

## Prince Sutasoma: Children's Digital Comic Design Based on Kakawin Literature

I Nyoman Suarka<sup>1\*</sup>, Putu Ari Suprpta Pratama<sup>2</sup>, Dewa Ayu Carma Miradayanti<sup>3</sup>, I Wayan Nuriarta<sup>4</sup>

<sup>1,2,3</sup> Universitas Udayana Bali, Indonesia.

<sup>4</sup>Indonesian Institute of Arts, Denpasar, Indonesia.

\*Corresponding Author: [rismanuniqbu@gmail.com](mailto:rismanuniqbu@gmail.com)

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### ABSTRACT

In the current digital era, transformation and digitization are strategic ways to strengthen and promote Old Javanese kakawin literature as one of the cultural objects in Indonesia. Digital transformation becomes a new space for the protection, development, utilization, and guidance of Old Javanese literature for the millennial generation. In connection with that, this article tries to introduce the transfer of Kakawin Sutasoma into the form of children's digital comics. Kakawin Sutasoma is an ancient Javanese literary work that contains local wisdom in the form of the Catur Paramita concept, Pancasila ideology, Bhinneka Tunggal Ika motto, and national character values, including tolerance, hard work, discipline, honesty, creativity, friendship, social care, and responsibility. The value of national character is important to be instilled in children from an early age through the media of children's digital comics based on Kakawin Sutasoma. In addition, the cultivation of national character values through children's digital comics based on Kakawin Sutasoma is important to protect the millennial generation from the negative impact of digital comics, video games, and animated films with foreign cultural themes that are prone to cause cultural disruption. This research is designed as qualitative research and is multidisciplinary. Data collection was carried out by integrating text study methods and children's digital comic creation methods. Data analysis was carried out by applying the method of transferring vehicles and creating children's digital comics based on the working principles of literary theory and comics theory. The results of data analysis and creation are presented in the form of prototypes of children's digital comics. The invention and novelty of this article lie in the development of the research methodology, which integrates literary assessment methods and the creation of digital comics simultaneously. This article contains a new finding that Kakawin Sutasoma was created in 1370, during the reign of King Hayam Wuruk in Majapahit. Moreover, the way of analyzing why the text of Kakawin Sutasoma was chosen as the source of inspiration for the creation of the Digital Comic of Prince Sutasoma, how the text of Kakawin Sutasoma is treated in the Digital Comic of Prince Sutasoma, and the contribution of the Digital Comic of Prince Sutasoma to Kakawin Sutasoma in this article can be used as an example by other researchers.

**Keywords:** Transformation, Digitization, Kakawin, Digital Comics.

### INTRODUCTION

The advancement and strengthening of culture in the future must adopt advances in information technology in terms of protection, development, utilization, and guidance. Information technology is an integral part of the life of the millennial generation as the inheritors of culture. In this regard, the digital transformation of cultural objects is a must in the current era. Information technology is an important vehicle for cultural inheritance to be more easily accepted and understood by the millennial generation. Further, the digital transformation of cultural objects promises the development and utilization of cultural objects not only as a source of character but also as a source of community welfare in accordance with the mandate of the Law of the Republic of Indonesia Number 5 of 2017 concerning the Advancement of Culture.

The results of cultural research in Indonesia are directed at producing prototypes or innovative products, both as learning media to improve student learning outcomes (Nahuddin, 2021; Amalia et al., 2021; Siregar et al., 2021; Ulfa et al., 2022; Fuadati, 2023) as well as a source of the creative economy to improve community welfare (Insana et al., 2022). Thus, research results in the form of innovative products are important to meet the needs of the community and the government's demands for the role of higher education as an "agent of economic development", namely producing innovative products that are of economic benefit to the wider community (Ministry of Education, Culture and Higher Education Strategic Plan 2020-2024) through the downstream of research results.

One of the ancient Javanese literary works, which was a cultural object inherited by the Indonesian nation, is Kakawin Sutasoma, the work of Mpu Tantular. As it is known that Kakawin Sutasoma is a source of noble values of the nation's culture, even history has recorded that the ideology of Pancasila and the motto *Bhinneka Tunggal Ika* are explored and sourced from Kakawin Sutasoma (Suarka, 2019; Ardhana, 2019). Kakawin Sutasoma contains national character values, including religious values, tolerance, discipline, honesty, hard work, creativity, care, and responsibility. The national character values contained in Kakawin Sutasoma are considered worthy of being thematized as digital comics as reading material for Indonesian children to prevent children from being influenced by cultural disruption. Furthermore, children's digital comics based on Kakawin Sutasoma are seen as having a strategic role in instilling the ideology of Pancasila and honoring diversity, differences, and a sense of nationality in children from an early age in order to have a strong national character and noble character.

The era of information technology that brings foreign cultures into the lives of Indonesian children is vulnerable to shaping the way of thinking and behavior of today's Indonesian children, who are more likely to stay away from cultural traditions, have an instant lifestyle, individualized, hedonistic, and pragmatic. The condition must be anticipated in order to achieve the golden generation as predicted by the Indonesian government in 2045. In this regard, the internalization of national character values through the creation of children's digital comics is a priority need. The presence of children's digital comic design based on Kakawin Sutasoma is expected to fill the void of character values and, at the same time, provide opportunities for children to play while learning the nation's cultural heritage. Thus, Indonesian children will grow into a generation that has a strong national character and pride in the nation's cultural heritage.

## LITERATURE REVIEW

The empowerment of Old Javanese literature as a source of innovative products has been carried out by researchers since 2017 by raising the text of the Old Javanese *Tantri Kamandaka* as a source of creative economy. In 2020, the Old Javanese *Tantri Kamandaka* was transferred into digital comics as a medium for national character education. Previous research, both in the form of souvenirs and digital comics, was not specifically designed for children but to meet the reading needs of the general public. However, the research is worthy of being used as a basis for aesthetic understanding to be further developed in the design of children's digital comics based on Kakawin Sutasoma.

Kakawin Sutasoma has been translated into a manual comic book by Gun Gun (2019) entitled "Sutasoma Serat Awal: *bhinneka tunggal ika*". The comic is not specifically designed for children but to fulfill the reading needs of the general public. The word balloons and character dialog in the comic contain philosophical expressions that children do not easily understand. After all, the comic is still a manual book. However, the comic by Gun Gun can be used as a reference to create the children's digital comics developed in this research.

Fathoni et al. (2016) made a digital comic application design with the title "Digital Comic Design of *Wayang Kulit* Stories as an Android-based Javanese Culture Learning Media". The comic uses the Javanese version of the *Ghatotkaca* story as the source of the play, equipped with motion and sound animation to make it more attractive to children. The digital comic application succeeded in increasing children's understanding of Javanese shadow puppets in accordance with the research objectives. Thus, the research inspires the design of children's digital comics based on Kakawin Sutasoma.

Sabri et al. (2017) made comics as PAUD learning media with the title "PAUD Learning: Recognizing Letters and Numbers through Educational Comics". Comic design uses communication strategies, visuals, media, and creative concepts with photography techniques. The research produced outputs in the form of educational comic books accompanied by puzzle boards and merchandise as learning media for PAUD children. The comic does not use characters and plays sourced from traditional works but uses fictional characters of girls and boys aged 5-6 years named *si Bundu*, *si Siti*, *si Beddu*, *si Ulla*, and *si Aco*. The research inspired the development of this digital children's comic based on Kakawin Sutasoma.

Ilham et al. (2019) designed an information literacy comic titled "Making Information Literacy Comics to Improve Student Literacy at SMA Negeri 1 Padang Library." Some important steps taken in making this comic can be developed in the design of children's digital comics based on Kakawin Sutasoma.

Nahuddin (2021) conducted research on the design of digital comics as a final project to educate elementary school children aged 6-12 years with a story based on the fairy tale of Dewi Sekar Tanjung. His research is entitled "Designing Digital Comics to Educate Moral Children of Elementary Age 6-12 Years through Fairy Tales of Dewi Sekar Tanjung". The types of drawing styles, comic panels, and creative strategies applied in the research and design of comics are a reference in the development of drawing styles, comic panels, and creative strategies for the design of children's digital comics based on Kakawin Sutasoma because they both have a target audience, namely children of elementary age 6-12 years.

Siregar et al. (2021) conducted research and compiled a digital comic design in elementary school science subjects with the title "Evaluation Analysis of Digital Comic Development in Elementary School Science Subjects". The digital comic is a learning media development using the Research and Development method with the Borg and Gall model and the Eclipse theme. The idea that comics are entertaining and, at the same time, shape children's mentality through educational values in the study is worth developing in the research on the design of children's digital comics based on Kakawin Sutasoma.

Ulfa et al. (2022) conducted research and made a child-friendly digital comic design with the title "Development of Child-Friendly Comics for Digital Literacy Learning in Elementary Schools". The study used the Research and Development method with a descriptive approach and adopted the 4 D Models instructional development model (define, design, develop, disseminate). The results showed that the development of child-friendly comic media was able to improve children's digital literacy significantly. Based on the results of the study, the research on the design of children's digital comics based on Kakawin Sutasoma will enrich the treasures of children's digital literacy media in Indonesia.

Nuriarta et al. (2024) tried to examine the phenomenon of articulation of Indonesian identity in the wayang comics of the Mahabharata Epic by three legendary Indonesian comic artists, namely R.A, Kosasih from Sunda, Teguh Santosa from Java, and Gun Gun from Bali. The research used a qualitative method with a critical approach based on articulation theory and hegemony theory. The results showed that the three comic artists used the wayang model and the puppet story as a representation of Indonesian identity visualized in the form of comic panels. Wayang and wayang stories in comics by the three comic artists articulate not only the relationship between foreign culture and Indonesian culture but also the world of comics with the reading public in Indonesia and function to promote cultural diversity in Indonesia.

The digital comics produced in the above research still rarely use the source of inspiration for kakawin literary works. Even though there are digital comics built on traditional sources of inspiration, such as the story of Ghatotkaca and the fairy tale of Dewi Sekar Tanjung, the issue of the transformation process of the source text into comics has escaped the attention of previous researchers. Textual analysis of the literary work Kakawin Sutasoma as the first step to finding themes, characters, plot, and especially the cultural values to be transformed into digital comics, which previous researchers ignored, became a priority step and an advantage of this research.

## METHOD

The research on the design of children's digital comics based on Kakawin Sutasoma is qualitative, integrating literary approaches and the creation of digital comic artworks. Therefore, this research seeks to explore the text of Kakawin Sutasoma and its transformation into children's digital comics. A literary approach (Endraswara, 2020) is used to understand Kakawin Sutasoma as a literary work with various conventions and implications, both language conventions, literary conventions, and cultural conventions.

The data was acquired through reading, both heuristic and hermeneutic reading (Riffaterre, 1978). Meanwhile, the function of the Old Javanese language in Kakawin Sutasoma is understood in relation to the poetic function (Jacobson, 1960) of Kakawin literature in the Old Javanese cultural environment (Wiryamartana, 2014).

Verbal data sourced from the Kakawin Sutasoma text was analyzed using the analytic descriptive method. Each verbal data, both words and sentences, is described and then interpreted and concluded based on the working principles of semiotic structuralism theory (Danesi, 2012). Verbal data are textual elements that indicate structural elements that are interrelated in relation to other parts and the whole text of Kakawin Sutasoma as a structure. The verbal data is classified into theme, character, plot, and setting as structural elements and viewed as a semiotic system, a system of meaningful signs. Each structural element of Kakawin Sutasoma is seen to contain signifier and signified elements. The signifier elements in the form of words and sentences indicate the signifier in the form of concepts, ideas, and values that build meaning. The structural elements of Kakawin Sutasoma are further transformed into the creation of digital comics based on the working principles of comic art creation methods and comic theory.

Digital comics are a form of comics that are presented, published, accessed, and read online through computers, tablets, and smartphones. The presence of digital comics is a modern alternative to printed comics and an important part of the modern comic ecosystem that has a very wide audience reach (Fuadati, 2023).

Fuadati (2023) further explains that comics have main elements, including (1) space, which is the area around the main element that functions to direct the reader's attention; (2) image, which is a picture or illustration made by comic artists related to characters, settings, objects, and other visual elements; (3) text or text balloons are words and sentences added to convey dialog, monologues, and narratives to readers; (4) points and dots, which are visual elements of comics that function to communicate various concepts and effects; (5) line, a comic element that functions to depict characters, objects, panels, shapes, contours, and details, as well as various other comic elements; (6) shape, which refers to objects and visual elements in comics, both in simple and complex forms; (7) form, which is a way of giving dimension or thickness to characters, objects, and other elements in the panel; (8) tone/value, which is a comic element related to the darkness of light areas or visual elements in comics; (9) color, which is a comic element that functions to build comic aesthetics and enhance the emotional atmosphere of comics; (10) pattern, (11) texture, which is a comic element that functions to create different surface effects or impressions on characters, objects, and settings in comics; (12) voice, sound, audio, which is a comic element that functions to convey sound and audio experiences through the creative use of visual and text elements (Gumelar in Fuadati, 2023).

The design of this children's digital comic uses a graphic design program application with a simple layout display. However, it attracts children's interest and attention and is easy for them to enjoy. The illustration design uses photography techniques with miniature properties and dioramas as visual subjects. The stages of analysis in designing children's digital comics based on Kakawin Sutasoma include analyzing the object of communication material, including analyzing themes, developing ideas, creating premises, synopsis of Kakawin Sutasoma, and determining comic character characters. Furthermore, visual communication strategies were analyzed, namely making digital comics with simple visual appearances and simple language so that they are easy for children to enjoy. The next stage is positioning and branding analysis, which is used to select and determine the image style or illustration style as a visual display. Then, the brainstorming and mind mapping analysis is carried out to determine the method and theme in the form of "playing while learning the concept of *Catur Paramita*, Pancasila ideology, Bhinneka Tunggal Ika motto, and national character values". The creative concepts developed include the form and style of comic character design, typography, and color, and media concepts. The process of designing children's digital comics based on Kakawin Sutasoma includes action figure character design, mini studio design, shooting/photography, digitization, and layout (cf. Sabri et al., 2017).

## RESULTS AND DISCUSSION

### Kakawin Sutasoma as a Source of Inspiration for the Digital Comic of Prince Sutasoma Design

Kakawin Sutasoma is one of the Kakawin literary works that emerged during the Majapahit era (Zoetmulder, 1985). Kakawin Sutasoma was composed by Mpu Tantular. So far, the time of the creation of Kakawin Sutasoma is unknown, only estimated to have been written after 1365 or before 1389 (Mastuti et al., 2009). However, there is textual data that indicates the time of the creation of Kakawin Sutasoma in the form of the Candra Sangkala chronogram. Candra Sangkala is a system of time (year) based on the rotation of the moon that emerged during the Skha Dynasty (Irawan et al., 2017). The system of writing time (year) uses words or images that have the meaning of numbers. Candra Sangkala is not only used in inscriptions but also in kakawin literature, as explained by Zoetmulder (1985) that Kakawin Bharatayuddha was composed by Mpu Sedah in 1079 Saka or 1157 AD, in the form of the expression Candra Sangkala, "*sangakuda suddha candrama*", a man riding a clean horse like the moon. The word *sanga* is worth 9; *kuda* is worth 7; *suddha* is worth 0; and *candrama* is worth 1, making it 1079 Saka or 1157 AD.

In Pupuh CXLVIII stanza 4 of Kakawin Sutasoma, the phrase "*matanggan umiber i lemab*" is found. Heuristically, the phrase reads and means 'elephant flying above the ground'. Hermeneutically, the expression also reads and indicates another meaning, namely, as a marker of the time of creation. In the Candra Sangkala dating system, the expression "*matanggan umiber i lemab*" can be read and interpreted, namely "*mata*" is worth 2; "*angga*" is worth 9, "*umiber*" is worth 2, and "*lemab*" is worth 1. Thus, the phrase "*matanggan umiber i lemab*" indicates the year 1292 Saka or 1370 AD. If the interpretation of the year of creation of Kakawin Sutasoma is accepted, it can be explained that Kakawin Sutasoma was created in 1370, during the reign of King Hayam Wuruk. It is known that King Hayam Wuruk ruled Majapahit between 1350 and 1389 (Setiawan, 2022, p.110).

Kakawin Sutasoma tells the story of the glory of a prince named Sutasoma. The story begins with a king named Mahaketu from the Hastina palace yearning for a son to be able to overcome the chaos of the Hastina country from the attack of the giants. King Mahaketu meditated in front of the Jina statue and then received a revelation that Lord Buddha would incarnate as King Mahaketu's son. Not long after, King Mahaketu's consort, Prajadhari, became pregnant with many miraculous signs, such as the shaking of the earth and a bright light radiating to heaven. The gods, especially Lord Buddha, blessed Prajadhari's pregnancy. So Prajadhari gave birth to the

Buddha as a baby with great miracles. It is said that the baby was able to cure people of all kinds of illnesses and suffering. When the baby was seven years old, he was named Sutasoma. As he grew older, little Sutasoma grew into a handsome, intelligent, devoted, faithful, and noble prince. King Mahaketu wanted to crown Sutasoma as King of Hastina. However, Prince Sutasoma refused his father's request on the grounds that he preferred to live as a hermit enjoying the solitude of the mountain forest. In the middle of the night, Prince Sutasoma sneaked away from the Hastina palace when the inhabitants of the palace were fast asleep. Miracles happened, and the palace gate opened by itself. Sutasoma left the palace of Hastina while enjoying the beauty of the villages along the way. Prince Sutasoma arrived at a graveyard at sunset. Prince Sutasoma worshipped the presence of Dewi Bhairawi and was granted the Mahahrdayadharani magic mantra. After that, Prince Sutasoma continued his journey to Mount Sumeru. On the way, Prince Sutasoma met Kesawa, a hermitage leader. Prince Sutasoma asked Kesawa for help to be escorted to the top of Mount Sumeru. Prince Sutasoma and the Kesawa met a Buddhist ascetic named Sumitra, the uncle of Sutasoma's mother.

Sumitra told Prince Sutasoma the story of the evil giants from the giant Suciloma to Purusada. Prince Sutasoma and Kesawa continued their journey and arrived under a kepuh tree inhabited by Gajamukha. Gajamukha attacked Prince Sutasoma, but Prince Sutasoma was calm, and all of Gajamukha's weapons were blunted before Sutasoma. Finally, Prince Sutasoma was able to subdue Gajamukha with astra bhidura arrows but was not killed. Gajamukha became a friend of Prince Sutasoma. Then, Prince Sutasoma, Kesawa, and Gajamukha continued their journey and met a dragon. The dragon attacked Prince Sutasoma, but Prince Sutasoma was calm and was able to conquer the dragon with the light of his knowledge. The dragon was not killed but made a friend by Prince Sutasoma. Afterward, Prince Sutasoma, along with his friends Kesawa, Gajamukha, and Naga, continued their journey and met a tigress who was about to eat her cub. Prince Sutasoma advised the tiger not to prey on her cub, but the tiger refused because she was hungry. Prince Sutasoma gave himself up to be devoured by the tiger and the tiger's son to be freed. The tiger devoured Prince Sutasoma. While sucking Prince Sutasoma's blood, the tiger realized and repented. The tiger became Prince Sutasoma's friend. Later, Prince Sutasoma meditated at the top of Mount Sumeru and was tempted by the nymphs. However, the angels did not succeed in thwarting Prince Sutasoma's ascetic practice. After successfully practicing asceticism perfectly, Prince Sutasoma returned to the palace of Hastina to replace his father as king of Hastina. When he returned to Hastina, Prince Sutasoma met cousins named Dasabahu and Candrawati. Prince Sutasoma married Candrawati. Next, Sutasoma met Purusada, the giant king of the Ratnakanda palace, who had just recovered from a wound. Purusada made a vow to Bhatara Kala to give 100 kings. Prince Sutasoma offered to be devoured by Bhatara Kala as a replacement for the 100 kings whom Purusada had captured. Bhatara Kala tried to swallow Sutasoma by turning himself into a dragon. However, Bhatara Kala turned compassionate. Bhatara Kala left King Purusada, and King Purusada became friends with Sutasoma. Finally, Prince Sutasoma became the king of the Hastina Kingdom.

Kakawin Sutasoma has uniqueness and excellence as a basis for selection to be used as a hypogram for digital comic design. First, Kakawin Sutasoma is one of the kakawin literary works that specifically explores Mahayana Buddhism as the main theme. This can be seen in the *manggala* section of Kakawin Sutasoma, which indicates that Mpu Tantular, as the author of the kakawin, worships the greatness and glory of Lord Buddha. The word “*Sri Bajrajñana*” is used by Mpu Tantular to refer to Lord Buddha (Sang Buddha) as a deity of worship, worshipped as the embodiment of ultimate perfection (*sumyata*). With pleasure and inner sanctity, Lord Buddha is enshrined in the deepest recesses of the heart, revered as the protector of the three worlds, and always believed to provide perfect human inner enlightenment. Mpu Tantular offers an important point to the readers of his kakawin that when humans in the world are plagued by conflict as a sign of the times called Kaliyuga, the Buddha descends into the world to overcome evil (Mastuti et al., 2009, p.4). If the statement is viewed as a semiotic fact, it can be interpreted that conflict is a representation of the human mind shrouded in darkness. At such times and conditions, humans need enlightenment and intelligence. One of the vehicles of enlightenment and intelligence is literary literacy, especially the literature of Kakawin Sutasoma. That is why the transformation of Kakawin Sutasoma text into digital comics is important for readers, especially Indonesian children.

Secondly, Kakawin Sutasoma holds intelligent thoughts related to social human values, especially multiculturalism, democracy, tolerance, and religious moderation. These values are contained in the poetic expression “*mangkang Jinatwa kalawan Sivatatwa tunggal, bhinneka tunggal ika tan bana dharma mangrwa*” 'thus the essence of Buddha and Shiva is single', they are indeed different, but still single, because there is no double truth' (Mastuti et al., 2009, p. 504). The use of the diction “*tunggal*” 'unity' is cohesive and coherent with the diction “*bhinneka*” diversity, to strengthen the belief that the ultimate truth believed by adherents of each different religion is actually single, as represented in the first principle of Pancasila, namely “Belief in One God”. The poetic expression in Kakawin Sutasoma also carries a practical function for the Indonesian people as a source of national character values to strengthen the joints of multiculturalism in the life of society, nation, and state. These character values are important to instill early in Indonesian children, especially through digital comic media.

Third, Kakawin Sutasoma contains the term “Pancasila” which was later explored, developed, and made the basis of the state and ideology of the Unitary State of the Republic of Indonesia by the founders of the Indonesian Nation. Similarly, Kakawin Sutasoma contains the expression “Bhinneka Tunggal Ika,” which was later chosen as the motto of the Indonesian nation (Suarka, 2019). Indeed, Pancasila is the state foundation and ideology of the Indonesian nation, and Bhinneka Tunggal Ika is the nation's motto, which the Indonesian people have widely recognized. However, Kakawin Sutasoma, as a traditional reference source that contains both terms, is not widely known by the Indonesian people, especially the younger generation of Indonesia. Therefore, Kakawin Sutasoma needs to be socialized intensively and massively in various opportunities and media that are in accordance with the current situation and conditions of the younger generation or Indonesian children, namely digital comics.

Fourth, Kakawin Sutasoma is a beautiful garden for seeding the value of human love, both towards fellow humans and nature, plants, and animals. The value of love is needed for the young generation of Indonesia in the midst of the life of the nation and state as a multicultural nation. The values of multiculturalism, democracy, tolerance, religious moderation, mutual cooperation, and love that characterize the Indonesian nation are now increasingly eroded by modernity and globality. This is evidenced by the emergence of various cases of violence, both symbolic and physical violence. Nature conservation is increasingly threatened. Indonesian children today are more likely to stay away from tradition. In connection with that, the presence of digital comics of Prince Sutasoma is expected to contribute as a solution in solving these problems.

Three basic thematics of Kakawin Sutasoma became the source of inspiration for the design of the Digital Comic of Prince Sutasoma, namely *catur paramita*, Pancasila, and Bhinneka Tunggal Ika. *Catur paramita* is four virtues beyond ordinary human understanding and experience, consisting of *metri*, *karuna*, *mudita*, and *upeksa* (Zoetmulder et al., 1995, p. 167). *Metri* is the attitude and behavior of friendship or companionship. *Karuna* is the attitude and behavior of compassion. *Mudita* is the attitude and behavior of pleasing others. *Upeksa* is the feeling of a calm heart. Pancasila is the foundation and ideology of the nation and the Unitary State of the Republic of Indonesia. Bhinneka Tunggal Ika means unity in diversity; in one, the Unitary State of the Republic of Indonesia is the motto of the Indonesian nation.

### **Transformation of Kakawin Sutasoma Text into the Digital Comic of Prince Sutasoma**

Transformation is a change in structure, appearance, and character (Nasukah et al., 2021 p.179). If this is the case, then the transformation of the Kakawin Sutasoma text into the Digital Comic of Prince Sutasoma is identified through changes in structure, appearance, and character. In other words, how the text structure elements of Kakawin Sutasoma are treated in the digital comic is the main issue in the transformation. The Digital Comic of Prince Sutasoma is understood as a cultural work that is constructed through transformation.

The transformation of the text of Kakawin Sutasoma into the Digital Comic of Prince Sutasoma appears to have experienced changes in structure, appearance, and character. Changes in structure, appearance, and character can be seen in the omission of events in Kakawin Sutasoma when transformed into the Digital Comic of Prince Sutasoma. Incidents depicting the destruction of evil creatures and giants in the Hastina palace at the beginning of the story and some war incidents were deliberately omitted with the intention of avoiding violent scenes that could affect children's mentality. Similarly, long travel scenes and tall narratives that are difficult for children to understand in Kakawin Sutasoma are shortened and even abandoned in the Digital Comic of Prince Sutasoma to avoid boredom in readers, in addition to minimizing the number of pages.

On the other hand, changes in the structure, appearance, and character of Kakawin Sutasoma in the Digital Comic of Prince Sutasoma can be seen through scene development. There are parts that are developed in the Digital Comic of Prince Sutasoma, such as the story of Sutasoma's life as a child, narrating Sutasoma as a child playing and protecting his friends. The section is a thematic visualization of *catur paramita*, Pancasila, and *bhinneka tunggal ika* in the Kakawin Sutasoma text. It is considered important to develop the Digital Comic of Prince Sutasoma to influence the mentality of Indonesian children to get used to prioritizing love, friendship, patience in relationships, recognizing existing differences, and helping each other, both in joy and sorrow. The value of national character is internalized to form a strong personality of Indonesian children based on the ideology of Pancasila and the motto of Bhinneka Tunggal Ika, as shown in the following picture 4.1

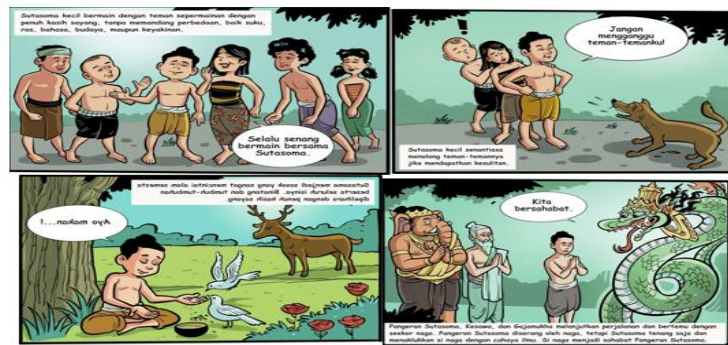


Figure 1. Figure of Prince Sutasoma.

The events experienced and carried out by Sutasoma that indicate the ideology of Pancasila and Unity in Diversity are highlighted in the Digital Comic of Prince Sutasoma to foster religious, tolerant, moderate, caring, and patriotic characters among Indonesian children from an early age. It is adjusted to the socio-cultural situation of Indonesian society as a multicultural society (Minan, 2017). The way and attitude of Sutasoma in facing enemies or opponents with compassion or without violence in the Kakawin Sutasoma text is a structural element that gets important attention in the Digital Comic of Prince Sutasoma. It is expected to provide Indonesian children with education and literacy related to human values. Humans must live in harmony, coexist, respect each other, and also always maintain harmonious relationships with God, humans, and the universe.

### The Digital Comic of Prince Sutasoma Design

The Digital Comic of Prince Sutasoma is a transformation work of Kakawin Sutasoma. Therefore, the design of Prince Sutasoma's Digital Comic follows the following stages.

(1) Selecting the narrative elements of Kakawin Sutasoma as the narrative source for the Digital Comic of Prince Sutasoma

The Digital Comic of Prince Sutasoma is a type of wayang comic that uses the story of Sutasoma in Kakawin Sutasoma as a comic narrative. Kakawin Sutasoma is a narrative work that tells the life of a character named Sutasoma chronologically and completely from birth to becoming King of Hastina. Narrative works are works that tell an event or phenomenon in detail (Faizin et al., 2020).

The entire Sutasoma story in Kakawin Sutasoma is considered too long if all the elements of events, characters, and settings are transformed into digital comics. In relation to that, in the design of the Digital Comic of Prince Sutasoma, the first step is to analyze the narrative elements of Kakawin Sutasoma that are considered feasible to be transformed into the Digital Comic of Prince Sutasoma. The selection of narrative structure elements is based on comic conventions and the needs of children's comic readers. This step is in line with one of the main characteristics of narrative research, namely aspects of data analysis strategies by analyzing stories, retelling, and developing themes using chronology (Faizin et al., 2020).

As a work of transformation, the narrative of the Digital Comic of Prince Sutasoma is an innovation of the Kakawin Sutasoma narrative. In principle, the main narrative in Kakawin Sutasoma is tried to be maintained as much as possible in the narration of the Digital Comic of Prince Sutasoma. However, innovation as part of creativity is still given space in the transformation process. Some elements were removed, especially the prolonged travel and war scenes that were not relevant to children's mentality. However, some parts were added, especially Sutasoma's friendly childhood social world, to shape the mentality of children with noble character.

The narrative elements of Kakawin Sutasoma transformed into the Digital Comic of Prince Sutasoma consisting of 26 main incidents as storylines, namely:

1. King Mahaketu meditated in front of the Jina statue and received a revelation that Lord Buddha would incarnate as Mahaketu's son.
2. King Mahaketu's consort, Prajnadhari, became pregnant with miraculous signs.
3. The gods blessed the pregnancy of King Mahaketu's consort.
4. The Buddha was born a miracle baby.
5. The miraculous baby cured people's illnesses, disabilities, and sufferings.
6. After the baby was 7 months old, the baby was named Sutasoma.
7. Little Sutasoma played with his friends lovingly, regardless of differences, ethnicity, race, language, culture, or beliefs.
8. Little Sutasoma always helped his friends if they were in trouble.
9. Sutasoma became a person who loved the universe and everything in it. Animals and plants are lovingly cared for.

10. Sutasoma grew up to be a handsome prince, disciplined, devoted, faithful, and noble.
11. Prince Sutasoma was about to be crowned king of Hastina, but he refused and chose to live as a hermit because the only place to achieve salvation was in the loneliness of the mountains.
12. At midnight, Prince Sutasoma sneaks away from the castle of Hastina. The gate opens by itself.
13. Prince Sutasoma walks through the beautiful villages.
14. When the sun set, Prince Sutasoma arrived at a graveyard near a hamlet. Prince Sutasoma honored Dewi Bhairawi and was given the gift of Mahahrdayadharani's magic mantra.
15. Prince Sutasoma continued his journey to Mount Sumeru. On the way, he met Kesawa, a hermitage leader. Prince Sutasoma asked Kesawa for help being escorted to the top of Mount Sumeru.
16. On the way, Prince Sutasoma and Kesawa met a Buddhist hermit named Sumitra, the uncle of Sutasoma's mother. Sumitra told Prince Sutasoma the story of the evil giants from the giant Suciloma to Purusada.
17. Prince Sutasoma and Kesawa continued their journey and arrived under a kepuh tree inhabited by Gajamukha. Gajamukha attacked Prince Sutasoma, but Prince Sutasoma was calm, and all of Gajamukha's weapons were blunted before Sutasoma. Finally, Prince Sutasoma was able to subdue Gajamukha with astra bhidura arrows but was not killed. Gajamukha became a friend of Prince Sutasoma.
18. Prince Sutasoma, Kesawa, and Gajamukha continue their journey and meet a dragon. The dragon attacks Prince Sutasoma, but Sutasoma is calm and conquers the dragon with the light of knowledge. The dragon becomes Prince Sutasoma's friend.
19. Prince Sutasoma, with his friends Kesawa, Gajamukha, and Naga, continue their journey and meet a tigress who is about to eat her cub. Prince Sutasoma advises the tiger not to eat her cub, but the tiger refuses because she is hungry. Prince Sutasoma gave himself up to be devoured by the tiger, and the cub was set free. The tiger devoured Prince Sutasoma. While sucking Prince Sutasoma's blood, the tiger realized and repented.
20. The gods, especially Indra, revived Prince Sutasoma.
21. Prince Sutasoma meditates on the summit of Mount Sumeru and is tempted by the angels, but the angels fail to thwart his meditation. Prince Sutasoma completed his asceticism and has successfully completed his schooling/education.
22. Prince Sutasoma returned to Puri Hastina after successfully performing tapa semadi. He has realized himself as the incarnation of the supreme Buddha God (Jina).
23. On his way home, Prince Sutasoma met his cousin, Dasabahu. Prince Sutasoma married Dasabahu's sister, Candrawati.
24. Prince Sutasoma then meets Purusada, the giant king of the Ratnakanda palace, who has just recovered from a wound. Purusada made a vow to Bhatara Kala to sacrifice 100 kings. Prince Sutasoma is willing to be presented to Bhatara Kala as long as the 100 kings are freed.
25. Bhatara Kala was very happy to see Sutasoma come to surrender. Bhatara Kala turns into a dragon and tries to swallow Sutasoma, but his ferocity suddenly turns into compassion. Kala asks Sutasoma to be his friend.
26. Prince Sutasoma becomes the king of Hastina. The state of Puri Hastina is full of peace and prosperity. All people live side by side, respecting each other, without discriminating ethnicity, race, culture, or religion under the motto "Bhinneka Tunggal Ika" based on the state ideology of Pancasila.

The narrative elements of Kakawin Sutasoma above essentially have narrative components consisting of events, characters, and story settings as plots. Plot is the context presented in images and text (Abdullah et al., 2021). The narrative elements are understood as a whole chronological unit that reflects the social norms and cultural values of the Majapahit period, which are still considered relevant to the life of Indonesian society today. Therefore, it is important to transform the narrative elements of Kakawin Sutasoma into the Digital Comic of Prince Sutasoma, both through word balloons, narration, and visualization. Thus, it would appear that the comic elements contribute to the overall theme of the story (Vimandhani et al., 2024), especially the inculcation of national character values contained in Kakawin Sutasoma on the mentality of Indonesian children as readers of the Digital Comic of Prince Sutasoma.

- (2) Make initial sketches or basic sketches to determine the composition of objects according to the storyline to be created.

The Digital Comic of Prince Sutasoma is designed and focused on exploring Sutasoma's life as a role model for Indonesian children. In line with that, Sutasoma's character is visualized as close as possible to the world of today's Indonesian children by elaborating puppet characters and human figures. However, the human figure that is humorous, entertaining, exciting, and handy as a comic trait (Siregar et al., 2021) is still maintained in the depiction of the character.

Drawing or visual illustration of characters is done using the procreate application (McCready, 2021). Procreate is one of the popular illustration applications among professional illustrators, and it has various features to support the creation of illustrative images. Initial sketches or basic sketches are made to compile various initial illustrations to make it easier for comic artists to determine the composition of images and storylines. This sketch is made by utilizing the studio pen 1 size 12 ink tool on the iPad Air, as shown in the following example image.



**Figure 2.** Basic sketches of Maharaja Mahaketu and the Buddha statue.

(3) Make a fine sketch to determine the character of the character

Fine sketches are made to determine the character of the character in the story. In addition to facial characteristics, the fine sketch also determines the depiction of characters with their clothing characteristics. The tool used is a Tool pen size 13 with 100% thickness. Fine sketches in the process of making the Digital Comic of Prince Sutasoma can be seen in the following example image.



**Figure 3.** Fine sketch of Maharaja Mahaketu's figure and Buddha statue.

(4) Create dark and light in the early stages of illustration to determine the volume or dimension of space

The drawing is continued by making details of each character and determining the background of the picture. The background shows the space and time the character is being told. At this stage, tone or value, as an important element in comics related to the dark and light of the visual elements of the image (Gumelar, 2011), is used to determine the dimensions or volume. The goal is to make the image look close to reality and show the perspective of determining the front, middle, and back objects. Black and gray color blocks begin to appear.

At this stage, the placement of word balloons and comic captions began to be arranged to clarify the narrative that was built. The power of comics uses a duo-specific storytelling technique, namely visual and verbal, which support each other to convey messages to readers. Verbal elements in the form of word balloons and narratives make it easier for readers to understand the visual elements in comics, as shown in the following image.



Figure 4. Dark and light sketches.

(5) Coloring Process

This coloring aims to provide visual aesthetics to the reader (Gumelar, 2011) and increase reader appeal. Similarly, coloring also serves to further reveal the spatial dimension. In comic drawing techniques (Iskandar et al., 2022), color also plays a role in strengthening the character so that readers can get to know the character more quickly by looking at the color identity, as shown in the following image.



Figure 5. Color sketches.

(6) Display comics digitally, saved in PDF (Portable Document Format) format in a digital book

The Digital Comic of Prince Sutasoma can be opened and read by importing files on the Books application on iOS-based devices and Google Playbook on Android-based devices. Digital books are created by utilizing the FlippingBook application, a simple application that displays books in PDF format in flipbooks.



Figure 6. FlippingBook application view.

The PDF file that has been compiled into the Prince Sutasoma book is uploaded to this application. By clicking the upload pdf button and selecting the file that has been determined, the Pangeran Sutasoma book can be read more interestingly and practically.

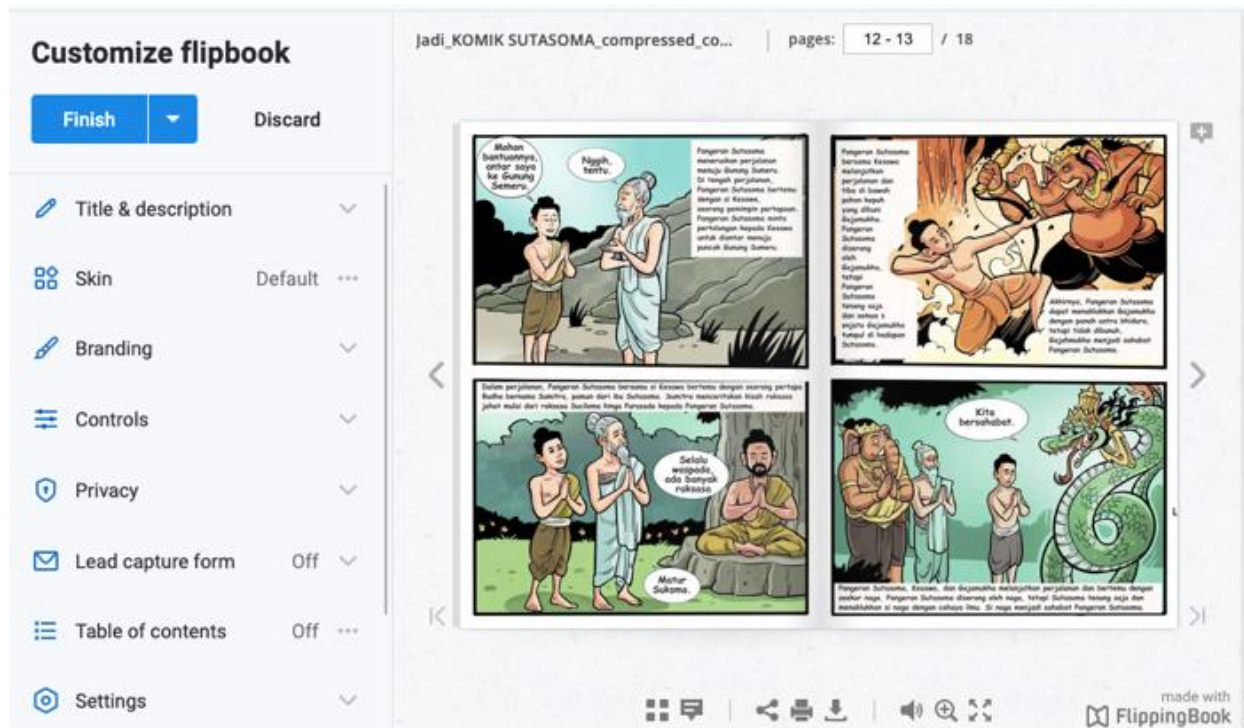


Figure 7. FlippingBook display of Prince Sutasoma.

## CONCLUSION

Kakawin Sutasoma is the work of Mpu Tantular. Kakawin Sutasoma was created in 1370 during the reign of King Hayam Wuruk in Majapahit. Three basic themes in Kakawin Sutasoma inspire the design of the Digital Comic of Prince Sutasoma, namely *catur paramita*, *pancasila*, and *bhinneka tunggal ika*. *Catur paramita* contains teachings of compassion, sympathy, patience, care, and friendship in relationships. *Pancasila* is the basis of the state and ideology of the Indonesian nation. *Bhinneka Tunggal Ika* is the motto of the Indonesian nation, which is important to instill in Indonesian children from an early age through digital comic media that is interesting and easy to understand in accordance with the environment of today's Indonesian children.

The transformation of Kakawin Sutasoma into the Digital Comic of Prince Sutasoma is a verbal to visual transformation and undergoes changes in structure, appearance, and character in the form of removal and development of structural elements. The visual elements of the Digital Comic of Prince Sutasoma contribute to the thematic development of Kakawin Sutasoma so that efforts to instill the value of national character in Indonesian children are easier to do.

The Digital Comic of Prince Sutasoma is not only a product of aesthetic transformation but also a representation of strategic steps in the efforts to protect, develop, utilize, and foster kakawin literature as the cultural heritage of the Indonesian nation.

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