



**INSTRUCTIONAL MEDIA IN THE XV CENTURY  
(A CASE STUDY OF WIDODAREN, GERBA, AND PASRUJAMBE INSCRIPTIONS)**

**MEDIA PEMBELAJARAN PADA ABAD XV M  
(STUDI KASUS PRASASTI WIDODAREN, GERBA, DAN PASRUJAMBE)**

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**ABSTRAK**

Penelitian ini bertujuan untuk menganalisis dan menginterpretasikan temuan baru pada masa kerajaan Hindu - Buddha di Nusantara (masa klasik). Objek dari kajian penelitian ini adalah prasasti- prasasti dari Lereng Semeru yakni; Prasasti Widodaren, Pasrujambe, dan Gerba. Metode penelitian yang digunakan adalah metode kualitatif dengan kajian studi arkeologi-sejarah. Pengumpulan data dilaksanakan dengan studi kepustakaan dengan tinjauan data primer. Selanjutnya menggunakan analisis struktural berupa transliterasi terhadap isi dan makna yang tertulis pada ketiga prasasti tersebut. Hasil analisis menemukan adanya bukti-bukti penggunaan media pembelajaran dalam proses pembelajaran di Lereng Semeru yang didukung oleh sumber naskah yakni *Nāgarakṛtāgama* dan *Buḅaḅga Manik*. Ketiga prasasti yang menjadi objek kajian terbukti sebagai media pembelajaran tradisional yang berbahan dasar batu. Media pembelajaran sendiri adalah alat bantu dalam belajar mengajar. Lebih lanjut, ketiga batu prasasti tersebut berisikan pesan-pesan moral interaktif yang merupakan salah satu sifat dari media pembelajaran.

**Kata Kunci:** Media Pembelajaran; Inscription; Widodaren; Gerba; Pasrujambe

**ABSTRACT**

This study was aimed at analyzing and interpreting the instructional media existing in the classical period of the Hindu - Buddhist kingdoms. The object of the study was inscriptions found on the Semeru Slope, including Widodaren, Pasrujambe, and Gerba. This study employed a qualitative method with an archeological-historical framework. The data was collected through a literature review and in-situ research of the inscriptions. The collected data was analyzed using a structural analysis in the forms of transliteration of the contents and meaning written at the inscriptions. The study found that there is evidence of the use of instructional media in teaching process. This finding is also supported by the *Nāgarakṛtāgama* and *Buḅaḅga Manik* manuscripts which narrate educational and moral values as one of the characteristics of instructional media. In addition, the instructional media serve as a tool support the teaching and learning process at that time.

**Keywords:** Instructional Media; Inscription; Widodaren; Gerba; Pasrujambe

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## INTRODUCTION

Studies on instructional media are not something new in the field of education. Many researchers have studied this topic in various aspects (Hamalik, 1990; Sastromiharjo, 2008; Arsyad, 2013; Falahudin., 2014; Nasution., 2015; Musfiqon., 2016). According to Azhar Arsyad (2013), media, or what is referred to as "*medius*" in Latin, is a plural form of the word medium which has an intermediary or introductory meaning. On the other hand, in terminology, experts have defined the instructional media in various ways (Musfiqon, 2016). Ely and Gerlach (1971) define instructional media as a device relative to the process of receiving, processing, and rearranging all forms of visual and verbal information conveyed in the photographic, graphic, and electronic forms. Furthermore, Heinich (2005) states that all forms of media that contain messages or information in the field of teaching activities can be referred to as instructional media. In line with Heinich, Falahudin (2014) also defines instructional media as an overall source of both software and hardware needed in communication among students. In other words, the use of instructional media in the teaching and learning process has the main function as a teaching aid that plays an active role in influencing the condition, motivation, and teaching and learning environment (Hamalik, 1990 in Falahudin, 2014, p. 24).

In this case, Muhammad Musfiqon (2012, p. 48) and Arsyad (2013, p. 10) explained that instructional media can be divided into two, namely traditional instructional media and modern instructional media. The traditional instructional media can be exemplified by print media consisting of modules, scientific magazines, handouts, and textbooks. There is also traditional media in the forms of pictures, photos, charts, graphics, exhibitions, posters, diagrams, info boards, and blackboards, as well as visual media that is not projected. Meanwhile, modern instructional media includes telecommunications-based media (e.g. teleconferences) and microprocessor-based media (e.g. computer-assisted instruction).

In the history of Indonesia, in 1871 when the liberal VOC minister (*Vereenigde Oostindische Compagnie*) Van De Putte authorized education for Indonesian natives, traditional instructional media within the scope of formal schools began to be disseminated (Nasution, 2015, p. 36). If a straight line is drawn backward in the period before the colonial entry in the Indonesian archipelago, especially in the classical period (the traditional kingdom period started from the era of Kutai Kingdom in the fourth century AD to Majapahit in the sixteenth century), there are not many discussions about education. This is because educational information sources at that time were quite difficult to find. Thus, the number of written works with the theme of the History of Education in Indonesia especially in the classical period can be said to be insignificant in comparison with other periods. Several written works that gave rise to the theme of the History of Education in Indonesia, among others, are discussed by Syamruddin Nasution (2015) and Dadang Supardan (2008). However, the main discussion in these works only focuses on the history of colonial education with no description before the colonial period. Furthermore, Ilyas Djumhur and Hasyim Danasuparta (1959) in their book entitled *Sejarah Pendidikan* (The History of Education) write classical education during the Hindu and Buddhist kingdoms in Indonesia by showing the process of Buddhism-

Hinduism acculturation in Indonesia in a brief overview of education during that era. Nevertheless, the description of classical education in Djumhur and Danasuparta's book is too broad. In other words, no detailed discussion has yet been found regarding other educational details such as the methods, the media, or the educational curriculum system in that classical period. A journal paper entitled *Guru Masa Klasik* (Teachers of the Classical Period) written by Abdul Kosim (2016) only discusses the condition of education during the entry and development of Islam in Indonesia. In other words, the main idea of the paper is a discussion of the teaching process of Islamic religion teachers in teaching their students in the pesantren (Islamic boarding school) environment. Other articles about Indonesian education in the classical period as written by Hardiati et al. (2010) and Munandar (2001) also do not discuss the instructional media used in the classical period. In conclusion, no paper or book discusses in-depth the History of Education in Indonesia in the classical period.

Paul Renfrew and Paul Bahn (1991) claim that written records are very important in the reconstruction of past social life. In other words, the written records can also be used as one of the study materials in analyzing the history of education in Indonesia in the classical period. In line with this, Soejono (2001) explained that in general the archeological study material in the form of written records can be found, among others, in inscriptions (written stone). Furthermore, this study also mentions *Nāgarakṛtāgama* and *Buḅaḅga Manik* which describes the existence of a *mandala cadewaguruan* named *catur bhasma mandala* which can be found around the Slopes of the East Java Mountains (Santiko, 1990). Therefore, this study focuses on the interpretation of data on inscriptions in the area of South Semeru Slope, which is assumed as instructional media in the Indonesian classical period. The inscriptions include Widodaren Inscription, Gerba (Gerba I and II), and Pasrujambe (Pasrujambe I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XIV, XIV, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, and XXIII). Therefore, this leads to the question: "how is the role of inscriptions as instructional media in the Indonesian classical period?".

## METHODS

The method used in this study was a qualitative method with the archeological-historical analysis. The study employed an archeological-historical analysis because the main source of this study was artifacts in the form of short inscriptions commonly used in the discipline of archeology. Thus, the stages of this method were as follows (1) data collection, (2) data description, (3) data analysis, (4) data interpretation (Sharer & Ashmore., 2003).

### Data Collection

The main data sources in this study included 26 inscriptions found on the south slopes of Mount Semeru, which were classified into three groups as follows: 1 Widodaren Inscriptions, 2 Gerba Inscriptions (Gerba I and II), and 23 Pasrujambe Inscriptions (Pasrujambe I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XX, XXI, XXII, and XXIII). Furthermore, the primary

data collection in this study was not in-situ because the findings of the inscriptions were not in the original location of the discovery except the Gerba Inscription II in Taman Sari Village, Ampel Gading Sub-district, Malang Regency (Nugroho, 2019, p. 109).

The stages of data collection in this study began with a literature review followed by data collection in the field. The collection of library data included secondary data in the form of transliteration or transcription of short inscriptions in research results or other records about places of education related to the South Semeru Slope.

### Data Analysis

Analysis of the data in this study included a specific analysis and a context analysis. The specific analysis involved the structure of space and place findings of short inscriptions as well as the *mandala kadewaguruan* complex on the South Semeru Slope. Furthermore, the context analysis in this study involved all forms of archaeological findings or cultural heritage that can be categorized as supportive and able to provide additional information on the subject of this study.

### Data Interpretation

The data interpretation was performed by analyzing the artifactual findings in the form of inscriptions which include: Widodaren Inscription, Gerba Inscriptions (Gerba I and II), and Pasrujambe Inscriptions (Pasrujambe I, II, III, IV, V, VI, VII, VIII, IX, X, X, X, X, X XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, and XXIII), as well as all archeological aspects related to the *mandala kadewaguruan* on the south slopes of Mount Semeru. The analysis of these primary sources was analyzed in more depth with a number of secondary sources consisting of literature and previous studies in the same field. This review was aimed to explore the contents of the 26 inscriptions to get clarity about the alleged existence of the South Semeru Slope inscriptions as instructional media in the Indonesian classical period.

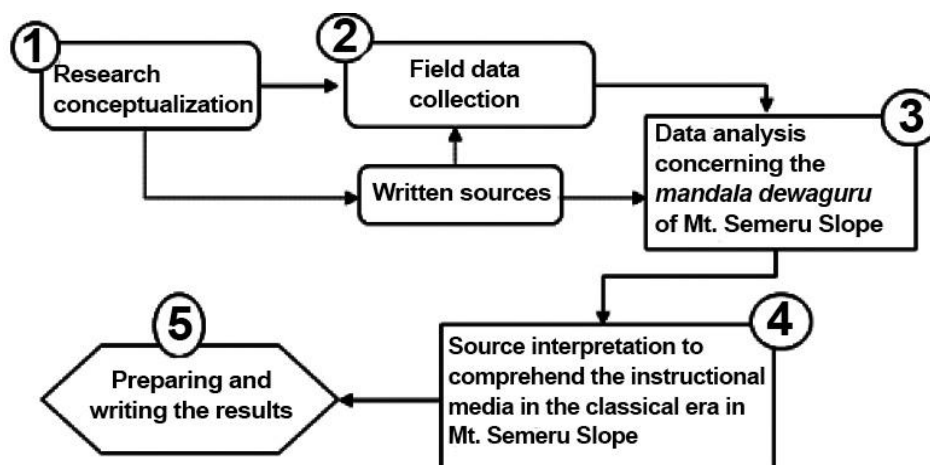


Diagram 1. Research Flow Chart  
(Source: Rakai Hino Galeswangi)

## RESEARCH RESULTS

The 26 inscriptions which are the object of study can be regarded as a form of instructional media. This is because the inscriptions (written stone) can be classified as one form of media that contains messages or information in the field of teaching. The messages written in the inscriptions are messages that contain educational slogans that teach manners and ethics in social life. The following is the explanation of the contents of the inscriptions:

### 1. Gerba I Inscription

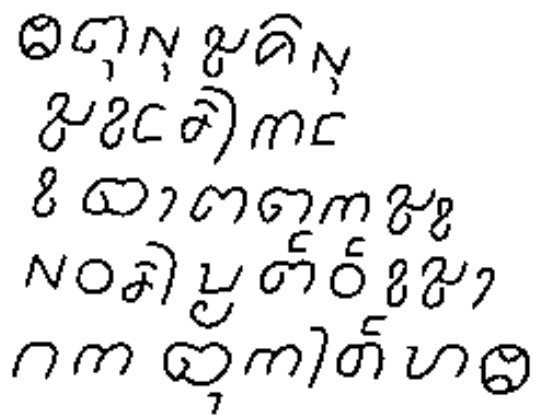


Figure 1. Gerba I Inscription  
(Source: M. M. Sukarto. K. Atmojo, 1984)

Transliteration	Translation and Moral Teaching	Location
(1) <i>tulus na(?) lu</i>	(1) be sincere	Current
(2) <i>sa den kadi</i>	(2) (in marriage life) like	location
(3) <i>botiñ akasa</i>	(3) the weight of the sky	Unknown
(4) <i>lawan pṛtiwi so</i>	(4) and earth	
(5) <i>ga kabuktih</i>	(5) hopefully (it is) proven	

### 2. Gerba II Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>yañ mami guru ye</i>	(1) this is our, the gurus, blessing	In Situ in
(2) <i>narabi donani kade</i>	(2) If you get married, it is recommended to	Tamanrejo,
(3) <i>n kadi botiñ akasa</i>	(3) (be) like the weight of the sky	Tamansari,
(4) <i>lawan pṛtiwi papa ka</i>	(4) and earth, misfortune will befall	Ampelgading
(5) <i>buktiha. Isa</i>	(4) (those who break it).	Subdistrict,
(6) <i>kala.1390</i>	(5) Saka year	Malang
	(6) 1390	Regency

### 3. Widodaren Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>Salêmah kas</i>	(1) For the land of Kasturi	Tugu Hotel,
(2) <i>turi Wêka caweha</i>	(Mandala Kadewaguruan)	Malang
(3) <i>totohan</i>	(2) Children/grandchildren must	Municipality
(4) <i>Dadiha kawula</i>	not	
(5) <i>batur saputula</i>	(3) (making) bets	
(6) <i>Mane samake muwah satêbe</i>	(4) Be a servant who obeys (to God) until broken (unrelenting) from now until later	



**Figure 2.** Gerba II Inscription  
(Source: Aang Pambudi Nugroho, 2019)



**Figure 3.** Widodaren Inscription  
(Source: Rakai Hino Galeswangi, 2010)

### 4. Pasrujambe I Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>Waler in a</i>	(1) The end border of	Mpu Tantular
(2) <i>Babad wo(n)</i>	(2) Clearing (forest) (as a site for)	Museum
(3) <i>Samadi</i>	people	
	(3) To meditate	

### 5. Pasrujambe II Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>San a</i>	(1) The	Mpu Tantular
(2) <i>Nawa kr</i>	(2) Bearers of	Museum
(3) <i>Ndha</i>	(3) The Casket	



**Figure 4.** Pasrujambe I Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 5.** Pasrujambe II Inscription  
(Source: Rakai Hino Galeswangi, 2018)

### 6. Pasrujambe III Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>hyañ a</i>	(1) sky deity	Mpu Tantular Museum
(2) <i>kasa</i>		

### 7. Pasrujambe IV Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>batha</i>	(1) earth deity	Mpu Tantular Museum
(2) <i>ri pꞑ</i>		
(3) <i>tiwi</i>		



**Figure 6.** Pasrujambe III Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 7.** Pasrujambe IV Inscription  
(Source: Rakai Hino Galeswangi, 2018)

## 8. Pasrujambe V Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>i saka</i>	(1) in the saka year	Mpu Tantular
(2) <i>1391</i>	(2) 1391	Museum

## 9. Pasrujambe VI Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>dhudhu</i>	(1) not	Mpu Tantular
(2) <i>kuna</i>	(2) (from) the past	Museum



Figure 8. Pasrujambe V Inscription  
(Source: Rakai Hino Galeswangi, 2018)



Figure 9. Pasrujambe VI Inscription  
(Source: Rakai Hino Galeswangi, 2018)

## 10. Pasrujambe VII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>i saka</i>	(1) in the saka year	Mpu Tantular
(2) <i>1391</i>	(2) 1391	Museum

## 11. Pasrujambe VIII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>dhudhu</i>	(1) not	Mpu Tantular
(2) <i>kuna</i>	(2) (from) the past	Museum





**Figure 10.** Pasrujambe VII Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 11.** Pasrujambe VIII Inscription  
(Source: Rakai Hino Galeswangi, 2018)

## 12. Pasrujambe IX Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>rabut</i>	(1) holy place (named)	Mpu Tantular Museum
(2) <i>macan</i>	(2) a tiger	
(3) <i>pêthak</i>	(3) white	

## 13. Pasrujambe X Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>bathara</i>	(1) deity (named)	Mpu Tantular Museum
(2) <i>mahi</i>	(2) mahisora	
(3) <i>sora</i>		



**Figure 12.** Pasrujambe IX Inscription  
(Source: Titi Surti Nastiti, 1995)



**Figure 13.** Pasrujambe X Inscription  
(Source: Rakai Hino Galeswangi, 2018)

#### 14. Pasrujambe XI Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>bathara</i>	(1) the greatest deity	Mpu Tantular Museum
(2) <i>ra ma</i>	(of all deities)	
(3) <i>hadewa</i>		

#### 15. Pasrujambe XII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>baga</i>	(1) holy person	Mpu Tantular Museum
(2) <i>wan</i>	(2) (named)	
(3) <i>caci</i>	(3) caci	



**Figure 14.** Pasrujambe XI Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 15.** Pasrujambe XII Inscription  
(Source: Rakai Hino Galeswangi, 2018)

#### 16. Pasrujambe XIII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>bagawa</i>	(1) holy person (named)	Mpu Tantular Museum
(2) <i>n citra</i>	(2) citra	
(3) <i>gotra</i>	(3) gotra	

#### 17. Pasrujambe XIV Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>sañ ku</i>	(1) the	Mpu Tantular Museum
(2) <i>rusya</i>	(2) kurusya	



**Figure 16.** Pasrujambe XIII Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 17.** Pasrujambe XIV Inscription  
(Source: Rakai Hino Galeswangi, 2018)

### 18. Pasrujambe XV Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>rabut</i>	(1) holy place (named)	Mpu Tantular Museum
(2) <i>lita.....</i>	(3) <i>lita.....</i>	

### 19. Pasrujambe XVI Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>panyañña</i>	(1) object of worship (to deities)	Mpu Tantular Museum
(2) <i>n sarga</i>	(2) (for) many people	



**Figure 18.** Pasrujambe XV Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 19.** Pasrujambe XVI Inscription  
(Source: Rakai Hino Galeswangi, 2018)

## 20. Pasrujambe XVII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>Rabut</i>	(1) holy place (named)	Mpu Tantular Museum
(2) <i>walañ taga</i>	(2) walang taga	

## 21. Pasrujambe XVIII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>sañ ko</i>	(1) the	Mpu Tantular Museum
(2) <i>sika</i>	(2) kosika	



**Figure 20.** Pasrujambe XVII Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 21.** Pasrujambe XVIII Inscription  
(Source: Rakai Hino Galeswangi, 2018)

## 22. Pasrujambe XIX Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>iki pañestu</i>	(1) this is blessing	Mpu Tantular Museum
(2) <i>yañ mami guru gu</i>	(2) (from) him, to (the) gurus	
(3) <i>ru yen arabi de</i>	(3) If you have a wife	
(4) <i>n kadi botinaka</i>	(4) (be) be like the weight of the	
(5) <i>sa lawan prtiwi</i>	(5) sky and earth	
(6) <i>papa kabuktiha</i>	(6) Misfortune (will) befall (those who break it)	

## 23. Pasrujambe XX Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>i sakala</i>	(1) in the saka year	Museum Lumajang
(2) 1391	(2) 1391	



**Figure 22.** Pasrujambe XIX Inscription  
(Source: Rakai Hino Galeswangi, 2018)



**Figure 23.** Pasrujambe XX Inscription  
(Source: Jordan Ridwan Ismas, 2018)

#### 24. Pasrujambe XXI Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>kama hadi</i>	(1) love is not the same	Current
(2) <i>gama karma</i>	(2) (as) the karma journey	location
(3) <i>tan pañka</i>	(3) Not (also) (the same as)	unknown
(4) <i>ja hiku</i>	(4) the gem	

#### 25. Pasrujambe XXII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>Bata</i>	(1) the protecting deity	Museum
(2) <i>rahi</i>		Lumajang
(3) <i>nata</i>		



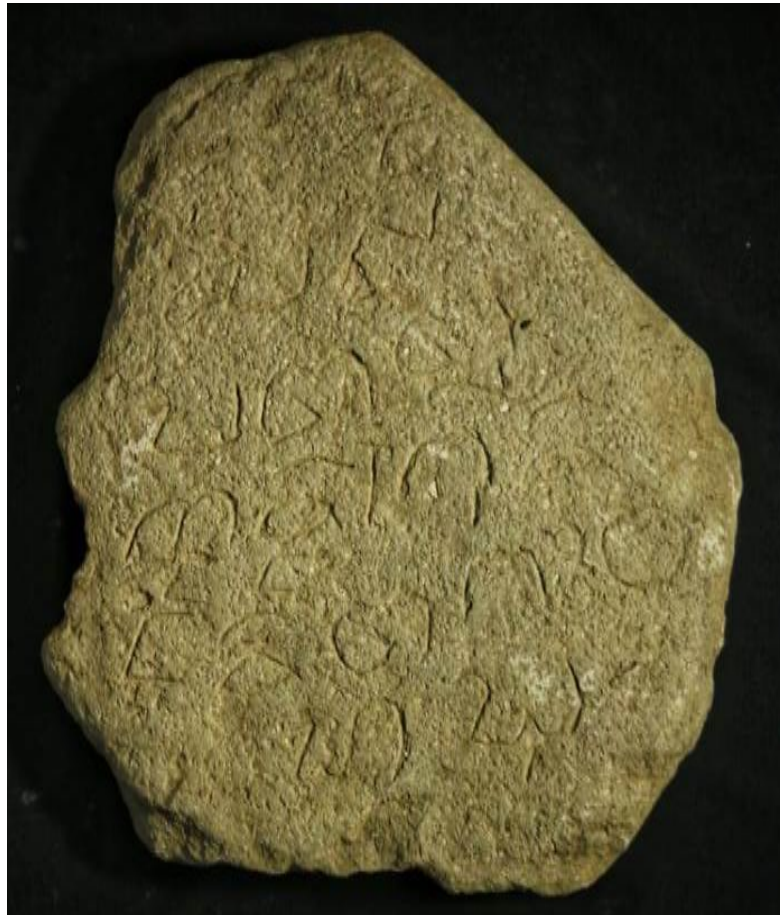
**Figure 24.** Pasrujambe XXI Inscription  
(Source: <https://digital-collections.universiteitleiden.nl>)



**Figure 25.** Pasrujambe XXII Inscription  
(Source: Didik Hermawan; Museum Majapahit, 2019)

## 26. Pasrujambe XXIII Inscription

Transliteration	Translation and Moral Teaching	Location
(1) <i>Peling</i>	(1) warning / please note /	Museum
(2) <i>pengangi</i>	remember (that)	Lumajang
(3) <i>tan tur na</i>	(2) something arranged	
(4) <i>di ning agawe</i>	(3) from the pulse/ vein	
(5) <i>hayu</i>	(4) will create happiness	



**Figure 25.** Pasrujambe XXIII Inscription  
(Source: Didik Hermawan; Museum Majapahit, 2019)

## DISCUSSIONS

The analysis shows that the 26 inscriptions that consist of 1 Widodaren Inscription, 2 Gerba inscriptions (Gerba I and II), and 23 Pasrujambe Inscriptions (Pasrujambe I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, and XXIII) and are classified into the inscriptions of the South Slopes of Mount Semeru illustrate the forms of instructional media found in the period. The discussion related to the finding is described as follows.

The first analysis: 1 Widodaren inscription, 2 Gerba inscriptions, and 23 Pasrujambe inscriptions tend to have a similar model. Furthermore, the similarity

of the model can be observed from the similar alphabets written on the 26 inscriptions. The similarity of alphabet patterns in these inscriptions implies that the inscriptions were made during the contemporaneous period. In this case, the writing of the inscription could be written by the same hand and at the same time or written by different people in one period. This is in line with Johannes Gijsbertus de Casparis (1975, p. 53) who presents the alphabet classification into five typologies according to the periods, i.e. Pallawa type, Early Kawi type, Late Kawi type, Javanese Majapahit type, and the 15th Century Javanese type. Generally, the classification is separated according to the century division. For example, the Pallawa alphabet used in Indonesia in the 4th century AD is different from the Old Javanese alphabet used in the 11th century AD.

In line with this, Louis Charles Damais (1985, pp. 8-11) in his paleographic study shows that the development of alphabet patterns depends on the cultural development of society. In this case, the form or style of the alphabet also depends on the learning process of the society itself. Thus, the Widodaren inscriptions that do not have year numbers can be categorized as contemporaneous with Pasrujambe V, VII, XX and Gerba II inscriptions which have year numbers because they have the same style and alphabet model. This is also in line with Willem Van der Mollen's interpretation (1985, p. 4) that the development of the alphabet in Javanese society does not change much and only have changes in small forms so that according to him Javanese alphabet does not change in total form. Therefore, it can also be said that the inscriptions were made at the same time (in the same year or the same century).

Geographically, the 26 inscriptions were found in the same site, i.e. on the south slopes of Mount Semeru. However, not all inscriptions found on the Semeru Slope are contemporaneous with the 26 inscriptions, for example, Kumbolo Inscription and Pabanyolan Inscription. These two inscriptions are geographically located on the west slopes of Mount Semeru, but in terms of paleography or alphabet, they are not the same or similar to the 26 inscriptions analyzed in this study. The Kumbolo inscription has an alphabet that tends to be the same as the Kadiri kingdom alphabet or known as the quadratic script, while the alphabet in the Pabanyolan inscription belongs to the Javanese Kawi alphabet. On the other hand, the alphabet in the Widodaren, Pasrujambe and Gerba inscriptions have special features and patterns. Ninny Soesanti (2001) suggests that the Widodaren inscription and the like are inscriptions with a patterned alphabet and a special alphabet that are not found in the inscriptions in general. This can be seen from several new characters, for example, the character "Ra" is different from both Old Javanese and Kawi characters.

Based on the analysis from Soesanti, it can be assumed that alphabets that are not the same as the patterns found in the Widodaren, Pasrujambe, and Gerba inscriptions are not contemporaneous. Thus, of the 26 inscriptions (1 Widodaren, 2 Gerba, and 23 Pasrujambe), there are only four inscriptions which have year numbers, namely 1390 Śaka (1468 AD) in Gerba II Inscription and 1391 Śaka (1469 AD) in Pasrujambe V, VII, and XX inscriptions. In addition, the 26 inscriptions can be categorized as contemporaneous, i.e. in the range of 1469 AD or the latter half of the 15th century AD. This is due to the similarity of the alphabet model used in the inscriptions.

The second analysis: the word *kasturi* as found in the Widodaren inscription. This inscription is the key to two other inscriptions namely Pasrujambe and Gerba. The word *kasturi* literally means a fragrant plant with beautiful flowers or if categorized as an animal, it means weasel (Zoetmulder., 2006, p. 470). In this context, the *kasturi* can be interpreted as a place name or an educational institution that was established in the classical period. In line with this, information related to the word *kasturi* in the Widodaren Inscription refers to the *mandala kadewaguruan* found in the Kakawin Nāgarakṛtāgama known in verse 78: 7 which reads,

"Len tañ maṇḍala mūla sāgara kukub pūrwwa sṭhitinyeniwō, tañ karyyañ sukayajñā **kasturi** catur bhasmeka liñ sañ ṛṣī, katyāgan caturaśrame paciran bulwaan mwañ luwan bwe kupañ, akweh lrānya mañaśrayeñ thani lawan jaṅgan prasiddheñ jagat"

Meaning:

"Others from the mandala (religious community) of *mula sagara, kubub awal*, do not stand behind *sukayajnya*, it is **kasturi** (community); *caturbhasma* (four ashes) said the *ṛsi*, the *catur asrama* hermitage, Pacira, Bulwan, Luwan Bue, and Kupang, all spread all over as the protectors of farmers and the cultivators became famous throughout the world. " (Pigeaud, 1960, pp. 86-91).

The *mandala kadewaguruan* in Nāgarakṛtāgama, one of which, is referred to as *caturhasmamandala* comprising the mandala of Kukub, Sukayajnya, Mulasagara, and Kasturi (Wahyudi, et al., 2014, pp. 107-119). The name Kasturi was also found in the Bujangga Manik script which reads,

"Leu(m)pang aing marat ngidul, datang ka lurah Kenep, cu(n)duk ka Lamajang Kidul, ngalalar ka gunung Hiang, datang a(ing) ka Padra. La(m)bung gunung Mahameru disorang kiduleunana. Sadatang ka Ranobawa, ngalalar ka Kayu Taji. Samu(ng)kur aing ti inya, sacu(n)duk aing ka Kukub, datang aing ka **Kasturi**, cu(n)duk ka Sagara Dalem, ngalalar ka Kagenengan, sumengka ka gunung Kawi".

Meaning:

I walked towards the Southwest, continued to the Kenep region, until South Lamajang, through Mount Hiang, coming to Padra. I passed the slopes of Mount Mahameru from the south side. Arriving at Ranobawa, I walked through Kayu Taji. From there, I left until I arrived at Kukub, then I went to Kasturi, arrived at Sagara Dalem, walked through Kagenengan, then climbed Mount Kawi (Noorduyn, 2009, p. 303).

Bujangga Manik was a Sundanese hermit who traveled around Java and Bali on a sacred journey in search of places of religious education at that time. It can be concluded from the two ancient pieces of literature that if these are related to the Widodaren Inscription found on the Semeru Slope, the name "kasturi" refers to the *mandala kadewaguruan* or a classical education institution. Therefore, all inscriptions with the same alphabets as the Widodaren Inscription found on the Semeru Slope are the product of the *mandala kadewaguruan* on the south slopes of Mount Semeru.

The third analysis: the findings of the site and other cultural heritage objects. The site found is a hermitage site or a *kaṛṣian* site. The site is known as the Jawar Site, i.e. one of the sites on the Semeru Slope that reflects the hermitage pattern on the Mountain Slope. The Jawar site is said to be a hermitage site because



according to an analysis from Agus Aris Munandar (2015, p. 159), the division of the three layers of the world (*triloka*) that applies to the structure of temples is a representation of the Mahameru symbol. The structure includes the *bhurloka* displayed on the foundation and foot of the temple, the *bwarloka* displayed on the body of the temple which contains the chambers and statues of deities in the niche, and the *swarloka* represented on the roof of the temple to its peak.

Temples also always have nature symbols such as circular leaf tendrils and a variety of ornamental shrubs and forest animals as the illustration of Mount Mahameru. So, it can be concluded that the mountain slope is the same as the body of the temple. If a hermit wants to get closer to the gods, he must build a holy building in a place closer to the top of the mountain, i.e. on the slopes. Therefore, it is not common to find many hermitage sites on the mountain slopes such as in Penangungan or Pawitra. This is in line with the Book of Tantupaṅgelaran which tells about the sacred mountains on the island of Java. In addition to the Jawar Site, other artifacts such as bronze bells commonly used as ceremonial instruments, ceremonial jewelry bracelets, ghanesya statues, and *prasen* (Nastiti, et al., 1995, pp. 5-18). The site and artifactual findings reinforce the assumption that the information contained in the Tantupaṅgelaran, Bujangga Manik, and Nāgarakṛtāgama scripts regarding the existence of a *mandala kadewaguruan* or an education site on the Semeru Slope.

According to Pigeaud (1924), in the *mandala kadewaguruan*, there is also a person who is considered as a teacher or known as *gurudeśa*. Santiko (1990, p. 163) stated that the *mandala kadewaguruan* is a place of religious education that is located in secluded places, including on the slopes of mountains, on hills, in the middle of a forest, on the banks of large rivers, on the seashore, etc. A Kadewaguruan dormitory is led by a 'Siddharsi' or 'Maharsi', also referred to as 'Dewaguru' or Gurudeśa. A Gurudeśa has pupils (*sisya*) who have tiered scholarly abilities. The levels from the bottom to up include *kaki* or *endang*, *manguyu*, *pangubwan* or *ubon*, and *ajar*. The *gurudeśa* and *ajar* live in a place called 'tapowana'. It is located in the center or middle of the settlement if it is on flat ground, but if it is on a mountainside, then it is at the top. Outside the tapowana is the residence of the *ubon* and then that of the *kaki* and *endang*. Thus, this Kadewaguruan dormitory area is similar to a *dukuh* (hamlet).

In this study, the *mandala kadewaguruan* can also be interpreted as a teaching site. In other words, if there is a *mandala kadewaguruan* on the South Semeru Slope, then instructional media will also be found in the area. Therefore, all the inscriptions which consist of 1 Widodaren Inscription, 2 Gerba Inscriptions (Gerba I and II), and 23 Pasrujambe Inscriptions (Pasrujambe I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, and XXIII) are instructional media as they were found in the *mandala kadewaguruan* located on Semeru Slopes.

The fourth analysis: the 26 inscriptions can further be regarded as instructional media in the form of visual print. Musfiqon (2012, p. 48) and Arsyad (2013, p. 10) argue that visual media are educational aids that are not projected and can be enjoyed by the senses directly. In other words, the scripts (arranged as words and sentences) on the 26 inscriptions are a form of printed instructional media in the *mandala kadewaguruan* on the south slopes of Mount Semeru.

Furthermore, the 26 inscriptions can be categorized as print media because, at that time, in Java, paper was not found as a writing medium so the stone was considered as a durable media for storing writings so as not to be susceptible to age.

If observed further, all 26 inscriptions contain certain teaching that seems to be addressed by the teachers to their pupils. For example, there are slogans in the class to ask the students to be disciplined, clean, diligent, and so forth. These can be clearly seen in some inscriptions such as Widodaren, Gerba I and II, as well as Pasrujambe I, XIX, and XXI.

In Widodaren Inscription, as shown in the 3rd line, there are sentences persuading students or readers to take care of the *Mandala Kasturi*, warning readers to value life without risking what is less useful for life and respecting God for life. The Gerba I and II inscriptions, as indicated in the 1st and 2nd lines, ask the students or readers to love one another for a life partner and it is hoped that married couples have a harmonious life like the sky and earth that always coexist with one another and overshadow all human needs. This harmonious life will certainly be useful for the sons and daughters as well as for the survival of the couple's life. The Pasrujambe XIX Inscription, also conveys the similar teaching for married couples to keep harmony in marriage life. Moreover, In the Pasrujambe XXI Inscription, there is a warning about karma and love. This is usually addressed to young people who are being engrossed in a love affair but breaking ethical and religious norms.

The instructional media as found in the 26 inscriptions) are, therefore, mostly containing moral teaching. This is because education at that time was predominantly based on religious teachings and manners as can be seen in Tantupaṅgel which talks about the responsibilities of *gurudeśa* who teaches *bhasa* (language), *śabda rahayu* (good advice), *daśaśilā* (ten good deeds), and *pañcaśikṣā* (five kinds of expertise) (Pigeaud, 1924). Thus, it can be concluded that instructional media in the form of inscriptions found in the *mandala kadewaguruan* area clearly contain educational messages.

## CONCLUSIONS

According to the analysis results, this study concludes that instructional media in the Indonesian classical period are manifested in the forms of inscriptions as found on the south slopes of Mount Semeru. The inscriptions include 1 Widodaren Inscription, 2 Gerba Inscriptions (Gerba I and II), and 23 Pasrujambe Inscriptions (Pasrujambe I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, and XXIII). The 26 inscriptions have similar alphabet patterns so they can be considered as contemporaneous. Furthermore, the 26 inscriptions are the products of a *mandala kadewaguruan* named Kasturi. Reinforced by information on places of education from the Pararaton, Nāgarakṛtāgama, and Bujangga Manik manuscripts, it can be seen that there is an education system in the Indonesian classical period that has visual print instructional media in the forms of inscriptions (written stones) that contain moral teaching.

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