



## Architectural Acculturation in Tuban's Arab Quarter: Tracing Cultural Hybridity Through Shophouse Design

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**Abstract**—The present paper is a study of cultural acculturation as reflected in the architecture of shophouse buildings in Arab Village, Tuban, East Java. Although several studies have attempted to investigate architectural acculturation in major urban center cities in Indonesia, fewer studies have pursued how multicultural interactions among the Javanese, Arab (Yemeni), Chinese, and Dutch Colonial communities are represented in the small-town context, especially through the hybrid architecture of shophouse buildings that serve dual purposes: residential and commercial. Against historical background, this study will investigate how these diverse architectural elements blend in overtime into the spatial and visual form of shophouse buildings. By adopting a qualitative descriptive approach, the data collection was done through visual observation, architectural sketching, interviews with long-time residents, and the analysis of archive and historical documents. The results indicate that the process of acculturation was found both in the physical elements, which were in the form of building typology, spatial layout, façade composition, roof shape, and ornaments, and the non-physical aspects of acculturation, manifested as trade practices, gender roles, and values on daily life culture. The physical forms are more easily accepted, while non-physical forms, such as lifestyle and social behavior, tend to continue to have stronger boundaries among cultures. This points out that Tuban's architectural identity has undergone hybridization gradually, driven by functional needs, cultural interaction, and urban transformation. In this respect, the built heritage can be a meaningful medium for cultural dialogue and identity preservation.

**Keywords:** Cultural acculturation; shophouse architecture; Tuban; Arab; neighborhood.

### 1. Introduction

The Arab village in Tuban is one of the historical areas on the north coast of Java that shows a long trace of interaction between the local population and the Arab community since the 19th century (Den Berg, 1989; Hayaze, 2021). The presence of the Arab community not only shapes the social and religious dynamics, but also colors the physical face of the area, especially through the shophouse buildings that become the dominant form in the area. Shophouses in this area not only function as business and residential spaces, but also become cultural artifacts that record the acculturation process visually and functionally.

Reading the cultural acculturation by building

artifacts involves understanding the use spaces in

daily life and the cultural dynamics that take place within them (Berry et.al., 2022; Kunst et.al., 2021). Observation of the physical building aims to find out the extent to which the community makes material cultural adaptations, with a special activity container adapted to functional needs, climate, and local context. These kinds of adaptations allow for the formation of easy spaces to build, use, and be accepted by the surroundings.

Moreover, other than physical attributes, there are non-physical observations that are crucial in tracing cultural acculturation—that is, through the values, symbols, and lifestyles inherent in the occupied

spaces and architecture (Rapoport, 1969). This process combined the local culture of the Javanese with the Arab community representing Yemen, Dutch colonials, and Chinese traders. These resulted in architectural compromises which, other than being aesthetically pleasing, were culturally meaningful.

While architectural acculturation studies to date in Indonesia have focused on metropolises like Jakarta, Semarang, or Surabaya, hybrid small-town contexts, such as Tuban, remain unexplored. Previous studies have framed acculturation mainly as a stylistic phenomenon, rather than as a dynamic negotiation process between function, identity, and socio-economic exchange. The present research tries to fill this gap by bringing both the morphological and socio-cultural perspectives together in an inquiry into how hybrid forms emerge and sustain themselves in multi-ethnic commercial corridors.

It contributes by (1) mapping acculturation across physical elements through a typo-morphological matrix based on archival chronology and (2) demonstrating how commercial pragmatics mediate cultural fusion in the design of the shophouse, where economic and domestic functions intermingle. Theoretically, it embeds the observed patterns of fusion, synthesis, and separation within larger frameworks of morphological hybridization and Bhabha's theory of cultural hybridity, which link abstract notions of "third space" with tangible architectural outcomes. This integration thus allows for a nuanced reading of the ways in which hybrid identities are materially created and spatially negotiated.

The study will analyze how cultural acculturation is manifested in the typology and architectural elements of shophouse buildings in Tuban Arab Village. This qualitative research uses field observation to scrutinize both non-physical and physical parameters of the buildings themselves to deduce the extent to which architecture is representative of the process of cultural adaptation. It is expected that this research will enrich the knowledge about architecture as an outcome of cultural dialogue and at the same time contribute to the efforts towards preserving historic areas reflecting a dynamic local identity.

## 2. Methods

The present research uses a descriptive qualitative approach aimed at understanding in depth the phenomenon of cultural acculturation in the typology of shophouse buildings in the Arab Village of Tuban. The qualitative-descriptive approach was chosen because it can grasp meanings and symbols along with processes of cultural adaptation that are not always visible on a quantitative level but can be interpreted through direct observation of

architectural artefacts and subjective experiences of residents.

### *Sample and Selection Procedure*

In total, 91 shophouse buildings on Jalan Pemuda were purposively selected as case samples according to the following criteria:

- (1) Buildings with a range of cultural acculturation features: Javanese, Arab-Yemeni, Chinese, and Dutch Colonial.
- (2) Those structures that retain identifiable historical characteristics dating from the late 19th to mid-20th century.
- (3) Accessibility for on-site observation, as well as permission from the owners or occupants for interviews and documentation.

Selected samples are distributed along the main commercial corridor of Tuban's Arab Village and its adjoining alleys that represent both the preserved and modified forms.

### *Data Collection Methods*

Data collection was done using several complementary techniques to thoroughly document and interpret the phenomenon of acculturation:

- (1) For the architectural elements that hinted at cultural acculturation, such as façade shape, spatial layout, materials, and ornaments, direct visual observation of the shophouse buildings was conducted. The surroundings were recorded to understand the spatial context.
- (2) Physical evidence was documented systematically by photography and architectural sketches for typological and morphological analysis.
- (3) Semi-structured, in-depth interviews were conducted with owners, previous occupants, and other relevant local stakeholders to investigate historical narratives, cultural perceptions, and personal stories about spatial use and architectural transformation.
- (4) Studies of archival and historical documents were conducted to place the findings in the context of the historical development of Tuban's Arab Village, encompassing records related to migration, socio-economic transformation, and spatial planning strategies.

### *Interview Participants*

A total of 12 informants were interviewed, who represented a variety of roles and perspectives relevant to the focus of this study.

Table 1. Interview Participants

Background	N	Interview Date	Notes
Shophouse owners (active traders)	5	Feb–Mar 2024	Discussed commercial use and renovations
Former residents / descendants	3	Mar 2024	Provided intergenerational histories
Local historians / elders	2	Mar 2024	Shared oral narratives and architectural changes
Cultural preservation officials	2	Apr 2024	Provided heritage and policy perspectives
<b>Total</b>	<b>12</b>		

Source: Puspitasari, 2025

**Data Collection Timeline**

The fieldwork was conducted between February and May 2024 in three main phases:

Table 2. Timeline

Activities		2024			
		Feb	Mar	Apr	May
1	Preliminary site mapping, case selection, and archival research				
2	Field observation, documentation, and interviews				
3	Transcription, analysis, and typological comparison				

Source: Puspitasari, 2025

**Ethics Statement**

All respondents gave informed consent prior to interviews and photographic documentation. Assurance of confidentiality for participants was achieved through anonymisation, with interview data coded accordingly. Permissions regarding the documentation of buildings were obtained from their owners. The research conformed to the ethical standards approved by the university's Research Ethics Committee for studies involving human subjects and for cultural heritage documentation.

**Analytic Procedure**

- (1) Coding: The data collected were analyzed using a comparative and interpretive framework that combined architectural and socio-cultural dimensions.
- (2) Thematic Analysis: Through iterative coding, themes including material adaptation, aesthetic negotiation, and social continuity were identified.
- (3) Typological Comparison: A typo-morphological matrix was constructed to compare physical characteristics-building typology, spatial layout, façade composition, roof shape, and ornamentation-across cases.
- (4) Interpretive Synthesis: Patterns were assessed through the fusion–synthesis–separation typology (Puspitasari, 2024), where:
  - a. **Fusion** occurs when elements of foreign and local cultures blend harmoniously, resulting in new architectural forms and de-characterizing the original architectural forms.
  - b. **Synthesis** refers to the incorporation of elements from different cultures in a more obvious way, while still retaining their originality.
  - c. The cultural **separation** shows the coexistence of foreign and local elements that remain visually and structurally separate.

This typology was contextualized within the theory of morphological hybridization and Bhabha's concept of hybridity, placing the shophouses within a "third space" of cultural negotiation (Bhabha, 1994). Using these levels of analysis, it is shown that commercial pragmatics and social values are mediators of the blending of cultural expressions in Tuban's Arab Village, with substantial contributions to knowledge about hybrid architectural identity within the Indonesian small-town context. With a combination of visual, narrative and historical data, this method allows researchers to interpret the acculturation process as a whole-both in terms of the physical form of the building and the cultural values contained in it.

This study recognized a number of limitations and potential biases. Because, generational memory bias may have influenced oral histories, whereby older participants idealize or omit details of past spatial changes. Another limitation is due to the building renovations and material alterations over time may also obscure original architectural fabrics, complicating any attempt to interpret authentic hybrid features. Limited archival access impeded efforts to verify construction chronology and ownership lineage, whereas the researcher's position as an external observer of the Arab-Javanese community may have influenced certain interpretive perspectives. To overcome these problems, interview findings were triangulated using photographic and archival data to enhance validity and analytical reliability.

### Theoretical Framework

This study create based on acculturation theory, referred to the work of Redfield et al. (1936) and Berry (2022), which explains that continuous cultural contact, adaptation, and exchange (Redfield et.al., 1936; Berry, 2003). In an architectural context, such acculturation expresses both physical transformation and social negotiation. The research will apply Bhabha's 1994 concept of hybridity and morphological theory (Conzen 1960; Moudon 1997) to interpret the shophouse as a hybrid form in which architectural typology, façade composition, and spatial order evolve through cross-cultural interaction (Conzen et.al., 1960; Moudon, 1997).

It also relies on the work of Rapoport (1987) on cultural materialism, and Lefebvre (1991) on social production of space. Such interactions result in different states of cultural integration: three typologies are presented which illustrate varying degrees of cultural integration-fusion, synthesis, and separation-in Tuban's Arab Village. Heritage governance situates architecture as a vital cultural process through which tangible form and intangible practice are inextricably interwoven. Taken together, these approaches create a complex glass through which social drivers-economy, identity, gender, policy-are linked with morphological outcomes-roof, façade, spatial layout-to demonstrate how acculturation is an influence both on the nature of the built environment and on the nature of cultural continuity (Rapoport, 1987; Lefebvre, 1991).

### 3. Results and Discussion

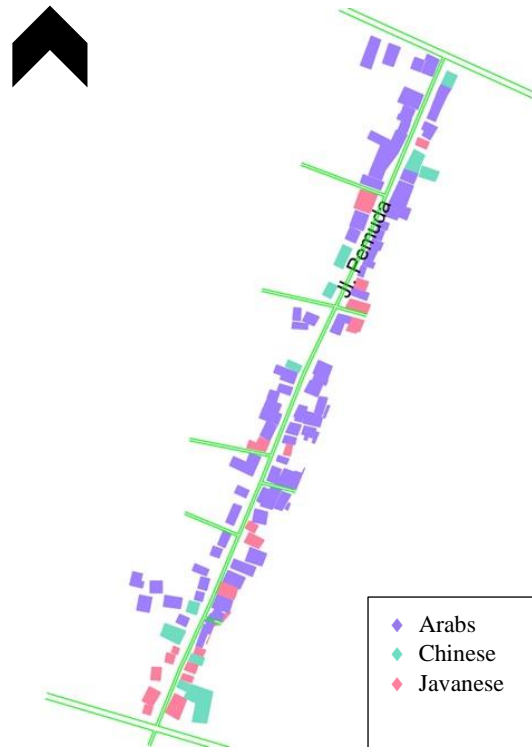
The shops in Kampung Arab are a trade corridor located on Jalan Pemuda. This street is in the western part of the Kutorejo area. Jalan Pemuda is inhabited by people of Arab descent. Some of the Arab community owns houses in Gang Kutorejo and runs a trading business on Jalan Pemuda by setting up shops. But some others live on Jalan Pemuda by turning their houses into shophouses.

Based on the survey results, it was found that the current residents in the Pemuda area are not only of Arab descent but also of Javanese and Chinese descent. In the map below, the Pemuda trade corridor has begun to transform into a multi-ethnic trade area. Not only does this affect the building style, the presence of various ethnic cultures in this trade corridor affects the interaction patterns that occur on Jalan Pemuda.

The distribution of buildings on Jalan Pemuda is in the form of a linear pattern of shophouses oriented towards the street. There are several architectural styles that can be identified today. The table below

shows some of the architectural styles that can be recognized to this day.

Contemporary architecture (20th and 21st century building styles) dominates the architectural styles on Jalan Pemuda. In addition, there are also some Colonial building styles without and with gates. Some of the residential buildings on Jalan Pemuda have been converted into shops. This has caused many facades to change to support commercial functions.



**Figure 1.** Map of Ethnic Culture Distribution in Jalan Pemuda Shopping Corridor  
 Source: Puspitasari, 2025

**Table 3.** Distribution of Architectural Styles on Jalan Pemuda, Tuban

Types of Architecture in Kutorejo	Numbers
Limasan Javanese Architecture	0
Javanese Joglo Architecture	0
Colonial Architecture	13
Colonial architecture with Paduraksa gate	1
Contemporary Architecture	77
	<b>91</b>

Source: Puspitasari, 2025

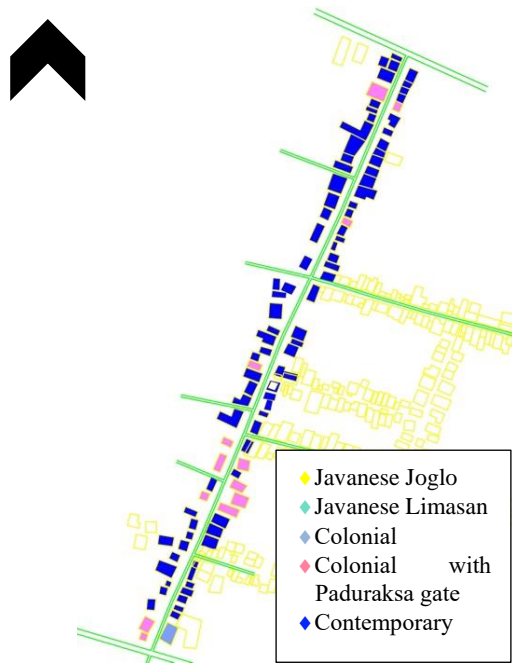


Figure 2. Distribution of Architectural Styles on Jalan Pemuda  
Source: Puspitasari, 2025

### Physical Artifacts

Changes in building forms to support commercial functions have occurred since the past. The shophouse building typology that originated from Chinese culture was adopted by the Arab community to combine houses with shops. Shophouse was introduced in Java since the 17th century (Lombard et.al., 1996). However, its style began to vary and was adopted by other groups in the 20th century. Nowadays, shophouses have become collectively meaningful (Bianca, 2014) as a solution to land limitations in urban areas.

The history of the proliferation of shophouse buildings on Jalan Pemuda is estimated to have started in the 1990s (Puspitaviani and Rahayu, 1997). Shophouses in this period were generally more influenced by the Colonial style while the influence of Chinese architecture completely disappeared (Handinoto, 1999). The shophouses on Jalan Pemuda underwent several renovations, but to this day the shophouses are still occupied by Arabs and coexist with some Chinese and Javanese shophouse owners. This condition is different from Kampong Glam in Singapore. The Arab community there, adopted shophouses which then did not survive to the generations below (Yunis, 2023). This means that only a very few continue the shophouse tradition and choose to move to live elsewhere.

In the image below, there are some typologies of the existing buildings on Jalan Pemuda. The first building is the original building that still functions as a residential house. It shows that the roof, wall, and ornamental elements are heavily influenced by the Colonial architectural style. The second and third

images are views of one- and two-storey shophouses. These two typologies have a contemporary style because they have undergone adjustments to their appearance to support commercial functions. Based on tracing the development of shophouses in several countries in Southeast Asia (Baroldin and Mohd, 2012; Han and Beisi, 2015) it can be recognized that the type of shophouses seen on Jalan Pemuda are early modern style shophouses that were widely developed in 1960.



Figure 3. View of (a) Original House; (b) 1-Storey Shophouse; and (c) 2-Storey Shophouse  
Source: Puspitasari, 2025

The influence of Chinese shophouses on the appearance was not immediately accepted by the Arab group, but experienced a process of adjustment for approximately a century. This shows that acculturation in building elements although it is the lowest acculturation accepted by the community, the process does not occur spontaneously but takes time to adjust to daily needs.

In the land of origin of the Arab group in Hadhramaut (Yemen), the shophouse typology is also well known as a dual-function dwelling, namely as a home and a place of business. However, shophouses in Hadhramaut are generally more private because they not only separate shop and residential activities, but also men and women (Attia, 2020; Abdallah et.al., 2020). In the picture below, it can be understood that the existing plan form of the shophouses on Jalan Pemuda does not follow the tradition of its place of origin, but rather receives more influence from the typical Chinatown shophouses in Indonesia.

The layout of shop houses in Yemen is similar to the residential with symmetrical towers (see Table 3). But on the first floor, the area is utilized for shops. The layout of Chinese shophouses in Java is characterized by an asymmetrical pattern; the first floor is for shops, kitchen and bathroom while the second floor is for rooms and balconies. The shophouses on Jalan Pemuda are almost similar to the Chinese shophouses, i.e. the pattern is asymmetrical; the first floor is for shops, kitchen and bathroom while the second floor is for rooms and balconies.



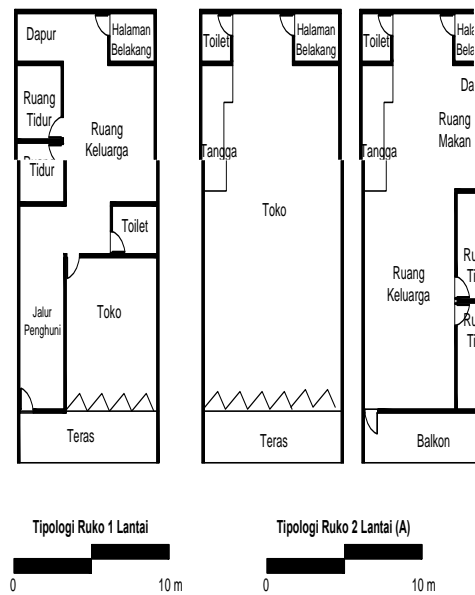


Figure 4. Plan of Shophouse Typology on Jalan Pemuda  
Source: Puspitasari, 2025

When referring to the phenomenon on Jalan Pemuda, a fusion occurs between the Arab and Chinese groups in using the same architectural form. Shophouses become a shared culture that can combine the culture of living and trading and coexistence. The acculturation of this visually strong fusion between cultural groups on a societal scale then creates a multicultural spatial order.

Table 4. Acculturation in Building Typology  
Building Typology

Row/single of shop houses	
Yemeni Architecture	
Javanese Architecture	-
Row of shop houses	
Dutch Architecture	
Row of shop houses	
Chinese Architecture	
Row of shop houses	
Tuban Architecture	
Category of Acculturation	Fusion

Source: Puspitasari, 2025

The shophouse buildings on Jalan Pemuda show a fusion of Javanese, Colonial and contemporary architectural styles. Some of the buildings are still recognizable as having Javanese and Colonial influences. This can be seen from the composition of three modules on the front of the second floor of the building. While some of the shophouses have undergone form adjustments by following the contemporary style that trended after 1990 (see Table 6).

Table 5. Acculturation in Spatial Layout  
Spatial Layout


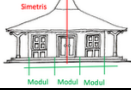



Yemeni Architecture	Asymmetrical, 1st-2nd floors storage & shop, 3rd floor service, diwan (meeting room), 4th floor majlis area (women), 5th floor domestic area (kitchen, etc.), 6th floor mafraj (men's area)
Javanese Architecture	-
Dutch Architecture	-
Chinese Architecture	Asymmetrical; 2 floors; 1st floor for shop, kitchen, and bathroom; 2nd floor for bedrooms and balcony
Tuban Architecture	Chinese: Asymmetrical; 2 floors; 1st floor for shop, kitchen, and bathroom; 2nd floor for bedrooms and balcony
Category of Acculturation	Fusion

Source: Puspitasari, 2025

In Table 7, it can be seen that the roofs of shophouses on Jalan Pemuda show a diversity of shapes and materials. Overall, the roofs that are widely adopted are a combination of Javanese, Colonial, and contemporary architectural styles. In addition, there are many buildings with gable roofs, limasan, and a combination of clay tiles that are closely related to Javanese and colonial influences. The fusion of architectural styles dominates the roof shapes and materials on the shophouse buildings on Jalan Pemuda.

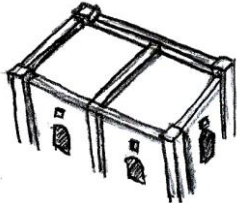
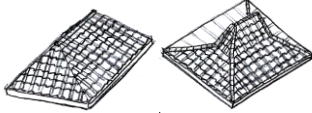
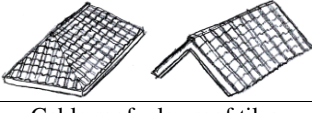
Table 6. Acculturation in Facade Composition  
Facade Composition



Yemeni Architecture	Symmetrical/asymmetrical composition, and the division of modules is unclear.
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Javanese Architecture	Symmetrical composition, divided into three modules.
	
Dutch Architecture	Symmetrical composition, divided into three modules / asymmetrical
	
Chinese Architecture	Symmetrical composition
	
Javanese+colonial/Contemporary	
Tuban Architecture	
Category of Acculturation	<b>Fusion</b>

Source: Puspitasari, 2025

**Table 7. Acculturation in Roof Shapes**

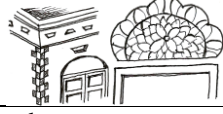
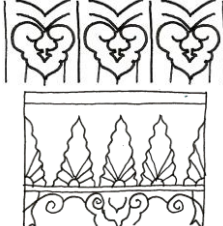

Roof Shapes	
	Flat roof; concrete material
Yemeni Architecture	
Javanese Architecture	Joglo/limasan/kampung roof; clay roof tiles
	
Dutch Architecture	Limasan/combination/saddle roof; clay tile/tegola roofing material
	
Chinese Architecture	Gable roof; clay roof tiles; ornaments on the ends of the rafters



	
Javanese+colonial+contemporary:	Flat/saddle/limasan/combination roof; clay/concrete roof tiles; no ornamentation
Tuban Architecture	
Category of Acculturation	<b>Fusion</b>

Source: Puspitasari, 2025

In Table 8, it can be seen that the shophouse building on Jalan Pemuda has a Colonial influence on the vine ornaments on the iron trellis. In addition, there is also a Colonial influence on the floral ornaments on the walls of the buildings. These buildings were on average built during the time when the dominance of the Colonial architectural style was still strong. Some buildings that have undergone renovation follow the contemporary style in the form of line or plain ornaments on the building walls.

**Table 8. Acculturation in Building Ornament**

Building Ornament	
Yemeni Architecture	Floral ornaments on wooden frames/panels/columns; box/line/diamond/arch/onion dome ornaments on walls
	
Javanese Architecture	Floral ornaments on wooden frames/panels/columns; box/line/diamond/arch/onion dome ornaments on walls
	
Dutch Architecture	Floral/vine ornaments on iron trellises; floral/line ornaments on walls/ceilings; floral/line ornaments on wooden moldings
	

Chinese Architecture	Swastika/square/rectangular/floral ornaments on door/window/column/beam
	
Tuban Architecture	Colonial: vine ornamentation on iron trellises; floral ornamentation on walls/ Contemporary: plain/stripped wall decorations
	
Category of Acculturation	<b>Fusion</b>

Source: Puspitasari, 2025

### Values and Lifestyle

The non-physical aspects of the shophouses are related to trading activities. As for these activities, the socio-cultural values that stand out are the ethnic economic networks that are very thick. Traders from the Arab community group maintain a strong economic network and support each other both among the Arab community in Kutorejo and among Arab communities in other locations. This encourages the economic strength of the group and forms special commodities in trading activities such as perfume, Muslim clothing, and Arabic food.

The most dominant profession in the Arab community is that of a trader, especially among men. Trading activities have been a common culture for Arab settlement communities since the era of their arrival in Tuban. Most women become housewives and help their husbands manage the finances in their shops (Puspitasari and Hanan, 2022). In general, groups of Arab women are seen in the cashier areas of the shops. This is where the role of women in trading is seen, which plays a major role in managing the household economy and family businesses.



Figure 5. Women's Role in Arab Community Trade  
 Source: Puspitasari, 2025

The socio-cultural values present in the shophouse buildings show a form of separation related to the typical work of the Arab community formed from ethnic trade networks and not involving other communities. As for the trading activities carried out, the pattern formed is separation. This considers the group's own involvement in forming an economic network, but in creating market segments it still involves other groups. This means that the Arab trader group still builds interactions with other groups in buying and selling activities within the scope of the shophouse building.

### Acculturation in Shop Houses in Tuban Arab Village

Where facade composition shows visual fusion, the lifestyle patterns remain in separation, thus suggesting selective permeability between visual and social domains. The values and lifestyles in the buildings in Arab Village include life cycle traditions, worship traditions, and daily activities in the buildings are more dominated by the form of separation. Therefore, it can be understood that acculturation in the form of visual elements is easier to occur than non-physical aspects. Acculturation in the physical form opens the acceptance of other cultures without changing the original culture.

Shophouse architecture is a form of architectural fusion that emerges from the functional needs for trading activities. The adoption of shophouse buildings did not happen spontaneously but took decades to acculturate. This shows that acculturation in building elements is not spontaneous but can adapt according to the needs of the times.

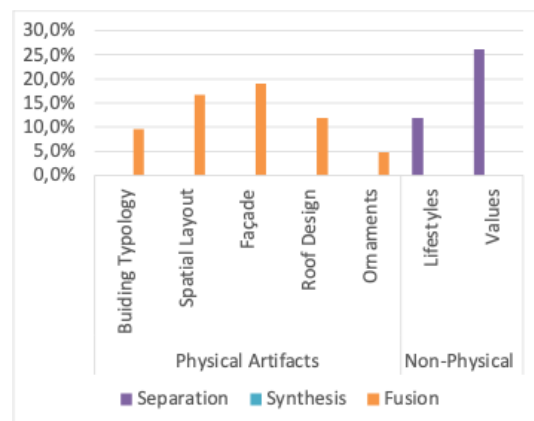


Figure 6. Acculturation in the Shophouse  
 Source: Puspitasari, 2025

Despite the influence of other cultures, the building style still retains Yemeni elements. This is due to the building workers who came from the Arab group. The imitation of Colonial architectural forms is widely done related to the availability of materials at the time of construction and the tendency to want to follow something that is considered higher,



prestigious or better than themselves (Bourdieu, 1984). This influences building preferences and cultural values. In this case, it can be seen that there is an imitation (mimicry) of Colonial architectural styles in Arab and Javanese houses (Bhabha, 1994).

In multicultural cities, it is common to hybridize cultures and develop a common spatial identity architecturally (Bianca, 2014). Therefore, in multicultural cities the architectural dictionary can be the same. The manifestation of acculturation in buildings is driven by various aspects, namely interaction patterns caused by *habitus* (Cassim et.al., 2020; Nowicka, 2015), cultural similarities, and pragmatism of daily life needs. The form of acculturation that is built both physically and non-physically is dominated by the desire to maintain group identity but on the other hand also wants to be part of the environment.

### From Descriptive Patterns to Interpretation

The morphological transformation of shophouses in the Arab Quarter of Tuban is not merely a matter of style but reflects complex negotiations between social processes and architectural adaptation. Four major drivers-economic pragmatism, material availability, identity negotiation, and policy environment-interact in ways that determine distinct morphological outcomes at the roof, façade, and spatial organization levels.

1. **Economic Drivers.** Trade-based livelihood systems and ethnic economic networks create the functional duality of the shophouse, which is both a place to live and a place to do business. Commercial pragmatism drives the placement of signs, openings in the ground floor façade, and flexibility in the space.
2. **Material and Technological Drivers.** Access to local materials-brick, lime, timber, imported tiles-and knowledge of construction methods determine the typology of roofs and ornamentation of façades. Renovation cycles introduce modern materials (e.g., concrete, aluminum panels) that produce hybrid visual forms.
3. **Cultural and Identity Drivers.** The interaction of Arab, Javanese, Chinese, and Colonial taste creates hybrid forms, a mix of functional pragmatism and symbolic negotiation. Community identity and religious modesty influence spatial organization, such as privacy layering between shop and residence.
4. **Regulatory and Policy Drivers.** Urban and heritage policies influence the practices of conservation or modification. Building regulations and road widening projects change the setback patterns, roof lines, and façade articulation.

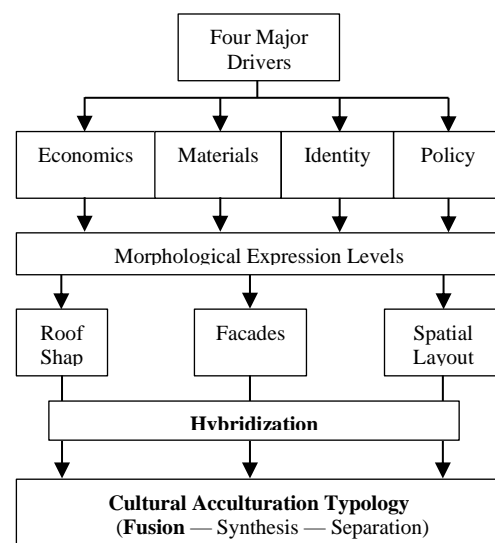
These drivers converge to yield morphological outcomes observable at three architectural scales.

**Table 9.** Morphological Outcomes

Driver	Morphological Expression	Example in Tuban Shophouses
Economic pragmatism	Spatial adaptation	Ground floor converted to commercial area; upper floor retained for family use
Material/technology	Roof typology	Gable and limasan roofs combined with modern concrete slabs
Cultural identity	Façade composition	Fusion of Colonial symmetry, Arab arches, and Chinese ornamentation
Policy environment	Urban morphology	Continuous frontage, uniform height, modified setbacks

Source: Puspitasari, 2025

The Conceptual Model Diagram depicts how social drivers-economic, material, cultural, and policy-shape spatial and material outcomes. The vertical flow depicts the causal influence from social processes down to the architectural form, the horizontal linkages denoting that each of these drivers interacts with more than one morphological layer. These interactions lead to the acculturation typologies of fusion, synthesis, and separation; these link the realm of social negotiation to built expression.



**Figure 7.** The Conceptual Model Diagram  
Source: Puspitasari, 2025

#### 4. Conclusion

This research reveals that the cultural acculturation of Tuban's Arab shophouse architecture is a complicated process. This process developed from continuous interaction among the Javanese, Arab-Yemeni, Chinese, and Dutch Colonial influences. Acculturation is most visible in the physical elements, such as facades, roofs, spatial layouts, and ornaments, and reflects an adaptation to functional, environmental, and social contexts. By contrast, non-physical elements manifest greater selectivity in terms of social values, gender roles, and lifestyles, showing more discernible cultural identities. In other words, while the built form offers a space for cultural compromise that is flexible, social practices are domains of negotiation and preservation.

Hence, the findings reflect the Tuban context and may not be generalizable to other Arab-Indonesian settlements with different colonial legacies. In consideration of this duality, heritage management in Tuban should be advanced beyond physical conservation itself to an integrated, community-based approach. In this regard, the study recommends: (1) including Tuban's Arab Village in the municipal heritage listing to protect both tangible and intangible layers of hybridity; (2) providing economic incentives for conservation and adaptive reuse of shophouses; (3) preparing facade intervention guidelines that ensure historically sensitive renovation; (4) safeguarding intangible practices such as trader networks and communal rituals; and (5) putting in place community-based heritage governance to enable participatory decision-making. These strategies together would support Tuban's hybrid urban identity and ensure architectural and cultural heritage evolve in balance with the demands of contemporary social life.

#### Acknowledgment

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#### References

- Abdallah, M. R., Hassan, H. A., & Al-Olofi, A. A. (2020). Traditional Yemeni architecture and its impact on energy efficiency. *International Journal of Engineering Research and Technology*, 13(8), 2014–2022. <https://doi.org/10.37624/ijert/13.8.2020.2014-2022>
- Attia, A. S. (2020). Traditional multi-story house (tower house) in Sana'a City, Yemen: An example of sustainable architecture. *Alexandria Engineering Journal*, 59(1), 381–387. <https://doi.org/10.1016/j.aej.2020.01.001>
- Baroldin, N., & Mohd Din, S. (2012). Documentation and conservation guidelines of Melaka heritage shophouses. *Procedia – Social and Behavioral Sciences*, 50, 192–203. <https://doi.org/10.1016/j.sbspro.2012.08.027>
- Berry, J. W., Lonner, W. J., & Best, D. L. (2022). The ascent of cross-cultural psychology. *Journal of Cross-Cultural Psychology*, 53(7–8), 715–728. <https://doi.org/10.1177/00220221221112327>
- Berry, J. W. (2003). Conceptual approaches to acculturation. In K. M. Chun, P. B. Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17–37). American Psychological Association. <https://doi.org/10.1037/10472-004>
- Bhabha, H. K. (1994). *The location of culture*. Routledge.
- Bianca, S. (2014). Morphology as the study of city form and layering. In F. Bandarin & R. van Oers (Eds.), *Reconnecting the city: The historic urban landscape approach and the future of urban heritage* (pp. 85–111). Wiley-Blackwell. <https://doi.org/10.1002/9781118383940.ch3>
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.
- Cassim, S., Stolte, O., & Hodgetts, D. (2020). Migrants straddling the “here” and “there”: Explorations of habitus and

- hybrid identities among Sri Lankan migrants in New Zealand. *Journal of Community & Applied Social Psychology*, 30(2), 185–198. <https://doi.org/10.1002/casp.2436>
- Conzen, M. R. G. (1960). *Alnwick, Northumberland: A study in town-plan analysis*. Institute of British Geographers.
- Han, W., & Beisi, J. (2015). A morphological study of traditional shophouse in China and Southeast Asia. *Procedia – Social and Behavioral Sciences*, 179, 237–249. <https://doi.org/10.1016/j.sbspro.2015.02.427>
- Handinoto. (1999). Lingkungan “Pecinan” dalam tata ruang kota di Jawa pada masa kolonial. *DIMENSI (Jurnal Teknik Arsitektur)*, 27(1), 20–29.
- Hayaze, N. A. K. (2021). *Hikayat Kapitein Arab di Nusantara*. Garudhawaca.
- Kunst, J. R., Lefringhausen, K., Sam, D. L., Berry, J. W., & Dovidio, J. F. (2021). The missing side of acculturation: How majority-group members relate to immigrant and minority-group cultures. *Current Directions in Psychological Science*, 30(6), 485–494. <https://doi.org/10.1177/09637214211040771>
- Lefebvre, H. (1991). *The production of space*. Blackwell.
- Lombard, D., Arifin, W. P., Hidayat, R. S., & Yusuf, N. H. (1996). Nusa Jawa: Batas-batas pembaratan. In D. Lombard, *Nusa Jawa: Silang budaya—Batas-batas pembaratan* (Bagian I). Gramedia Pustaka Utama.
- Moudon, A. V. (1997). Urban morphology as an emerging interdisciplinary field. *Urban Morphology*, 1, 3–10.
- Nowicka, M. (2015). Habitus: Its transformation and transfer through cultural encounters in migration. In C. Costa & M. Murphy (Eds.), *Bourdieu, habitus and social research: The art of application* (pp. 93–110). Palgrave Macmillan.
- [https://doi.org/10.1057/9781137496928\\_6](https://doi.org/10.1057/9781137496928_6)
- Puspitasari, C., & Hanan, H. (2022). The impact of the hijab concept on place attachment in the Arab settlement of Kutorejo, Tuban. *Journal of Settlements and Spatial Planning, Special Issue*, 43–56. <https://doi.org/10.24193/JSSPSI.04.PATDC>
- Puspitasari, C. (2024). *Perwujudan akulturasi di kota multibudaya: Studi kasus Kampung Arab Kutorejo, Tuban* (Disertasi). Institut Teknologi Bandung.
- Puspitaviani, S., & Rahayu, S. D. I. S. (1997). Aktivitas ekonomi etnis Tionghoa di Tuban tahun 1945–1959. *Verleden: Jurnal Kesejarahan*, 3(2), 144–153
- Rapoport, A. (1969). *House form and culture*. Prentice-Hall.
- Rapoport, A. (1987). On the cultural responsiveness of architecture. *Journal of Architectural Education*, 41(1), 10–15. <https://doi.org/10.1080/10464883.1987.10758460>
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, 38(1), 149–152. <https://doi.org/10.1525/aa.1936.38.1.02a00330>
- Van Den Berg, L. (1989). *Hadramaut dan koloni Arab di Nusantara*. INIS.
- Yunis, A. (n.d.). *The Arab traders of Singapore*. *AramcoWorld*. <https://archive.aramcoworld.com/issue/201404/the.arab.traders.of.singapore.htm>