

Redrawing the Past: The Value of Colours in a Graphic Narrative

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ABSTRACT

Graphic novels that are adapted from real-life events or the lived experiences serve as a platform for visual representation of the relationships between memory and storytelling. Graphic storytelling that is based on lived experiences place significance in the evidence of subsisting elements outside the frame which allow the readers to use their imagination in bringing still images to life. When appropriately developed, visual narratives that are enhanced with colours could effectively reflect reality through the passage of time. This paper seeks to analyse the use of colours in enhancing the significance of visual narratives that could affect the psychological connection and the recollection of social history in readers by utilising content analysis. It suggests that the application of colour aspects and colour schemes not only enhance a visual narrative but stimulate psychological responses and emotional reactions while correspondingly communicates the artistic intent and meaning.

Keywords: *Graphic narrative, Visual story-telling, Colour and value*

INTRODUCTION

Graphic novel is a form of visual communication that can effectively transmit meanings and values. Visual narratives have the capacity to enrich the overall wellbeing of those who are involved in its development of production or those who only read them. Not only that, graphic novels are able to transmute thoughts, feelings, and actions of the society especially with regard to shared societal matters; hence, opening up the opportunities for creators and readers towards varied possibilities of new visual narratives. It was suggested that graphic novels with subjects on the lived experiences or socio-history have revealed that visual information that is transmitted through sequential images could affect the

sensual memory of the distinct moment (Venderbeke, 2021). The visual narratives could be further enhanced with colours and the combinations of hues to augment values to the story.

Prior research by Chen et al. (2013) has proven that coloured illustrated books could engender intimate and extemporaneous influence to the readers experience (Chen, et al., 2013) while subsequent research by Kuhbandner et al. (2015) have identified that colours could also prompt varied impact on the memory. Subsequent researches further established that colours have emotive impact and affect mental health which suggests that colours influence feelings and thoughts (Lyu, 2022; Hussain, 2021; Jonauskaite, et al., 2020). The use of suitable colours is essential in creating evocative illustrations especially in graphic novels to give emphasis and coherence towards the story. Importantly, the coloured illustrations should be able to communicate an identifiable and appealing venue for the readers both psychologically and emotionally. Multiple researches have suggested that the use of colours could conceive and gradually intensify emotional sensations while contemporaneously stimulate the memory and the readers' engagement to the narrative (Lyu, 2022; Kuhbandner et al., 2015; Chen et al., 2013).

Graphic narratives that are adapted from real life events provide the plane for visual imagery on the interaction and relationship between memory and storytelling that illustrate a passage of time. It is worth mentioning that a graphic narrative which is constructed on the lived experience places significance in the development of evidence and the elements that lie beyond the boundaries of the frame where it allows the readers' imagination to make still pictures come alive. The focus of this study will be on the comic book '*Anak-Anak Berek – The Barracks Brood*' (Muhamad Azhar & Voviana, 2024). The literature will look into how colour harmony could influence value and affect the readers in making associations while reading and consequently create a psychological connection to the visual narrative. This paper aims to examine the use of colours to add value which could evoke or influence certain psychological and social memory associations to the readers through content analysis.

LITERATURE REVIEW

Colour is an elemental component of how human and animal perceive the world with various researches have been performed to investigate its effects in multiple aspects including the visual perceptions. Studies on the history of colours went back as far back into the ancient times but credit has been given to the ancient Greek for its earliest known theories on colours. Multiple researches have proven that colours have influences to human emotions and thoughts. It has been acknowledged that colour harmony and hues could trigger specific emotional sensations, thoughts and memory retention. However, researchers have also cautioned that the effects may differ between individuals.

In reviewing prior researches, Diachenko et al. (2022) have identified that the cognitive processing after reading materials with coloured illustrations is better while memory retention is enhanced compared to reading from black and white materials. Although the disparity is not significant, Diachenko et al. (2022) asserted that the results are observable as it was also recognised that colours have the capacity to augment emotional responses and significantly improved memory performance. Nevertheless, the use colour harmony (Figure 1) and hues have varying emotional and psychological values as Calderon (2019) suggested that colour harmony requires thoughtful arrangement that combines artistic acumen with scientific dexterity to produce visually attractive arts.



Figure 1. Colour wheel harmony
(Source: Calderon, 2019)

Nevertheless, it needs to be emphasised that the primary, secondary, and tertiary colours serve as the fundamental components from which all other colours are produced, mixed, and blended (Figure 2). Several researches have proven that these basic colours have significant impacts on the cognitive processing with specific colours carry specific values on emotions, thoughts, and memories (Chen et al., 2020; Tham et al., 2020, Haller, 2019; Jung, et al., 2018). The trace of history on colours have suggested that research on colour preferences is not only perplexing but can lead to confusion and contradictory to culture and geographical settings. Recent studies have demonstrated that the general preference is inclined towards cool colours compared to the warmer colours but this may vary according to the different hues with other affecting factors including culture, geographical setting, and gender.

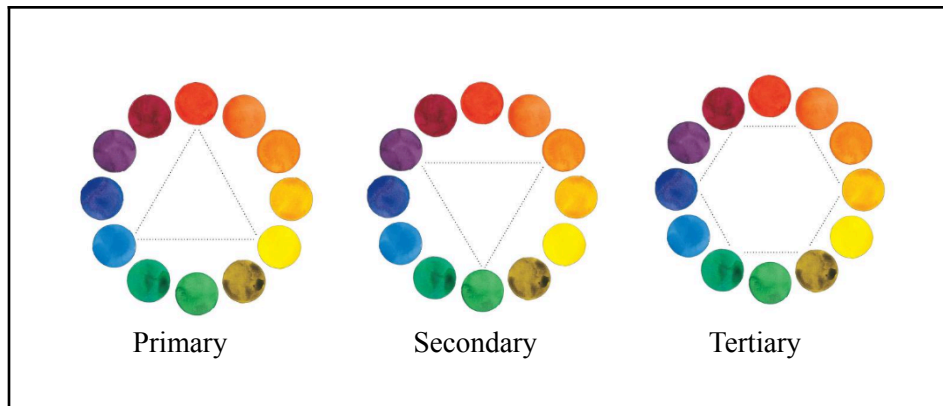


Figure 2. Primary, secondary, and tertiary colours
(Source: Mollica, 2018)

Colour Harmony and Values

When light enters the eyes, it stimulates the production of a chemical transmitter and prompts the generation of electrical messages that are transmitted to the hypothalamus in the brain which controls several physiological processes including metabolism, appetite, body temperature, water regulation, sleep, autonomic nervous system, and the sexual and reproductive functions (Lyu, 2022; Jonauskaitė, 2020; Tham et al., 2020; Haller, 2019). This implies that colour is not only a visual stimulus but it also affects the body physiological changes and psychological responses that expresses an individual's thoughts and emotions. However, further literature suggested that a more systematic approach to understanding the conceptual colour associations needs to be developed.

The meaning and value of a colour may be affected by the object it is seen on. It has been suggested that the elemental factors which determine an individual's preferences to specific colours consist of the significance of an object in a person's perceptual experience, and the psychological intensity that they create. Nevertheless, the associations of colours to objects and cognitive thinking may also be influenced by socio-cultural settings, age group, and gender. In an attempt to develop systematic *a priori* understanding on the effects of colours on cognition and behaviour, Haller (2019) inferred that the associations of colours may differ from one culture to the next but introduced four 'psychological primary colours' with their universal values namely; red, yellow, blue, and green, which are identified as the 'psychological primaries' that could cause specific and observable responses.

Table 1. 'Psychological primaries'
(Haller, 2019)

Red	It prompts a person's physical responses, noticeably raises the heart rate, influences the impression that time is passing faster than its actual rate, and activates the physiological reaction in response to a threat.
Yellow	It assumes the neurological system that is crucial in transmitting messages between the brain and the whole body. This consequently elicits emotional reactions which influences the emotional state.
Blue	It stimulates the intellect and impels mental responses.
Green	It engenders balance and harmony and is considered to be the leverage or balancing element of the mind, body, and emotional self or between the physicality of red, the intellect of blue and the emotion of yellow.

The literature further suggested that several attributes of an individual's colour preference may be of universal qualities as colours are distinguished by hue, brightness, and saturation; for instance, blue is generally preferred because it is associated to the blue sky, the river or the sea, while some colours are not universally appealing when associated with repulsive elements (Chen et al., 2020; Tham et al., 2020; Haller, 2019; Palmer, 2010). It has also been established the presence of substantial and significant predictable correlation between colour brightness and saturation to emotional responses. Hence, the aspects of colours and the colour schemes used could evoke certain emotional reactions but it has been cautioned that the responses would vary across cultures.

Colour in Illustrations

Colour could be an instrument for immediate communication and when used in book illustrations, it can transmit a range of meaning-making and narrative referencing which consequently trigger different emotional responses to the readers. Readers' initial visual perceptions are communicated through colours and could give an immediate background setting of the narrative which transcending to their personal experience. The application of colour aspects in graphic novels not only enhances reading experience but could engender appreciation that is complemented with intellectual conception of the art and narrative. However, the consideration of some external factors such as geographical context and cross-cultural differences need to be accounted for when interpreting readers' psychological and emotional responses to the visual in a graphic narrative. When colour schemes are applied consciously and effectively, they are capable of transmitting the narrative in a graphic novel effectively to the readers but more importantly, impelling them through a journey of time.

The colour schemes (Figure 3) applied gives value to the illustration in a graphic novel and may significantly impact storytelling by influencing readers in their interpretations and responses to the story. Colour scheme assists in creating a sense of balance or harmony in the arts for visuals. Not only that, the colour scheme provides contrast in the action or movement of the storyline and enables the creator to showcase visual hierarchy on the significance and intensity of the plot.

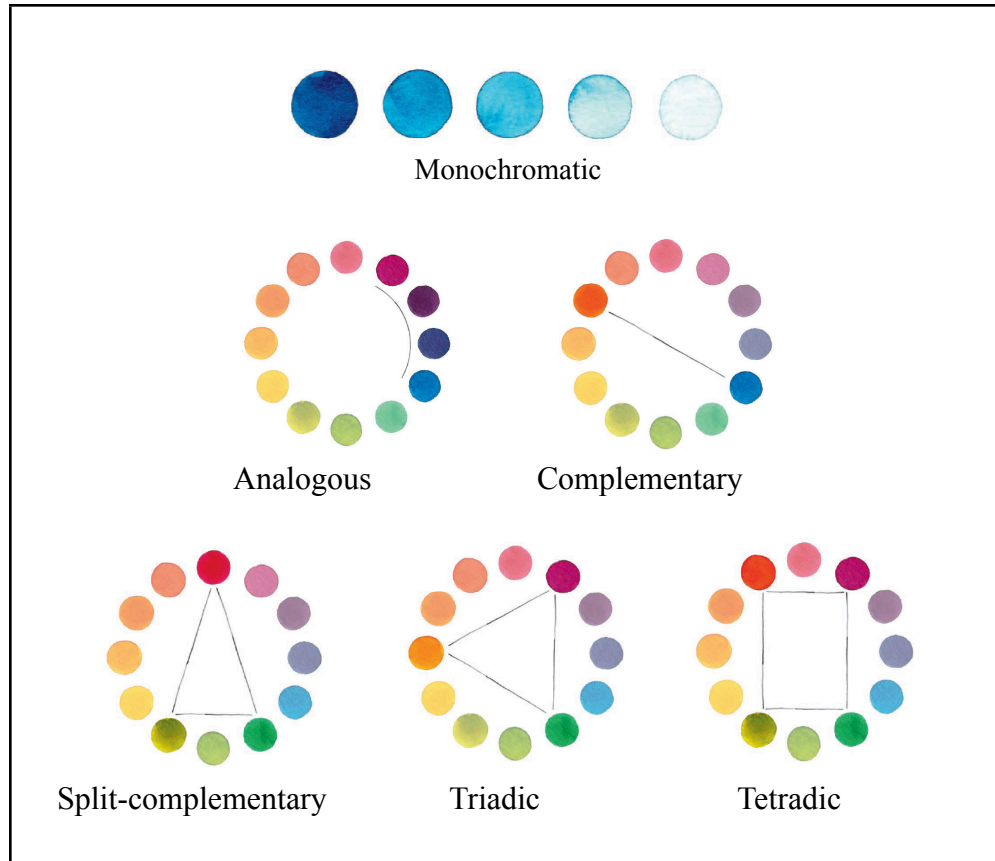


Figure 3. Colour schemes
(Source: Sutton & Whelan, 2004)

While readers traverse the pages of a graphic novel through its storytelling, the colours used in the illustrations will not only affect their emotions but may also set the atmosphere of the setting and influence the readers' perception of the characters; thus, influencing their emotional and psychological responses (Lyu et al. 2022; Hussain, 2021; Vanderbeke, 2021; Chen et al., 2013). The use of colours in graphic novels enhances readers' visual interests through colour contrast and harmony which further highlight the essential elements and detailing in the art. Importantly, colours also support the characters' identities in the narrative while establishing their distinct personality traits and ultimately breathe life to the characters. The application of effective colour aspects could also enhance storytelling in a graphic narrative according to its genre, theme, and setting. The elements of colours could help create the *mise en scene*, enabling readers to transition between the time frame of either the present, a flashback, or foreshadowing.

RESEARCH METHODOLOGY

Through qualitative content analysis, the use of colour aspects will be analysed by demonstrating its application in the selected pages that reflect the setting, theme, and genre of the storytelling. The analysis will include the evaluation of the colour aspects applied in the illustrations in terms of hues, saturation, and contrast which may be alternately referred to as value, as well as convention of the colour schemes. This way, the artistic intention to communicate the meaning of the graphic narrative could be characterised as shown in Figure 4.

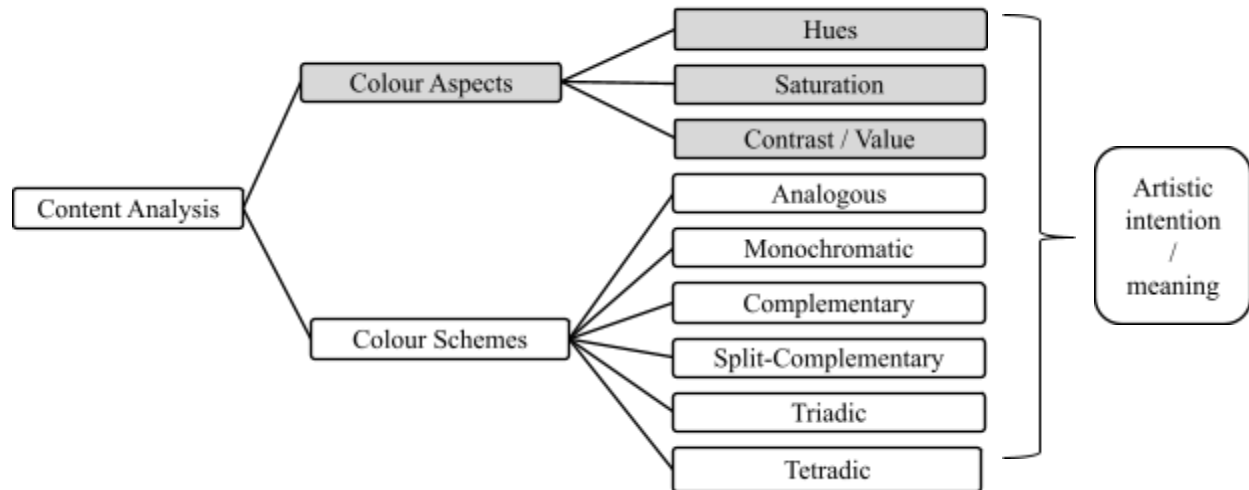


Figure 4. Content analysis

Content analysis is a versatile method that allows for both qualitative and quantitative research, allowing researchers to explore themes in-depth and make quantifiable comparisons. It provides a rich, in-depth understanding of data through coding and categorizing, allowing researchers to explore nuanced meanings and connotations. Content analysis is an unobtrusive method, making it suitable for sensitive research topics. It can handle large data sets, making coding more straightforward. Content analysis's systematic nature enhances its reliability, as other researchers can reproduce the study. It also allows for longitudinal studies, tracking changes and trends over time. Compared to other research methods, content analysis is cost-effective, as it primarily involves analysing existing texts, requiring fewer resources.

FINDINGS

The illustration in Figure 5 depicts a blue truck with a group of adults and children waiting for an occasion. The vehicle appears to be linked to a convoy or military activity, and the scene demonstrates motion or change. The artwork applied the analogous colour scheme with blue and yellow tones that are next to each other in the colour wheel; thus, creating a harmonious and aesthetically pleasing composition. The yellow hue is a stimulus for the neurological system that transpires emotional reactions as suggested by Haller (2019). The cool pastel yellow-orange tertiary colours in the artwork may capture the characters' emotional tension or great expectation leading to stronger emotional reactions in both the viewer and the characters. The yellow hue combined with blue might imply a mix of anxiousness or uncertainty and, harmonised with the impact of power, portrayed by the blue truck. Additionally, Chen et

al. (2020) further indicated that green, blue, and white are associated with tranquillity and tenderness. The artwork effectively communicates the underlying emotional depths and visual coherence, raising viewers' awareness to the underlying psychological states of the characters. The intentional use of colours in the illustrations that are next to each other within the colour wheel creates an engaging visual narrative.

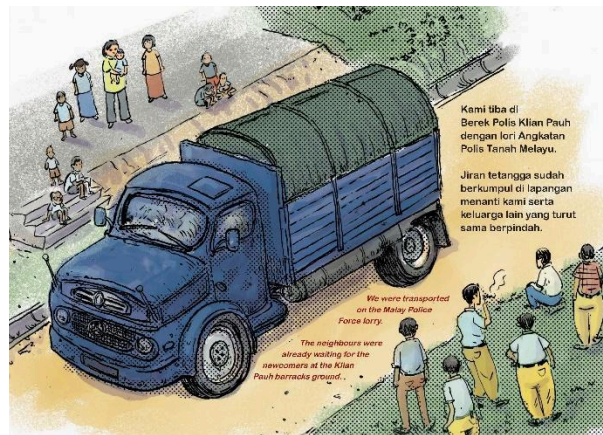


Figure 5. Anak-Anak Berek: The Barracks Brood
(Source: Muhamad Azhar & Voviana, 2024)

Figure 6 illuminates a traditional Malay kitchen that is characterised by conventional elements such as a cement rendered floor, woodfire cooking area, and antiquated kitchen items. The natural setting is further emphasised by the monochromatic colour palette which accentuates the organic tones. The cool pastel composite colour of brown is indicative of a psychological sense of equilibrium and harmony. The composition draws attention to the simplicity and functionality of the kitchen environment, capturing an evocative and culturally significant moment. It has been indicated by Tham et al. (2020) and Lyu (2022) that colours could affect the manifestation of memories which may be a customary element in a culture and geographical region; thus, supporting prior research by Kuhbandner (2015). Moreover, the utilisation of organic tones generates a sense of tenderness and cosiness, which is in alignment with the cultural context. The intricate representation of traditional kitchen utensils and the overall environment suggests a profound affinity for a simple lifestyle and cultural heritage which further demonstrates the assertion that colours are often associated to colours (Chen & Chu, 2022; Tham et al. (2020). As brown is a composite colour of the primary red-blue-yellow, its value of being associated with earth has the capacity to influence the readers' or viewers' psychological and emotional responses. The illustration could be interpreted as a tribute to the traditional way of life, specifically the Malay, in which the kitchen served as a central living area for family interaction. In reflection to cultural values of self-sufficiency, simplicity, and harmony, the utilisation of earthy tones and green symbolises a connection between man and nature while reflecting memories from the 1960s.

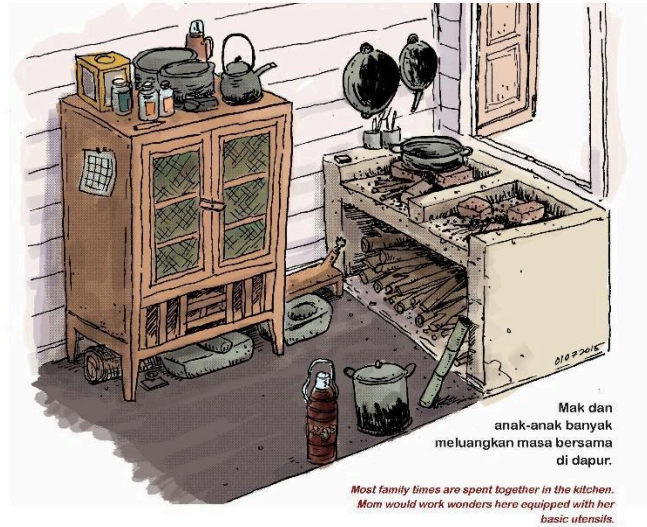


Figure 6. Anak-Anak Berek: The Barracks Brood

(Source: Muhamad Azhar & Voviana, 2024)

The use of the monochromatic scheme with very light hue produces a serene cool outlook in Figure 7 and applied to express connectedness with the environment as proposed by Tham et al. (2020). The light and monochromatic pastel tone helps create the mood and atmosphere of the scene. It also shows clear activity of the characters, gesture and also personality of the characters. The sense of calm and family bonding time in such space and contrast captured by the use of the primary yellow, off white, and grey. It also shows the material and texture from the cement-rendered floor to the wall revealing subtlety in the setting. The choice of colours is intended to communicate significant meanings that could stimulate readers' psychological and behavioural reactions as implied by Schleifer et al. (2023). The light monochromatic value also captures time setting which is in the 1960s showcasing its simplicity and socio-economic status providing further background information to readers.



Figure 7. Anak-Anak Berek: The Barracks Brood

(Source: Muhamad Azhar & Voviana, 2024)

Once more, it is visible that the artist justifies the contrast and mood of the scene with its pastel monochromatic colour and hue in Figure 8. If the artist approaches in black and white, we can see the used of hatching, cross hatching and pure black fill in to create the mood and atmosphere through lighting play. In this particular visual narrative and scene, the simple art style leaves space for colour to justify the mood and visual storytelling. Furthermore, the textual ‘sound effect’- ‘KCHIING... KCHHING”, is applied with the pastel primary yellow in order to accentuate the quiet classroom scene, where everyone is alert and looking for the source of the sound. The application of the analogous colour scheme with a dash of pastel pink gives contrast to the primary blue, white and yellow hues. The use of pink in the background is to enhance the message of love and respect between the two characters of brothers. In the scene, Ajis the little brother paid back for the curry puff which he ate first without paying to the older brother, Jan. This pastel colour hue helps to induce the emotional response and enhance the narrative which ultimately create the halo effect Schleifer and Tamir (2023). The use of appropriate colours is an effectual method harnessed by artists to enhance the visual narration while amplifying the action and mood of the scenes and characters without any textual descriptions.



Figure 8. Anak-Anak Berek: The Barracks Brood
 (Source: Muhamad Azhar & Voviana, 2024)

Hence, the effects of colours on emotional reactions and psychological perceptions are not only influenced by the colours but also by the elements of colour aspects and colour aspects. They are exploited to further enhance the visual narrative and subsequently stimulate the readers or viewers’ perceptive judgments prior to making their resolute conclusion on the value of the storytelling. The summary of findings on the value of colours used in the comic book ‘*Anak-Anak Berek: The Barracks Brood*’ is displayed in Table 2.

Table 2. Summary of result

Figures and Illustration	Colour Scheme	Artistic Meaning
Figure 5	Analogous – blue and yellow	Anxiousness or uncertainty
Figure 6	Monochromatic – blue and yellow	Serene and cool
Figure 7	Monochromatic – primary yellow, off white, and grey	Sense of calmness
Figure 8	Pastel monochromatic colour and hue, hatching, cross hatching, and pure black fill	To create the mood and atmosphere through lighting play, the simple art style leaves space for colour to justify the mood and visual storytelling, to accentuate the quiet scene

CONCLUSION

Graphic novels can be an enriching medium through its ability in transforming societal thoughts and values. The application of colours and the combination of hues, a narrative could be enhanced visually while strategic contrast adds value in amplifying emotional reactions. Multiple researches have recognised that colours have the ability to invoke intimate memories, possess extemporaneous influences on viewers' personal experiences, and provoke the thoughts (Schleifer & Tamir, 2023; Chen et al., 2022; Lyu, 2022; Hussain, 2021). Nevertheless, empirical evidence is necessary to demonstrate how socio-cultural and geo-cultural elements influence colour perceptions. Furthermore, its emotive effects suggest that its perceptual responses should be further delved into with more concrete theoretical and empirical footings. Finally, more pragmatic research that can be generalised is required to substantiate the effectual influences that colours preside over readers' psychological and emotional responses.

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REFERENCES

- Calderon, A. V. (2019). *Color Harmony for Artists*. Quarry Books.
- Chen, Y, Yang, J, Pan, Q, Vazirian, M, Westland, S. (2020). A method for exploring word colour - associations. *Color Research and Application*, 45(1), (pp. 85-94). <https://doi.org/10.1002/col.22434>
- Chen, C., Li, D., Cassidy, T., & Cheung, T. (2013). *Effects of colour and emotion in illustration*. In L. MacDonald, S. Westland, & S. Wuerger (Eds.) *AIC Colour 2013: Proceedings of the Twelfth Congress of the International Color Association (AIC2013)* (pp. 881-884). <https://eprints.whiterose.ac.uk/81209/>
- Chen, S., & Chu, Y. (2022). A Study of the Cultural Significance of Traditional Colors in Chinese Movies. In Ghaffar, A.; Mehmet, C. B. & Intakhab, A. K. (Eds.), *2022 6th International Seminar on Education, Management and Social Sciences (ISEMSS 2022)* (pp. 1362-1368). Atlantis Press.
- Diachenko, I., Kalishchuk, S., Zhylin, M., Kyyko, A., & Volkova, Y. (2022). Color education: A study on methods of influence on memory. *Heliyon*, 8(11). <https://doi.org/10.1016/j.heliyon.2022.e11607>
- Haller, K. (2019). *The Little Book of Colour*. Penguin UK.
- Hussain, A. R. (2021). Colour psychology in Art: How colour impacts mood. *Art and Design Review*, 09(04), 301–308. <https://doi.org/10.4236/adr.2021.94025>
- Jonauskaitė, D., Parraga, C. A., Quiblier, M., & Mohr, C. (2020). Feeling blue or seeing red? Similar patterns of emotion associations with colour patches and colour terms. *i-Perception*, 11(1), <https://doi.org/10.1177/2041669520902484>

- Jung, I., Griber, Y. A., Hanenburg, J., Arbab, S., Yoshimura, K., Ulusoy, B., Elhady, I. M., Johansson, S. & Samir E. E. (2018). Colour associations in different cultures. *Proceedings of the International Colour Association (AIC) Conference 2018*, (pp. 503-508). Lisbon: Newton: The International Colour Association. <https://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-93454>
- Kuhbandner, C., Spitzer, B., Lichtenfeld, S., & Pekrun, R. (2015). Differential binding of colors to objects in memory: red and yellow stick better than blue and green. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00231>
- Lyu, J. Y. (2022). Analysis of the effect of different types of colors on human behavior and emotion. In A. Luqman, Q. Y. Zhang & W. Liu (Eds.), *Advances in Social Science, Education and Humanities Research, 670: Proceedings of the 2022 3rd International Conference on Mental Health, Education and Human Development (MHEHD 2022)*, (pp. 1060 – 1063). doi:10.2991/assehr.k.220704.191.
- Mollica, P. (2018). *Special Subjects: Basic Color Theory*. Walter Foster Publishing.
- Muhamad Azhar Abdullah. & Voviana, Z. (2024). *Anak-anak berek: The barracks brood*. Lakar Preenz Design.
- Palmer, S. E., & Schloss, K. B. (2010). An ecological valence theory of human color preference. *Proceedings of the National Academy of Sciences*, 107(19), 8877–8882. <https://doi.org/10.1073/pnas.0906172107>
- Rizo, S. G. (2021). Key design principles. In S. Rigby, P. Barker, & M. Lewis (Eds.), *Fundamentals of Character Design* (2nd ed.), pp. 53–84. 3dtotal Publishing.
- Schleifer, R., & Tamir, I. (2023). Sport, the arts, and fans' loyalty: the role of color for sport fans. *Frontiers in psychology*, 14, 1239085. <https://doi.org/10.3389/fpsyg.2023.1239085>
- Sutton, T., & Whelan, B. M. (2004). *The Complete Color Harmony*. Rockport Publishers.
- Tham, D. S. Y., Sowden, P. T., Grandison, A., Franklin, A., Lee, A. K. W., Ng, M., Park, J., Pang, W., & Zhao, J. (2020). A systematic investigation of conceptual color associations. *Journal of Experimental Psychology*. (pp. 1 – 76). <https://doi.org/10.1037/xge0000703>
- Vanderbeke, D. (2021). History, Formats, Genres. In S. Domsch, D. Hassler-Forest, & D. Vanderbeke (Eds.), *Handbook of Comics and Graphic Narratives*, (pp. 35–80). Walter de Gruyter GmbH & Co KG.