TRANSFORMING MEANING: REINTERPRETATION OF RIAU ARCHITECTURAL IDENTITIES

Miftahul Karima
Agus S. Ekomadyo*
Alfathri Adlin
Zahrul Athanafi

School of Architecture, Planning, and Policy Development
Institut Teknologi Bandung
Indonesia

Abstract

The study explores the reinterpretation of local architectural identities through understanding Barthes' semiotic system. After decentralisation, Indonesian provinces were encouraged to translate their local culture into their local provincial identity and integrate it within their built environment. The Riau province is largely dominated by Malay culture, imprinting such culture as the basis of Riau architectural identity. In Pekanbaru, as capital of Riau, many contemporary buildings reflect Malay traditional architecture. This paper aims to address the transformation of meaning and identities of Malay architecture in Pekanbaru, utilising Roland Barthes' semiotics approach. Using Soeman HS Library as a case study, the study conducts semiotic explorations of denotative and connotative meanings in the evolution of Malay-influenced architecture in Pekanbaru. The study discusses the culture of the Riau society as the basis of their value system, investigating how it applies to its building elements using Barthes' semiotic analysis. Such a system shapes how the associated meanings of vernacular Malay homes are understood by Riau society and then transformed into contemporary building elements.

Keywords: architectural identity, Barthes semiotic analysis, localities, sign systems

Correspondence Address: Agus S. Ekomadyo, Institut Teknologi Bandung, Jalan Ganesa 10 Bandung 40132, West Java, Indonesia. Email: ekomadyo@itb.ac.id

Introduction

This study explores the reinterpretation of traditional architecture as local identities of modern buildings through Barthes' mythological analysis. Since the 1970s, every province in Indonesia has been encouraged to develop architecture that exhibit their local identity. This trend continued after the 1997–1998 reformation, which led to decentralisation where provincial governments were further pushed to present their traditional culture as provincial identities (Brown, 2002; Chotiudompant, 2003). Due to decentralisation, provinces are capable of spending local tax revenue for public works independently. Provincial decision-makers now possess opportunities to explore their own culture by hiring architects to design public buildings that interpret vernacular architecture into contemporary architecture. Such reinterpretation demonstrates the urgency of how local culture can be transformed and reinterpreted in current society.

Figure 1. Riau Regional House of Representative (DPRD) building (Photograph by author)

This paper explores the reinterpretation process of Malay culture in contemporary buildings of Riau, a province in Indonesia. In such context, the application of Malay culture in contemporary buildings is obliged and legitimated through government policy, including building permits. To express the Riau Malay identity, architects often refer to vernacular Riau Malay houses that have existed in the past (Firzal, 2015; Repi, 2014).

It is shown that there have been evolving interpretations of traditional Malay architecture in modern architecture. For example, in Pekanbaru, the capital of Riau Province, buildings are often designed with various methods to interpret Malay architecture in contemporary contexts. Some adopt the traditional and vernacular form of Malay houses with modern materials, some choose to pin gable and finial on the existing buildings, and some try to creatively interpret the identity of Malay architecture by still presenting the original form of Malay house, while others may choose more futuristic forms. It can be argued that the idea of local identity can be translated and reinterpreted in various ways instead of existing in a singularity.

This paper aims to analyse the semiotic meaning of Malay architecture in a contemporary building in Pekanbaru, focusing on the Soeman HS Library as the study case. The study uses

Barthes' semiotic approach to analyse building elements as a denotative and connotative sign communicated and accepted by others (Eco, 1997). Through such denotative and connotative analysis, this study aims to uncover the 'myth' according to Barthes, which for this study is the reinterpretation of vernacular Malay elements in contemporary Pekanbaru architecture as the language of local identity.

Earlier research attempted to reveal the meaning behind architecture using semiotics, generally derived from Peirce's conceptualisation of semiotics (Peirce, 1977). This paper will enrich the body of literature in architectural semiotics, especially Barthesian semiotics, in creating interpretation and evaluation of hidden meaning in architecture for translations of local identity.

Semiotics and cultural myth of architecture

Semiotics, as the study of signs, is derived from semiological constructs by de Saussure and semiotics by Charles Pierce (Hoopes, 1991). According to Saussure (1916/2011), who was a structuralist, semiotics are divided into signifiers and signified, forming a system of signs. Signifiers are representations of the sounds or words that refer to the signified. Signified is a concept that is formed in the mind as any material item that signifies a sense of meaning (Piliang 2012). For example, the following figure describes the sign system of 'glasses,' where the word glasses itself is a representation which can be called the signifier. Meanwhile, the signified is an object with a pair of lenses with frames, hinges, and bridges that has a meaning that correlates with the word glasses.
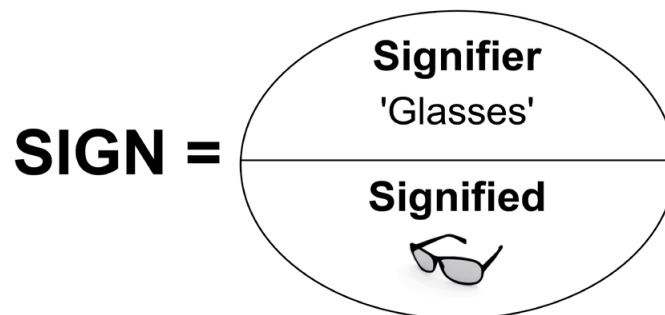
While Saussure focuses on the abstract definition of signifiers and signified as part of linguistic understanding, Barthes who was a post-structuralist developed such a sign system as a relation between concept and material-object (Piliang, 2012). In doing so, Barthes developed Saussure's concept into two levels of language: denotation and connotation (Bahri, 2019; Barthes, 1957/1972; Kusumarini, 2006).

Based on Piliang (2012), denotation can be defined as the explicit meaning that is tied to reality and common sense, it exists as something obvious, literal, and can be generally agreed upon. For example, a door can be defined denotatively as a surface with two-metre heights, coloured in blue, equipped with ventilation windows above, and commonly used for entry and

exit. On the other hand, connotative meaning focuses more on cultural issues, emotions, values, culture, and ideology of the reader of the sign (Piliang, 2012). Hence, connotative meaning is more subjective because the reader is affected by many objects or signs. For example, a door can have a connotative meaning as a tool to protect the house and the people inside from harm by other people, animals, and evil spirits.

According to Barthes (1957/1972), within the connotative meaning lies a form of a metaphoric myth. According to Merriam-Webster (n.d.-a), a myth is an idea or belief which is believed by people although it cannot be proven. Other meanings of myth are: a) misrepresentation of truth; b) something or someone fictional; and c) concept of someone fictional or something that is exaggerated or idealised (Piliang, 2012). A collection of myths is defined as mythology, which is often owned by religion, tradition, or a certain culture (Merriam-Webster, n.d.-b). The existence of meaning creates narratives of a way of dealing with things. According to Barthes, myth is not an idea or an object, but it is a way to deliver them. For example, in the previous articulation of door, when the sun sets the door of the house should not be opened too often to keep from evil spirits.

Barthes' semiotic sign system has two levels of language: the first level is language as an object, while the second level is language as meta-language—a language that describes another language (Bahri, 2019). While the denotative meaning of the signifier and signified exist as the first level of signification in the sign system, the position of connotative myth in Barthes' theory is in the second level. Glasses as an object have denotative meanings as a helping tool for vision or eye protection. However, when the glasses are used by an actor in a movie, a form of myth exists when the actor can perceive himself as a genius or a nerd by using them. In the event of such perception, the glasses as an object are not only defined denotatively but also become a conceptual myth (Figure 3).

1st level Language as object/denotation	Signifier	Signified	
	Sign Object (Signifier)	Concept (Signified)	2nd level Language as meta-language/ connotation/myth
	Signification		

Figure 3. Barthes' two-level signification system (Image by authors)

This study aims to understand the process of reinterpretation of vernacular architecture as a local identity in a more modern context. Understanding the process of myth as a connotative level in the sign system (Barthes, 1957/1972) and its translations to modern context becomes necessary as myth has a meaning accepted, believed, and agreed upon by vast society (Piliang,

2012). Myth, according to Barthes (1964/1968), are message with hidden or implicit ideology within the object. Myth works through the process of naturalisation, making historical and cultural values, behaviour, and beliefs that seem natural, normal, make sense, and therefore correct (Barthes, 1964/1968). Thus, these believed values become something natural, naturalising arbitrary phenomena (Piliang, 2012). From those definitions, we can conclude that myth is something which refers to cultural beliefs fictional and does not represent fact (Barthes, 1957/1972). The study aims to analyse the first and second levels of the sign system of vernacular architectural elements in the modern context. The study then discusses the existence of myths of such elements as the local Riau identities.

Method

This paper utilises a qualitative approach in which data is obtained from secondary literature such as journals, articles, and books, and the primary source such as discussion. Barthes' semiotics are used as a framework to analyse vernacular architectural elements in the modern context. This study explores Soeman HS Library as a case study through empirical observation to discover its first and second-level sign system and the existing myth which emerges. Soeman HS Library is chosen as the case study as it is a monumental building in Pekanbaru that co-opts local culture and modern concepts in architecture, hence it demonstrates the potential to be decoded semiotically. The step-by-step analysis process consists of: (1) the first level, which is language as an object where the building's denotative meaning is uncovered and (2) the second level, language as meta-language where the building's connotative and often mythological meaning is uncovered. By analysing the second level, the local identities of Soeman HS Library design can be discovered and reinterpreted.

Investigating local identities: Semiotic analysis of Soeman HS Library

Soeman HS Library is a public library and national archive building in Pekanbaru that is located in a strategic central location on Pekanbaru main street. Soeman HS library is developed to generate society's passion for reading for society. This building is designed to provide a comfortable space for reading and other activities. The facilities included are an auditorium, a Malay culture cubical area, an atrium, meeting rooms, an internet room, a prayer room, a café, a cafeteria, and a sponsor corner, all organised in six separate stories. This building is also designed to represent historical values for the local Riau citizens, also a symbol of the forerunner of democracy in Indonesia.

Soeman HS building combines Islamic architecture thought and Malay culture in a modern way. The combination is driven by society's understanding that the Malay community is rooted in Islamic teaching. Representation of Malay identity utilises traditional elements of Malay architecture, however, it is reshaped into newer and futuristic architectural expressions

to represent a more modern development. How local identity is reinterpreted in the expression of Malay culture in the Soeman HS Library building is analysed by the semiotic investigation of its architectural elements below.

Sign one: Roof

The library consists of three main masses. All three masses are integrated by a steel arched x-shaped roof which serves as the iconic element of the building. Denotatively, the roof as the outermost part of the building has the function of protecting the area below from direct impacts of weather, such as rainfall drainage, and exposure to sun and wind (Awwad et al., 2018). Connotatively, as part of the Malay culture, the roof form may be metaphorically compared with the shape of an open book or the shape of an unfolded *rehal* or *tawla*, which is the name of a foldable book stand, usually used for reading the Qur'an. Using the shape of *rehal* connects the Malay culture with its Islamic teaching of reading (Wardoyo, 2019).

Signifier 'ROOF'	Signified Architectural element placed above the building to protect the room below from the weather
Sign Object (Signifier) 	Concept (Signified) The unfold *rehal*, which is used for Al-Quran placement, shows how the Malays' culture and lifestyle are influenced by Islamic teaching. It is also based on *selembayung*, an ornament from local architecture to shows local identity
X-shaped roof	

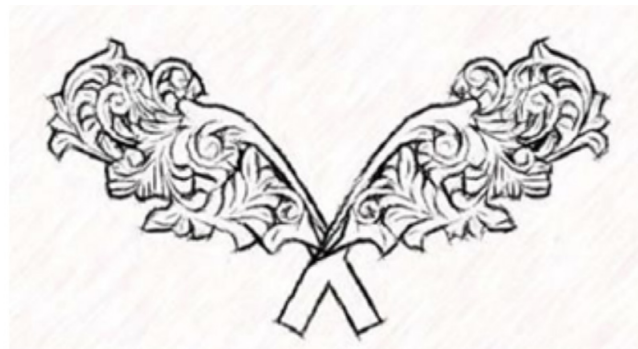*Figure 4. Signification system of the roof (Image by authors)*

Figure 5. Selembayung *(Image by Faisal & Wihardyanto, 2013)*

Another possible connotative meaning refer to the shape of *selembayung* which is a traditional Riau ornament (Wardoyo, 2019) which is usually put at the top of a building in a crossed shape like a library roof. The element of *selembayung* is used on the roof of a respected figure's house (Wahyuningsih, 1986). It is a symbol of the human relationship with God. The connotative use of *rehal* or *selembayung* demonstrates the tightness between Malay ethnics and Islam as part of the society's belief.

The sign system of the roof is defined in Figure 4. The word 'roof' as the signifier demonstrates a denotative signed meaning as architectural elements placed above the building. In the second level of the sign, the connotative meaning of the x-shaped roof is the relation with knowledge, but also with the higher or more respected figure.

Sign two: Column

This library uses a laminated circular column. Denotatively, the meaning of columns is a vertical structural system with a key role to transfer the load from the top to the bottom of a building. Most buildings use square column since it is affordable and easy to make and position in the building. However, the circular column is often used as a space-saving measure and for aesthetic purposes. The columns at the library can be compared to the expression of the columns at elevated Malay traditional houses. Malay traditional homes often elevate the floor for protection towards floods, wild animals, and for storage purposes. Expression of columns in such a context creates a connotative understanding of past knowledge in creating a shelter that is suitable for them, the climate, and the environment.
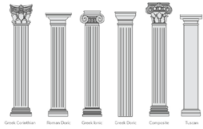
Signifier	Signified
'COLUMN'	Vertical structural system with a key role to transfer the load from top to the bottom of a building
Sign Object (Signifier)	Concept (Signified)
	Gaining aesthetical and natural feeling in compact place and taking inspiration from the elevated local Malay house which represents knowledge the Malays in the past already gained
Circular column with natural pattern	

Figure 6. Signification system of the column (Image by authors)

Figure 6 draws the sign system of the column in Soeman HS library. The word 'column' as the signifier demonstrates a denotative signed meaning as architectural elements that support the building loads from top to bottom. In the second level of the sign, the connotative meaning of the column expresses local Riau knowledge that connects self, climate, and the wider environment.

Sign three: Glass facades

The library is dominated by semi-transparent glass facades. Denotatively, the glass is a source of natural light because of its translucency. The facade allows the light to pass and provide thermal energy (Adryanta, 2008). In addition, glass as a material has high resistance to chemical materials, which makes it suitable for building skin (Lestari & Alhamdani, 2014).

On the other hand, connotatively, the existence of a glass facade provides certain impressions of the building,

demonstrating either a luxurious or magnificent image of the building. Its translucency can also give images of lightness, openness, honesty, and nakedness (Adryanta, 2008). Glass facades with their translucency stimulate people's interest to look at the activities inside the library. People can walk past the building and have a glance at what is happening around the building, increasing people's interest in reading and expanding the quality of Riau citizens (Wardoyo, 2019).
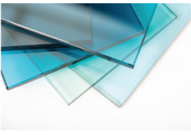
Signifier	Signified
'GLASS'	A material that can be used as a source of natural light because of its translucency
Sign Object (Signifier)	**Concept (Signified)** Creating a luxurious or magnificent image of the building. Its translucency can also give images of lightness, openness, honesty, and nakedness while maintaining enough temperature and lighting to look at the activities inside the library
Semi transparent glass	

Figure 7 draws the sign system of the glass facades in Soeman HS library. The word 'glass' as the signifier demonstrates a denotative sign meaning as architectural elements that provide a source of natural light due to their translucency. In the second level of the sign, the connotative meaning of the glass facade portrays a luxurious and magnificent image, but it may also stimulate openness and attract potential visitors.

Sign four: Ornament and reliefs

In the Soeman HS library, various building ornaments and reliefs are pasted on the exterior of the buildings, covering most of the exterior walls. The ornaments are derived from traditional Riau Malay ornaments and reliefs, which narrate the history of Malay cultures and science (Figure 8). Ornaments provide different aesthetic meanings, which exist as a means for architecture to connect with local culture, whereas reliefs have commonly been crafted to portray life in the past.

The communicative nature of the ornaments and reliefs provides different connotative meanings for their architecture. With the use of ornaments, architecture exists in a more sincere way in this modern era. The historical, religious, educational, cultural, and artistic values of ornament and reliefs shape such sincerity. An important form of relief is presented in the form of *pantun*, a form of literary work that is used to tell stories in a poetic way.

The use of *pantun* in Nusantara cultures is rooted deeply in Malay people (Maulina, 2015). In the Soeman HS library, the *pantun* is etched in the library facade, consisting of a poem narrating Riau culture, and starts with God-praising sentences based on Islamic teaching. The visitor may immediately see the *pantun* as

they enter the library via the main entrance. Such placement of this *pantun* relief marks the start of the visitors' journey, giving a welcoming impression to the visitors. Some reliefs inform understanding about past events so that the next generation of Malays would not forget their ancestral history, such as relief about the struggle of independence history. The relief exists not only for aesthetic purposes but also as cultural documentation.

Signifier 'ORNAMENT'	Signified Details in architecture to connect with local culture
Sign Object (Signifier)	Concept (Signified) Riau Malay Culture
Riau Malay Ornament	

Signifier 'RELIEF'	Signified crafts to portray life in the past
Sign Object (Signifier)	Concept (Signified) Pekanbaru history
Reliefs of Pekanbaru city history	

Transformation of Riau local identities at Soeman HS Library

Based on the above elaboration, the semiotic comparison of architectural elements of Soeman HS Library can be summarised in the step-by-step myth analysis in Table 1.

The Barthes' signification system summary above decodes how the myth works and decodes how the design is formed

Object	Denotation	Conotation
Roof	Consists of three main masses integrated by a steel arched roof. Roof has functions to protect the room below from weather, rainfall drainage effectively, sun and wind, and provide privacy	The roof form takes metaphoric shape of *rehal* and *selembayung*, demonstrating human relationship with God and emphasise Islamic values as the core of Malay culture
Columns	Uses a wood-laminated circular column to support the building load. Act as a space-saving measure and to support building aesthetics in a natural way	Reflect elevated column in a Malay traditional house, demonstrating a response to the surrounding environment
Glass facade	Source of natural light because of its translucency. Strong and durable material as the building skin	Demonstrate luxurious or magnificent image of the building. Provide sense of openness to stimulate the people's interest to look the library
Ornaments and reliefs	The ornaments are derived from traditional Malay culture, narrating history and science knowledge of Riau. Ornaments have been used as an aesthetic means for architecture to connect with local culture	Communicates the start of the visitors' journey with connection to Islamic teaching. Provides stories about past events of Riau to maintain the ancestral history

from cultural reference. The first level of language identifies the signifier and the signified as a formed denotative concept in the mind. In the second level of language where connotation meaning appears, the signifier becomes concretely signified and creates further signification which is represented by the myth of the architectural design which emerges.

The second level language reading of the architectural elements of Soeman HS Library, consisting of its roof forms, columns, glass facades, and ornaments shows how local culture has been reinterpreted as a source of reference for the whole building design. Some of the connotative meaning that reflects the locality applies in the physical expression of the elements themselves, such as the use of a big roof and big columns which appropriates traditional cultural elements. Other elements demonstrate local language in a more communicative way, such as in the use of material and the application of local stories of past cultures in the society.

Conclusions

This study explores the transformation of Riau architectural identity at Soeman HS Library using Barthes' semiotic analysis. It discusses the reinterpretation of Malay architecture elements for implementation within the context of contemporary architecture. The library is used as a case study with the intention of reading the stories it has to tell as a modern architecture imbued with local meaning.

Based on the analysis using Barthes' method of reading the semiotic system elaborated in the study, the second level of language, which is the meta-language, which defines the form, structure, materials, ornaments, and relief of the Soeman HS Library design, can be identified. The elaboration shows how local culture plays a big role as a source of reference in determining the building design. The design plays the role as a mediator which creates dialogues between the past and future. Furthermore, as a cultural representation, its architectural elements contain the myth that is believed by societies. Such myth is demonstrated in the connotative meanings demonstrated by the elements, which physically and communicatively express forms, parts, and stories which represent local Malay cultures.

This paper provides a contribution to the way local culture is reinterpreted and transformed in contemporary culture, by manifesting different languages and meanings of such culture for application in local monumental buildings in the city. Explanation of Malay architecture in Riau and its implementation on local architecture from time to time is still limited, as well as semiotic interpretation of other monumental buildings in Pekanbaru is scarce. To enrich the knowledge of semiotic reading, performing semiotic analysis of another regional-representing architecture across Indonesia may be necessary (Ekomadyo, 1999; Putra & Ekomadyo, 2015; Sibarani & Ekomadyo, 2021). Such discussion may provide various ways local culture can be transformed and redefined in the design process.

References

Adryanta, A. (2008). *Kaca sebagai struktur pada bangunan* [Glass as building structure] (Publication No. S48422) [Undergraduate thesis, Universitas Indonesia]. Universitas Indonesia Library.

Awwad, B. A., Suliman, M. O., & Safran, M. (2018). Study of different pitched roof types. *Civil and Environmental Research*, 10(3), 98–113. https://www.iiste.org/Journals/index.php/CER/article/view/41818

Bahri, N. F. (2019). Analisis semiotika Roland Barthes pada Masjid Keraton Buton di Kota Baubau, Sulawesi Tenggara [Roland Barthes semiotic analysis of Masjid Keraton Buton in Baubau, Southeast Sulawesi]. *Jurnal Rupa*, 4(1), 46–53. https://doi.org/10.25124/rupa.v4i2.2314

Barthes, R. (1968). *Elements of semiology* (A. Lavers & C. Smith, Trans.). Hill and Wang. (Original work published 1964)

Barthes, R. (1972). *Mythologies* (A. Lavers, Trans.). The Noonday Press. (Original work published 1957)

Brown, K. M. (2002). Decentralization & ethnic regionalism in Indonesia: The case of Minahasa [Master's thesis, University of Hawaii at Manoa]. ScholarSpace.

Chotiudompant, S. (2003). Decolonization and demystification: One hundred years of solitude and nationhood. *Manusya: Journal of Humanities*, 6(3), 68–87. https://doi.org/10.1163/26659077-00603004

Eco, U. (1997). *Function and sign: The semiotics of architecture*. In N. Leach (Ed.), *Rethinking architecture* (pp. 173–186). Routledge.

Ekomadyo, A. S. (1999). Pendekatan semiotika dalam kajian terhadap arsitektur tradisional di Indonesia: Kasus Sengkalan Memet dalam arsitektur Jawa [Semotic approach in studying Indonesian traditional architecture: Sengkalan Memet in Javanese architecture]. In J. Adiyanto (Ed.), *Naskah Jawa–Arsitektur Jawa* (pp. 50–95). Jurusan Arsitektur–FT–Unmer Malang.

Ekomadyo, A. S. (2009). *Pengendalian kualitas arsitektur kota pada ruang publik di Kota Pekanbaru* [Managing the quality of urban architecture in public space at Pekanbaru] [Doctoral dissertation, Institut Teknologi Bandung]. UPT Perpustakaan ITB.

Fahrezi, A. (n.d.). *Aerial drone view of Soeman HS Provincial Library* (Perpustakaan Soeman HS) *of Riau and Riau Governor's Office* (Kantor Gubernur) *in Pekanbaru, Riau, Indonesia*. Shutterstock. https://www.shutterstock.com/image-photo/aerial-drone-view-soeman-hs-provincial-1843462597

Faisal, G., & Wihardyanto, D. (2013). *Selembayung sebagai identitas Kota Pekanbaru: Kajian langgam arsitektur Melayu* [*Selembayung* as Pekabaru identity: Study of Malay architectural style]. *Indonesian Journal of Conservation*, 2(1), 51–59. https://journal.unnes.ac.id/nju/index.php/ijc/article/view/2694

Firzal, Y. (2015, September 1–2). *Power practice in architecture: Redefining local architecture in decentralisation era* [Paper presentation]. International Conference: Manifestations of Architecture in Indonesia, Surabaya, East Java, Indonesia.

Hoopes. (Ed.). (1991). *Peirce on signs: Writings on semiotic by Charles Sanders Peirce*. The University of North Carolina Press.

Kusumarini, Y. (2006). Analisis teks dan kode interior gereja karya Tadao Ando "Church of the Light" dan "Church on the Water" [Text and interior code analysis of "Church of the Light" by Tadao Ando]. *Dimensi Interior: Jurnal Desain Interior*, 4(1), 38–47.

Lestari, L., & Alhamdani, M. R. (2014). Penerapan material kaca dalam arsitektur [The application of glass material in architecture]. *Langkau Betang Jurnal Arsitektur*, 1(2), 30–42. http://dx.doi.org/10.26418/lantang.v1i2.18798

Maulina, D. E. (2015). Keanekaragaman pantun di Indonesia [Variations of poem in Indonesia]. *Semantik: Jurnal Ilmiah Program Studi*

Pendidikan Bahasa dan Sastra Indonesia, 1(1), 107–121. https://e-journal.stkipsiliwangi.ac.id/index.php/semantik/article/view/103

Merriam-Webster. (n.d.-a). Myth. In *Merriam-Webster dictionary*. https://www.merriam-webster.com/dictionary/myth

Merriam-Webster. (n.d.-b). Mythology. In *Merriam-Webster dictionary*. https://www.merriam-webster.com/dictionary/mythology

Peirce, C. S. (1977). *Semiotics and significs* (C. Hardwick, Ed.). Indiana University Press.

Piliang, Y. A. (2012). *Semiotika dan hipersemiotika: Gaya, kode, dan matinya makna* [Semiotic and hypersemiotic: Style, code, and the death of meaning]. Matahari.

Putra, R. A., & Ekomadyo, A. S. (2015). Penguraian tanda (decoding) pada Rumoh Aceh dengan pendekatan semiotika [Decoding signs in Rumoh Aceh with semiotic approach]. *Tesa Arsitektur: Journal of Architectural Discourse*, 13(4) 1–14.

Repi, R. (2014). *Identifikasi arsitektur bangunan perdagangan di Pasar Pusat Pekanbaru* [Identifying architecture in Central Pekanbaru market]. *Jurnal Arsitektur: Arsitektur Melayu dan Lingkungan*, 1(1), 48–61. https://journal.unilak.ac.id/index.php/arsitektur/article/view/6362/2784

Saussure, F. (2011). *Course in general linguistics*. Columbia University Press. (Original work published 1911)

Sibarani, G. A. H., & Ekomadyo, A. S. (2021). Penguraian tanda (decoding) pada Rumah Limas dengan pendekatan semiotika [Decoding signs in Rumah Limas with semiotic approach]. *Tesa Arsitektur: Journal of Architectural Discourse*, 19(1), 51–63. https://doi.org/10.24167/tesa.v19i1.3123

Wahyuningsih, W. (1986). *Arsitektur tradisional daerah Riau* [Riau traditional architecture]. Pusat Penelitian Sejarah dan Budaya Proyek Inventarisasi dan Dokumentasi Kebudayaan Daerah.

Wardoyo, K. (2019, January 30). *Makna arsitektur Gedung Perpustakaan Soeman HS* [Architectural meaning of Soeman HS Library]. Pemerintah Provinsi Riau Dinas Perpustakaan dan Kearsipan. https://dipersip.riau.go.id/post/makna-arsitektur-gedung-perpustakaan-soeman-hs