A shot communicates to the audience through its relationship with the shots that precede and succeed it along the timeline. Storyboard graphic makes it easier to visualise the order of the shots along the scene timeline, which has the crucial effect of advancing the story and setting the mood of the scene (Heft and Blondal 1987).

PRACTICAL EXAMPLES

I applied storyboard graphic to two scenes from the film *Whiplash* (2014), directed by Damien Chazelle. The film, which obtained an Academy Award for Best Film Editing, is widely used for teaching filmmaking, since it is based on a classical way of storyboarding. The pacing and rhythm of the scenes play a vital role in presenting the emotions and information in the film and hence it is an ideal way of demonstrating the merits of storyboard graphic.

Example One: Storyboardgraphic of Scene 17 (Int. Pizzeria – Night)

This is the date scene between Andrew and Nicole. The storyboardgraphic gives us an overview of the whole scene. The scene is composed of six shots, which, although a relatively large number of shots, only cover a small range on the Y-axis (shot sizes) between Medium Shot and Extreme Close-up, with one Insert Detail Shot. There is a good balance in the time Andrew and Nicole appear in this scene since both of them occupy about 50% of the timeline. The scene opens with a Medium Shot (Master Shot) of Andrew and Nicole to establish the setting and visualise the balance between them. Then the scene goes through a series of Medium Close-to-Close Shot of Andrew and Nicole as they get to know each other. The Medium Close-to-Close Shot is used to establish a visual distance reflecting the

nervousness of their first date and representing the emotional distance between them. The first part (seconds 75–88) is fast paced and conveys well a state of nervousness. The pacing slows in the second part (seconds 89–101) since things are more relaxed as they try to open up to each other. When Andrew asks Nicole ‘What do you want to do with your life?’ the scene has the first Extreme Close-up, emphasising the importance of the question for Andrew. The approach and level of importance that they give to their careers begins to create an emotional distance between them. And, as that happens, the scene moves back to the Medium Shot and the energy that they have built up is lost, which means that they have to start all over again. The scene moves back to the Extreme Close-up, when Nicole speaks about her homesickness: ‘I feel homesick sometimes. You know? I hate how people in college pretend they never feel homesick. Or maybe I’m

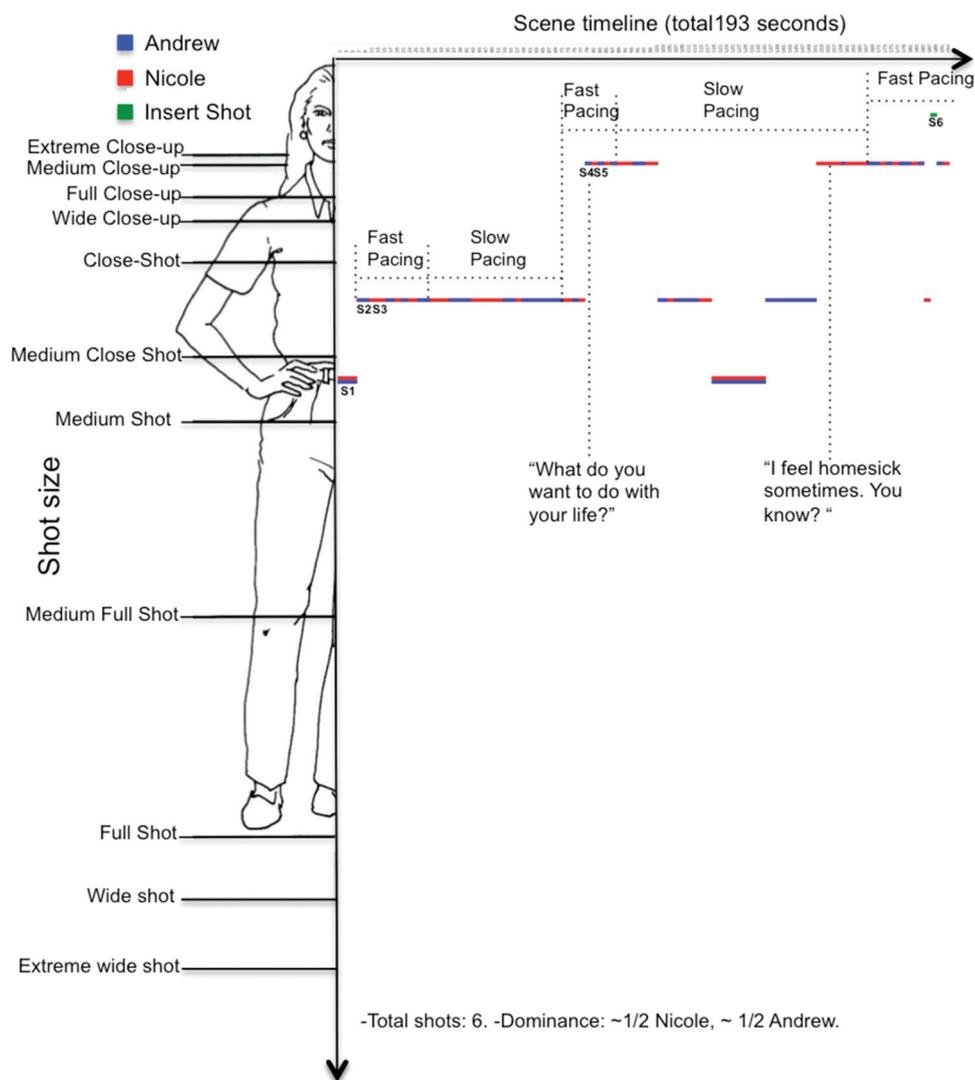


FIGURE 2. Storyboardgraphic of scene 17 (In Pizzeria – Night) from the film *Whiplash* (2014). Andrew is represented in blue, Nicole in red and the Insert Shot of feet touching in green. S1–6 represent shots 1–6. Dotted lines and text indicate extra information to clarify some uses of the storyboardgraphy.

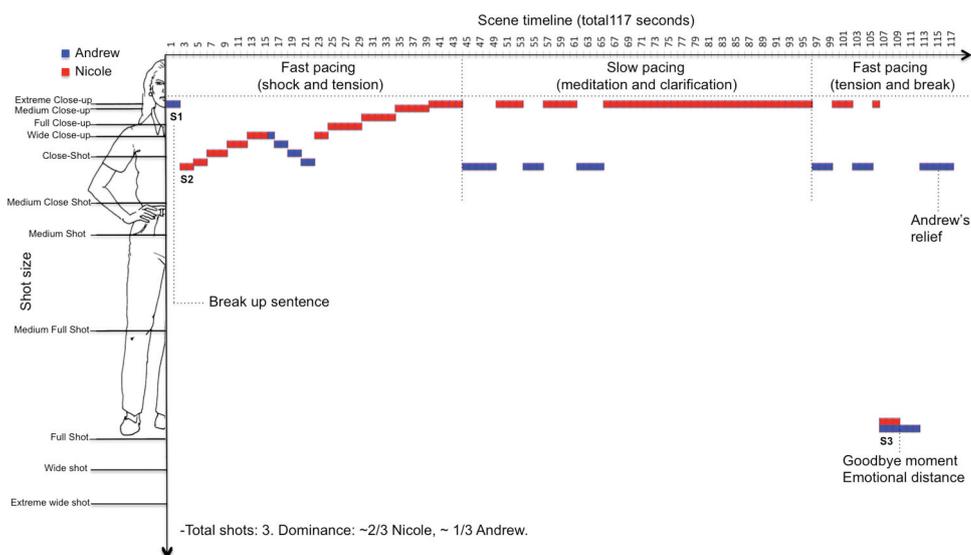


FIGURE 3. Storyboardgraphic of scene 51 (In Coffee Shop – Day) from the film *Whiplash* (2014). Andrew is represented in blue and Nicole in red. S1–3 represent Shots 1–3. Dotted lines and text indicate extra information to clarify some uses of the storyboardgraphy.

literally the only one, but ... I don't think so'. It is a very emotional moment and hence it needs an Extreme Close-up. From here on, Andrew and Nicole start to build some kind of connection, to find some common ground. The first part of this block of Extreme Close-ups is more slowly paced but then speeds up before the Insert Detail Shot of feet touching. The scene finishes with an Extreme Close-up showing that the relationship between them is now on the right track (Figure 2).

Example 2: Storyboardgraphic of Scene 51 (Int. Coffee Shop – Day)

This is the break up scene between Andrew and Nicole. The storyboardgraphic gives us an overview of the whole scene, which can be easily compared with scene 17 (date scene). Scene 51 (the break up) includes only three shots, which is half the number of shots in scene 17 (date scene); however, these three shots have a greater range of shot sizes (from Full Shot to Extreme Close-up) that is almost double the shot size-range in scene 17 (from Medium Shot to Extreme Close-up). The scene is dominated (about two thirds of the scene timeline) by the presence of Nicole, when the emotion of the viewers is with her, while Andrew occupies only about one third of the scene timeline. This compares with the roughly 50–50% presence of Andrew and Nicole in the date scene (17). Scene 51 (break up) is very intense and emotional. The storyboardgraphic starts with an Extreme Close-up of Andrew saying his breaking up words: 'OK, I'm going to just lay it out. This is why I don't think we should be together'. The

scene is dominated (about 95%) by shots ranging between Close Shot and Extreme Close-up, reflecting the tension in the scene. The storyboardgraphic shows intensive fast pacing at the beginning (seconds 0–44), followed by a relatively slower pace in the middle (seconds 45–96) but is still dominated by Extreme Close-ups. At the end of the scene the fast pacing returns (after second 97). The storyboardgraphic swaps between the dolly-out from Andrew (emotional distance from the viewer) and dolly-in to Nicole (empathy from the viewer). The intensive Close Shots and Extreme Close-ups are broken at the end of the scene to show the emotional distance and Andrew's relief after breaking up (Figure 3).

CONCLUSIONS

Here I propose a new film visualisation tool to complement storyboarding that I call 'Storyboardgraphy' and define as 'a film pre- and post-visualization tool showing shot sizes and lengths along a film timeline'. Storyboardgraphy is of great interest for visualising a) an overview of shot sizes/lengths in one simple graphic; b) shot pacing (changes in the lengths of shots along the film timeline); and c) the dynamics of shot sizes (order of the shots on the scene timeline), all of which are not easily understood from a conventional storyboard. Hence, storyboardgraphy will be of interest not only for film pre-visualisation and production but also for film post-visualisation including editing, teaching film-making and film studies including investigating the historical trends in scene composition and shot durations.

Over the past two years, I have taught storyboardgraphy to my students (filmmaking, storytelling and storyboarding; Angelone 2019). Storyboardgraphy makes it easier for me to explain different film concepts (e.g. pacing, rhythm, the effects of juxtaposition, etc.) and students have enjoyed applying storyboardgraphy to their film analyses. While some cinematographic concepts such as narrative structures, plots and storyboards are relatively easy to explain and understand, others including pacing and rhythm are not so intuitive. Storyboardgraphy enables these concepts to be visualised and hence reduces the time that students need to assimilate and apply them.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author.

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