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Virtual Linguistics Landscape in Smart City: A Study of the Government Websites of Malang City, Indonesia

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Abstract

Studies on virtual linguistic landscape (VLL) are becoming increasingly popular globally. However, there are few VLL studies have specifically examined top-down official government websites, particularly in the Indonesian context. This study examines the virtual linguistic landscape on the official website of the Malang City Government, one of the Indonesian cities implementing a smart city. Through a qualitative analysis of the language used on the official website of the Malang City Government (malangkota.go.id), this study attempts to uncover the dominant language used on the website, along with its informative and symbolic functions. The results indicate that Indonesian is the dominant and default language used to operate and present content on the website. The use of Indonesian as the default language aligns with Indonesian regulations that require Indonesian as the official language. However, the website also uses English and local languages. The use of Indonesian represents the informative function because it facilitates the delivery of information to users who predominantly speak Indonesian. This aligns with the concept of a smart city, which embodies the dimensions of smart governance, smart society, and smart living. Meanwhile, the symbolic function relates to adherence to and identity of the national language, as well as prestige, a sign of prosperity, and a sign of modernity.

Keywords: *virtual linguistic landscape; smart city; government website; language policy*

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Introduction

The way cities around the world communicate with the public has changed since the development of information and communication technology; before the development of information and communication technology, city communication with the public was carried out traditionally. Since the development of information and communication technology, communication and services have been enhanced by various e-government applications and the online packaging of information. This digital advancement is encouraging cities worldwide to build more accessible, interactive, and modern self-presentations, presented by various digital-based services, such as official websites, social media, and other government digital platforms.

In connection with this transformation, the smart city concept is gaining increasing attention in urban governance. Broadly speaking, a smart city can be understood as an approach to urban management and development that integrates digital technology, resources, and governance to address various urban challenges and improve the community's quality of life (Albino et al., 2015; Caragliu et al., 2011). In the Indonesian context, smart city development is also part of the transformation toward digitally-enabled government governance and public services. Thus, the smart city concept is realized not only through the provision of various digital platforms but also by using technology to enhance accessibility, efficiency, transparency, and integration of public services, while facilitating interaction between the Government and the public.

The concept of smart city in Indonesia began to be echoed in 2010 through *Presidential Regulation Number 81 of 2010 Concerning the Grand Design of Bureaucratic Reform*. Based on this regulation, the Central Government instructed both the Central Government and local governments to carry out bureaucratic reform to become more accountable, transparent, fast, accessible, and participatory. This grand design was realized through various means, including the use of technology, service integration, management information systems, digital services, and e-governance in public services. In 2016, the smart city concept in Indonesia began to be implemented in various major cities in Indonesia (Ministry of Administrative and Bureaucratic Reform, 2016). In fact, in 2017, the Indonesian Government launched a national program for 100 cities/regencies with the smart city concept (Ministry of Communication and Information, 2017). This program was further strengthened by *Presidential Regulation Number 82 of 2023 Concerning the Acceleration of Digital Transformation and Integration of National Digital Services*, which mandates the integration of digital services across various levels of government. Therefore, in relation to different government programs aimed at realizing a smart city, the development of digital information spaces is crucial for the government. In this regard, websites are one of the most common forms of digital-based governance systems developed by governments across various public service sectors.

Official government websites serve as a crucial interface between government institutions and the public, providing access to government information, public services, policies, and various administrative procedures. Effectively managed government websites can enhance information dissemination, facilitate access to public services, and strengthen the interaction between the government and the public (OECD, 2023). In the Indonesian context, the information conveyed through government websites also shapes public perceptions of transparency, which in turn can contribute to public trust and engagement (Ernungtyas & Boer, 2023). Therefore, government websites should be viewed not merely as a medium for providing information, but also as a space for digital governance where the government communicates institutional priorities, its public service orientation, and the representation of a specific region. From this perspective, analyzing official government websites can reveal new insights into how governments negotiate their values, culture, identity, and ideology with the public in the era of digital modernization.

One of the local governments that develops and utilizes websites for public communication is Malang City. Malang City is one of the cities in Indonesia actively striving to realize digitalization in its governance. With its characteristics as an educational city, tourist destination, and center of economic growth in southern East Java, Malang City faces rapid urban dynamics that demand innovative government responses. Malang has long positioned itself as a city of education and tourism. This identity can be traced to the *Tri Bina Cita Kota Malang*, established in 1962, which designated education, industry, and tourism as three major orientations of the city's development (Malang City Government, 2026). Furthermore, with its nickname, The City of Flowers, and the image of incredible mountains, Malang City has a good tourism reputation, marked by the high number of tourists, including both domestic tourists (3,089,759) and international tourists (67,148), who travel to the city (Central Bureau of Statistics, 2025). Based on these conditions, the official government website is crucial for developing as a channel that bridges communication between the Malang City Government and the public.

The development of an official website as a channel for government communication with the public influences the language used in virtual public spaces. In communication within virtual public spaces, language choices—and other forms of visual communication—are designed to convey the city's values, ideology, character, and identity. Linguistically, Malang is situated within a predominantly Javanese-speaking region, alongside Indonesian as the national and official language. Local Javanese varieties are commonly used in everyday communication, while Malang is also known for distinctive local linguistic practices, including *walikan* (reversed language). This sociolinguistic background provides an important context for examining how national, international, and local linguistic elements are represented on the Malang City Government website.

One of the essential infrastructures required to realize a smart city is a website. Within the smart city concept, a website can cater to the needs and aspirations of citizens, offer quick access to information, and represent the city's character to the global community. For this reason, the choice of language used to present website content needs to consider the target users so that the content can be accessed not only by residents, but also by global citizens. Thus, the presence of appropriate, consistent language choices that reflect local wisdom can be used to represent the inclusiveness of government policies.

The use of language in virtual spaces has implications for the birth of a new field of study, namely, virtual linguistic landscape (VLL), which is an extension of linguistic landscape (LL). LL was first introduced by Landry and Bourhis (1997). In general, LL is defined as the use of language in public spaces, for example, street signs, business signs, building signs, and banners. In line with this explanation, VLL is defined as linguistic representation in digital public spaces, such as websites, social media, and online applications (Landry & Bourhis, 1997). Thus, VLL is the transformation of language use in physical public spaces into digital ones.

Most LL studies have explored language use in physical public spaces (Im, 2023), for example, LL in tourist attractions (Bonotan, 2025; Li et al., 2023; Nenotek et al., 2025), and on business signs (Ridzwan et al., 2025). In its development, LL studies have also been conducted in virtual spaces, for example, studies of VLL on university websites (Putri & Rohmah, 2025; Xue & Zou, 2023; Yingying, 2022), VLL on company websites (Hu & Song, 2025; Kraft & Lønsmann, 2018), VLL in online advertising discourse (Kimambo, 2025), and VLL on government websites (Berezkina, 2018). In general, studies on VLL focus on language use in virtual public spaces, which is dynamic—frequently updated and easily managed—unlike language use in physical public spaces (Maseko & Siziba, 2023).

VLL broadens the scope of the linguistic landscape by enabling researchers to examine language practices online (Putri & Rohmah, 2025). Websites—as one form of language use in digital spaces—allow users to engage in various linguistic practices using different registers, such as formal and informal

registers. In the context of official government websites, the language used should be formal and bureaucratic in tone. However, in virtual spaces, language use can be more dynamic because language use in digital spaces also conveys substantial ideological implications from its creators.

Official government websites serve as public platforms connecting the government and the public. These websites not only serve as information hubs provided by the government to the public but also serve as virtual windows that reflect the values, character, and identity of official government institutions. In other words, government websites reflect institutional language values and practices (Putri & Rohmah, 2025), expressing government policies that elevate both dominant and nondominant, or local languages (Maseko & Siziba, 2023) through bilingual or multilingual practices. In virtual spaces, bilingualism is used to represent values, cultural orientations, or even resistance. Such linguistic practices can even be used by marginalized groups to assert their identity, counter dominant narratives, and foster intergroup solidarity by the marginalized groups (Huo & Yu, 2025). On the contrary, the findings of Putri and Rohmah (2025) suggest that bilingual practices on university websites demonstrate a practical preference, especially in terms of ease of access, rather than ideological considerations. Thus, the use of language, predominantly bilingual or multilingual, in virtual spaces can demonstrate the identity and values held by its creator and is not merely a tool for communication.

Studies on VLL are currently becoming increasingly common in various contexts and countries. In the educational context, Maseko and Siziba (2023) examined VLL on university websites in South Africa, and Putri and Rohmah (2025) examined VLL on university websites in Indonesia. Maseko & Siziba's (2023) research revealed that multilingualism is often practiced on university websites in South Africa, with English being the dominant language. Similarly, in Indonesia, bilingualism—the use of both Indonesian and English—is also evident on university websites (Putri & Rohmah, 2025). In the economic context, VLL in used car advertisements in Tanzania does not specifically highlight monolingual, bilingual, or multilingual practices in advertising, but rather highlights the integration of icons, indices, and symbols. This practice is employed to ensure effective communication with the audience and thus influence their attitudes and behavior (Kimambo & Mdukula, 2024). In the corporate context, the research results of Hu and Song (2025) indicate that economic, cultural, and geopolitical factors frequently influence a company's language choice.

Based on previous research, the study of VLL on government websites remains underexplored, particularly in the Indonesian context. Yet, Southeast Asian countries have experienced rapid urbanization alongside increasing digitalization, prompting the development of smart city initiatives across the region (Kong & Woods, 2021). In Indonesia, smart city initiatives have similarly become an important part of the digital transformation of urban governance (Syalianda & Kusumastuti, 2021). Furthermore, in the case of local government websites, language is not only used to convey information but also to signal administrative modernity, professionalism, and global openness, while reinforcing the local values they wish to highlight. This concept is relevant to the smart city trend in Indonesia. In the context of the smart city concept, local governments strive to present themselves as a modern and innovative entities while maintaining their local roots. Based on this rationale, a significant research gap exists to examine VLL on top-down government websites in the Indonesian context.

As a form of official digital representation, government websites serve a dual function: both informative and symbolic function (Ivkovic & Lotherington, 2009). Informatively, government websites are used to convey information, news, policies, and public services. Symbolically, government websites can act as identity showcases in virtual spaces, including demonstrating how language, symbols, images, and narratives shape public perceptions of the city. For example, certain government websites use both Indonesian and

English to present information to the global public to attract international tourists. In other examples, government websites may use local language options as an effort to preserve the local language of that region (Fierra & Nurjaleka, 2025). Thus, the language choice used on a website is not simply a matter of language usage but also reflects the values and character that the local government embodies. Government websites can also serve to demonstrate modernity and global openness or emphasize cultural roots and local wisdom.

Based on this background, this study aims to (1) identify the dominant language use in the official website of the Malang City Government; (2) analyze the informative and symbolic functions of language use in the official website of the Malang City Government. Theoretically, this study contributes to the development of virtual linguistic landscapes studies in Indonesia as a new analytical category relevant to the context of developing cities that balance modernization and public services. Practically, the findings of this study are expected to provide insights for local governments in designing digital communication strategies that are more inclusive, representative, and rooted in the unique characteristics of each city. Thus, deepening the understanding of the virtual linguistic landscape is not merely an academic endeavor, but also a strategic step in shaping the image of a modern and competitive city in the digital era.

Methodology

This research used a qualitative approach to explore language practices on the official website of the Malang City Government. This research was conducted only on the primary domain of the Malang City Government website and did not examine its subdomains. The researcher observed the use of language on the Malang City Government website, along with the function of language use in the virtual public space. The objects analyzed were (1) government information containing news, policies, and public services, (2) visual and verbal content on the interface menu, (3) language choices used on the website, (4) the structure of information presentation on the website, and (5) representation of local culture, city identity, and smart city values represented on the website.

The data for this study consisted of language usage practices on the official Malang City Government website (malangkota.go.id). Data collection was conducted through a manual search of the Malang City Government website, which is publicly accessible through its pages. Data collection was limited to the city government website and excluded websites or subdomains belonging to lower-level government agencies, such as sub-district governments or city government agencies. Data collection was conducted throughout November 2025, when website content was consistently accessible and when the website was not undergoing content updates.

Data were collected from the website's main page, which includes the homepage and various menu pages, as well as visual elements, icons, and interface design. All linguistic and visual elements were documented and stored. A total of 48 screenshots were taken using the print screen function, selected based on their relevance to the research questions.

Data analysis was conducted using a virtual linguistic landscape approach (Ivkovic & Lotherington, 2009), also known as virtual linguistic ethnography by Kelly-Holmes (2015). This approach is used to investigate language policy in new media. It combines virtual ethnography (Hine, 2000) with linguistic landscape analysis (Landry & Bourhis, 1997), connecting ethnographic analysis with an investigation into the use and function of language in cyberspace.

Official government websites are highly relevant for assessing the "level of compliance" with language use laws (Berezkina, 2018) in a country and for tracing the functions of language shaped by government institutions. Therefore, the researcher conducted data analysis first by examining the language choices used on the website. Next, the researcher analyzed the informative and symbolic functions represented on the website. To deepen the analysis, the researcher also analyzed the visual elements contained within the website. Language predominance was determined based on the

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observable linguistic features of the website, including navigation menus, headings, and content, rather than the intentions of the website administrators.

Results and Discussion

This section contains the results of research on the use of language on the official website of the Malang City Government, along with the informative and symbolic functions contained on the website.

1. Dominant Language on Government Websites

A key finding is that the Malang City Government website uses Indonesian as its default language. Visitors can access various content available on the website in Indonesian because Indonesian appears as the default language in the website's presentation and operation, as well as being used in the website title. Indonesian dominates both the website's navigation menus and its content as illustrated by the homepage data presented in Data 1.



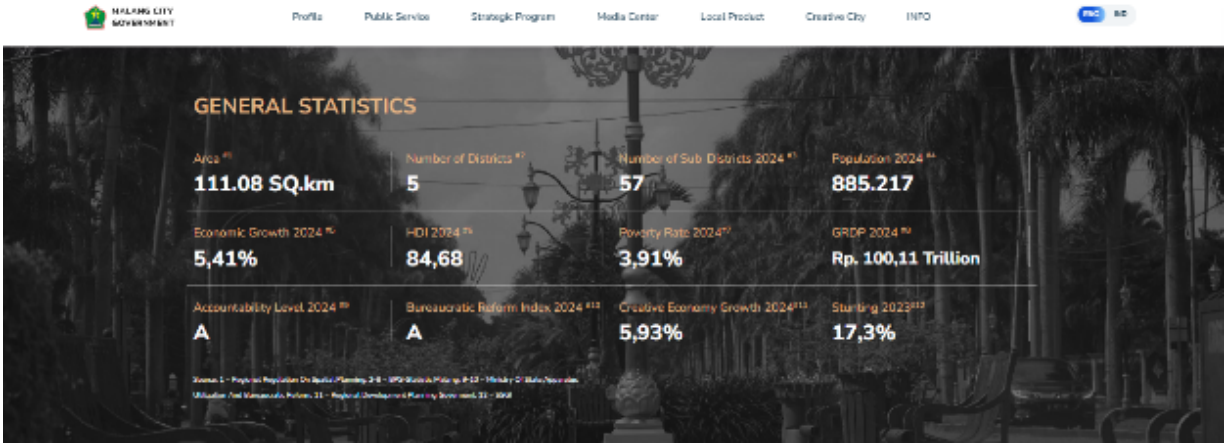
Data 1. Use of Indonesian on the Home Page of the Malang City Government Website

The use of Indonesian as the default language on the official Malang City Government website is inseparable from the Indonesian government's policy, *Law Number 24 of 2009 Concerning the National Flag, Language, and Emblem and the National Anthem* which mandates the use of Indonesian in public spaces in Indonesia. As part of a government institution, the official Malang City Government website is required to comply with the language policy in public spaces through its use of language in its communications. Because official government websites are a top-down form of public administration, compliance with the policy of using the national language (Ben-Rafael et al., 2006) is mandatory.

The language presentation on the Malang City Government website can be classified as monolingual, bilingual, and multilingual. Regarding the presentation of language as bilingual or multilingual, Reh (2004) classifies bilingualism and multilingualism into four types: duplication, fragmentation, overlapping, and complementarity. Duplication refers to the complete translation of the original text into text in another language. Fragmentation refers to the presentation of information in each section using different languages, each conveying a distinct, unrelated message. Overlapping refers to the use of languages to describe the same information, but the language used is not entirely or precisely the same. Complementary refers to the use of languages to represent different sections, but each section complements the other so that the audience can understand the overall message.

The official website of the Malang City Government is an example of multilingual practices. In this case, the official website of the Malang City Government exhibits duplication, overlapping, and complementary practices. The following describes the duplication, overlapping, and complementary practices on the Malang City Government website.

Although Indonesian is the primary language of the website, its linguistic landscape displays both monolingual and bilingual forms. Several elements on the default homepage, including navigation menus and contens, are presented exclusively in Indonesian and can therefore be categorized as monolingual Indonesian. At the website level, however, an English transllation option is provided through the navigation menu in the upper-right corner of the main page, allowing users to access the website in either Indonesian or English. Following Reh's (2004) classification, the availability of these two language options represents a bilingual practice. The provision of English alongside Indonesian also reflects the different communicative functions of the two languages. While Indonesian functions as the primary language for communicating information to local users, English potentially extends the accessibility of the website to a broader audience. Previous studies have shown that English occupies a prominent position in virtual communication landscapes (Hu & Song, 2025; Im, 2023; Putri & Rohmah, 2025). On official government websites, the use of English may also carry symbolic meanings associated with modernity and global orientation (Li et al., 2023), prestige (Bruyèl-Olmedo & Juan-Garau, 2015), and prosperity (Kim, 2022). Thus, the coexistence of monolingual Indonesian elements and bilingual Indonesian–English options on the Malang City Government website reflects not only different patterns of language display but also the informational and symbolic functions of language in the digital landscape.



Data 2. Use of English on the Malang City Government Website

The use of Indonesian and English is offered through translation in menus located on the main page, including the website title, navigation menu, and content. For example, the website title uses " Portal Kota Malang" in Indonesian on the Indonesian-language page and "Malang City Portal" in English on the English-language page. Navigation menus are also translated from Indonesian into English, for example, *Profil* becomes *Profile*, Layanan Publik becomes *Public Service*, and *Program Strategis* becomes *Strategic Program*. However, the translation from Indonesian to English on the Malang City Government website is partial. This means that not all content on the website can be translated into English. English appears to be used in specific contexts, for example, in information about profiles, general statistics, vision and mission, and menu names. Thus, the use of English is entirely for general information targeting an international audience.

In addition to duplication, there is also overlap in English in some menus. For example, the *UMKM of the Week* menu on the Indonesian main page features a mixture of Indonesian and English. UMKM—an abbreviation of Usaha Mikro, Kecil dan Menengah 'Micro, Small, and Medium Enterprises', which refers to productive businesses owned by individuals or business entities—is an Indonesian term, while of the week is an English construct. The use of the *UMKM of the Week* menu indicates a mixture of Indonesian and English. On the English page, this menu is then translated as *Local Product of*

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the Week. The phrase *local product* is used to translate UMKM (Data 3).



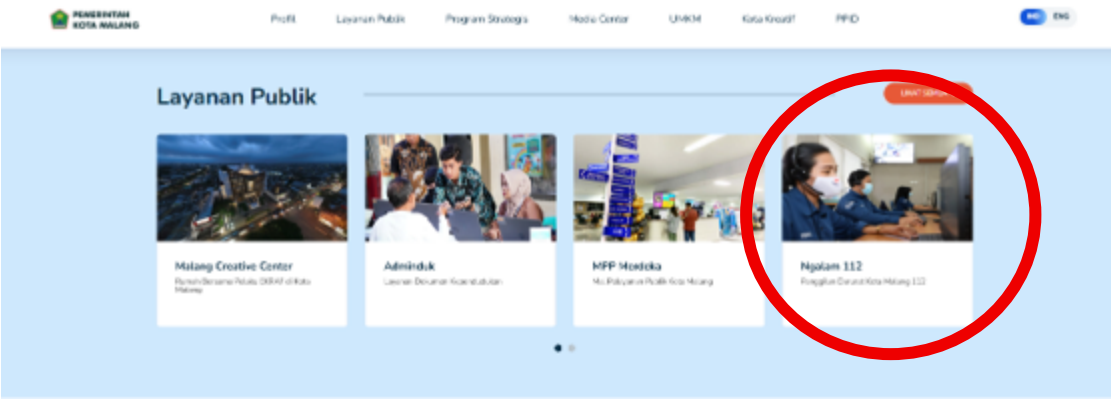
Data 3. English Overlap on the Website

On the Indonesian-language homepage, there's a *Media Center* menu in English. This menu also has the same title, *Media Center*, on the English-language page. This is an example of complementary practices. This section is called complementary practices because the *Media Center* menu fulfills a specific function: displaying public documentation in the form of news, photos, or videos. This menu is separate from the other menus but complements the overall information contained on the website.

In addition to Indonesian and English, the Malang City Government website also uses the local language, the Malangan Javanese. In this study, the term "Malangan Javanese" is used to refer to the local Javanese variety spoken in Malang. The use of the Malangan Javanese is reflected in the use of the word *mbois* in the Malang City slogan located on the website's homepage. The word *mbois* comes from the English word *boys.* Malang residents pronounce the word in the Malangan dialect, becoming *mbois*. This word is thought to have emerged in the 1970s. At that time, the word *mbois* was used to refer to a group of young people or male gangs that were rife in Malang City at the time (Mahmudan, 2024). Members of these male groups were admired, and this admiration was expressed using the word *mboys*. Over time, the word *mbois* has expanded in meaning, so that it now means 'cool' or 'good'.



Data 4a. Use of Local Languages on the Malang City Government Website



Data 4b. Use of Local Languages on the Malang City Government Website

The Malangan Javanese variety also appears in the *Ngalam 112* menu. *Ngalam* is a reversed form of *Malang*, reflecting *Walikan*, a distinctive word-reversal practice in Malangan Javanese that primarily involves phonological reversal (Setyanto, 2016; Yannuar, 2020). While Indonesian dominates the Malang City Government website, English is used to reach a broader global audience (Hu & Song, 2025), whereas local language elements reinforce Malang's local identity.

The dominance of the Indonesian language on the Malang City Government website is implemented to realize the smart city concept, as a smart city emphasizes not only the use of technology but also modern governance to improve the quality of life for citizens (Dai et al., 2024). In the context of a smart city, in addition to utilizing technology, success in improving the quality of life of citizens is also determined by the accessibility and effectiveness of communication between the government and citizens. The predominance of Indonesian on the website primarily reflects its function as the official language of communication between the government and citizens. Therefore, its use does not directly indicate smart city implementation. Instead, the connection to smart city development can be seen in how language is integrated with digital features to facilitate access to information and public services. Therefore, the use of Indonesian as the default language is a crucial foundation that ensures digital innovation remains legal, inclusive, easy, effective, and oriented to community needs.

In terms of smart governance, the use of Indonesian as the official language in communicating with citizens demonstrates the Malang City Government's compliance with applicable Indonesian regulations. In accordance with *Law Number 24 of 2009 Concerning the National Flag, Language, and Emblem and the National Anthem*, Indonesian must be used in governance, including on official government websites, electronic documents, and public services. In this regard, the use of Indonesian is a manifestation of smart governance, manifested through the presentation of transparent, legal, and credible information using standardized language. The use of Indonesian as the standard language can facilitate public access to information and services and increase public trust in the digital services provided by the government.

In the context of a smart society, the use of Indonesian is related to the inclusiveness of digital services. This means that digital services and information should be enjoyed by a wide range of groups. Therefore, the use of exclusive languages, such as English, which is only understood by a select few, can lead to disparities in access to information. If government services create disparities in access to information, this contradicts the vision of a smart city, which is to provide access to information and services for all groups. Therefore, by using Indonesian, the disparity in access to information and services can be reduced, and all citizens can have equal opportunities to access information and services.

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In the context of smart living, security and comfort are indicators of quality of life. In this regard, using Indonesian as the default language makes websites more user-friendly. Websites are more transparent and easier to understand for a wide range of users, making them feel safer and more comfortable using them. This allows city services to run effectively.

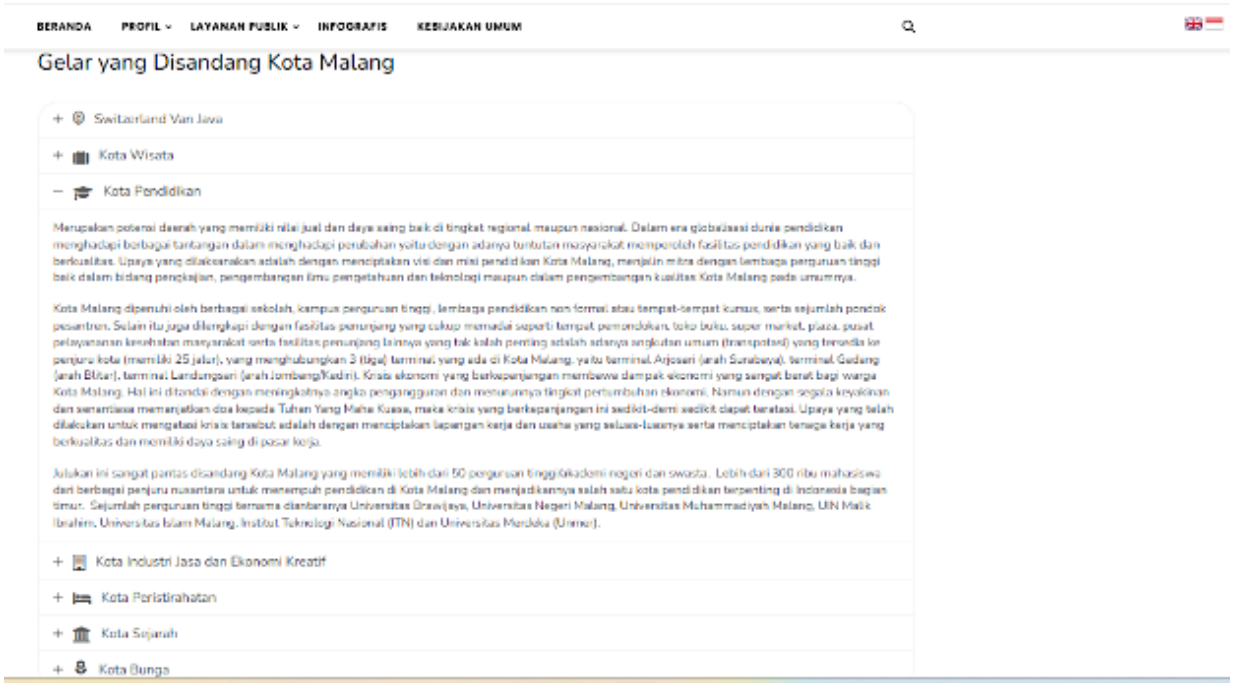
2. Language Functions on Government Websites

According to Landry & Bourhis (1997), LL has two functions: informational and symbolic. The informational function refers to LL's function as a distinctive marker of a geographic region inhabited by a particular language community. Meanwhile, the symbolic function refers to LL's function as a marker of the feeling that the language of a specific group has value and status relative to other languages. This section will explain the informative and symbolic functions of VLL on the official website of the Malang City Government.

a. Informative Function of Government Websites: A Tool for Conveying Messages

In public spaces, including virtual spaces, languages coexist and form multilingual discourse (Dressler, 2015; Ivkovic & Lotherington, 2009). In this context, one language is emphasized or prioritized to convey information clearly and effectively. In this case, language plays an informative role. The informative function is used to convey practical information, such as stating facts, events, or detail. Furthermore, Ivkovic & Lotherington (2009) state that the informative function is measured by its success in conveying information, its efficiency, and its relevance in presenting content.

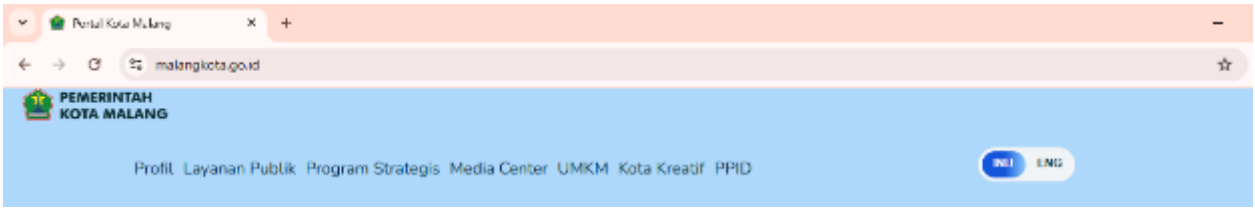
The Malang City Government website is primarily designed for Malang City residents. Therefore, the primary language used is Indonesian, the official language of Indonesia. In this case, Indonesian is the language emphasized or prioritized on the Malang City Government website. By using Indonesian, the information presented on the website can be understood by the public, namely Malang City residents in particular and immigrants living in Malang in general—given that Malang is an urban area visited by many immigrants, both as students and university students from various regions, so that Indonesian tends to be the language of daily communication. This is in line with the findings of Sheng & Buchanan (2022), who observed a tendency for the national language to be used because it is also the language of daily communication.



Data 5. Use of Indonesian to Provide Information Clearly

The use of Indonesian as the primary language is understandable, given the top-down nature of the Malang City Government website, which requires the language to adhere to the language policy in force in the public authority area, namely Indonesian. The main page displays the government's name, website title, tagline, development pillar themes, and various website navigation menus. The Indonesian language used is standard Indonesian which demonstrate a formal and informative function. The Indonesian-language menus on the website's homepage aim to provide administrative orientation and direct users to the services they need.

The informative function presented on the Malang City Government website is evident from the beginning to the end of the page, as well as in the website's domain name. The use of the domain name *go.id* indicates that the site is an official government information source. This means that the information presented on the website is sourced officially from the Malang City Government, ensuring its accuracy and reliability. Furthermore, the website name, *Pemerintah Kota Malang* 'Malang City Government', is explicitly written in the upper left corner, along with the Malang City Government logo, which serves as an institutional identifier.



Data 6. Use of the go.id Domain, the Name and Logo of the Government of Malang City on the Website

The informative function is also evident in the navigation of bureaucratic elements, such as Government Profile, General Statistics, Public Services, and News. These navigation elements are all presented using standard Indonesian as the primary language of the website. Pragmatically, the use of standard Indonesian makes it easier for readers to understand and identify information content, find relevant services, follow the correct steps or procedures, obtain necessary administrative contacts, and obtain more detailed information available on subdomains linked to the main domain. The presence of procedural, integrated, and easily accessible service information such as this is crucial for cities or regions promoting the smart city concept (Bernardo, 2019; Dai et al., 2024; Ismagilova et al., 2019).



Data 7. Subdomain Information Provision

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The increasing number of international tourists and international students visiting Malang City year after year also impacts on the quality of website content that various tourist and international students can understand. Therefore, providing English-language website menus is crucial to offer informative functions to different groups who are expected to be able to read the signs (Spolsky & Cooper, 1991). Furthermore, as a city that has declared itself a smart city, openness to the outside world is crucial. Therefore, the use of English is highly relevant to its needs as a smart city.

In a smart city context, the government website functions as a strategic channel for accessible, accurate, and timely public information, while also connecting the government and citizens. It supports *smart governance* by promoting transparency and accountability through information on policies, programmes, budgets, permits, and public services, while facilitating citizen participation and access to digital services (Gascó-Hernandez, 2018). It also contributes to *smart living* through features such as CCTV services, *UMKM of the Week*, latest news, and other public services that support safer, more efficient, and convenient urban life. Furthermore, *UMKM of the Week* promotes economic opportunities and the local business ecosystem, thereby contributing to the city's competitiveness.

To reach a wider audience, especially those with disabilities, the Malang City Government strives to improve content information through *Accessibility Tools*. This feature is primarily designed for individuals with low vision. This feature offers several menu options to enhance website content accessibility for individuals with low vision, including the ability to increase text size, decrease text size, switch to grayscale, and increase color contrast for clearer text, among other features. This menu is intended to improve the comfort and accessibility of all website users, including those with low vision. Data shows the accessibility tools available on the Malang City Government website.



Data 9. Provision of Accessibility Tools Features

At the time of this research, the Accessibility Tools feature on the Malang City Government website was still primarily aimed at people with low vision and had not yet been expanded to address other disabilities, such as blindness. Therefore, the Malang City Government website is not yet fully accessible to all people with disabilities.

b. Symbolic Functions in Government Websites: A Tool to Represent Identity

Websites are not merely instruments used to convey information to the public. Furthermore, websites can also be used as a medium to build, perpetuate, or reinforce self-image. The use of language on websites is closely tied to the representation of meanings related to identity, legitimacy, self-image, and even ideology (Im, 2023). In this regard, the

use of language on websites is related to symbolic functions.

The symbolic function on the Malang City Government website is found in several aspects. *First*, the use of Indonesian as the website's default language reflects the national linguistik identity. The use of Indonesian, exceptionally standard Indonesian, demonstrates the government's steadfast commitment to Indonesian as the official language of the state, used for communication with its citizens. This means that when a local government uses Indonesian on its official website, it affirms the identity and sovereignty of the state. This simultaneously strengthens the institution's image as an official representation of the state. The use of Indonesian also provides legal legitimacy to information or policies published on the website, indicating that the information presented on the website is legitimate and originates from a public authority (the government).

For Bourdieu (1991), language is not only a means of communication but also a medium of power through which individuals can pursue their interests and demonstrate their competence. The concept of power is embedded in standardized language policies and planning within a country, related to the determination of a country's national or official language (Fairclough, 1989). An official language, in this context, is a legitimate language imbued with symbolic capital. This means that a language is considered official only when declared as such by a public authority (Begum & Sinha, 2021). In this case, Indonesian is designated as the official language by the Indonesian authorities, and lower authorities must obey this determination within the Indonesian state.

In relation to smart cities, the use of Indonesian is closely aligned with the basic principles of smart cities, particularly in the aspects of smart governance and smart society. Within the smart city concept, information accessibility is a fundamental element that the government must ensure is achieved (Mora et al., 2021; Noori et al., 2021). This means the government is responsible for ensuring that the information provided is accessible and understandable to a wide range of people from diverse backgrounds. Since most Malang City residents are Indonesian speakers, using Indonesian as the website's default language is highly relevant.

The use of Indonesian on government websites supports digital literacy, a key element of smart city development (Ylipulli et al., 2025; Ylipulli & Hämäläinen, 2023). As the default language, Indonesian makes digital information and services more accessible and understandable, reducing potential language barriers. Thus, its use promotes inclusive access to digital services and supports the broader smart city vision.

Second, although the default language used on the website is Indonesian, the use of English is also essential in efforts to develop the concept of a smart city. As a smart city, Malang needs to open itself to the outside world, for example, to tourists, students, researchers, investors, and other global communities—not only to serve its citizens. Moreover, Malang City is a tourist destination, a hub of education, and a creative hub. Therefore, the provision of foreign languages, especially English, is necessary as a form of smart branding and a smart economy. English is used to demonstrate the modernity of its users (Im, 2023). This finding aligns with Akindele (2011), who stated that increased economic activity and the demands of globalization have led to the presence of English.

Third, the symbolic function is reflected in the tagline *Mbois Berkelas*. Taglines are particularly important for developing cities as a means of city branding, helping them build a distinctive image and differentiate themselves from other cities (Porter, 2013; van Steensel, 2025). Combining the Malangan Javanese *mbois* ('nice' or 'cool') with the Indonesian *berkelas* ('classy'), *Mbois Berkelas* not only projects the city's desired image but also reinforces its local identity (Setyanto, 2016; Yannuar, 2018, 2020).

The integration of local languages elements into official government websites can contribute to the representation of local identity and culture. In the Malang City

Government website, this is reflected in the use of the local word *mbois.* Although its limited occurrence does not indicate systematic efforts to preserve the local language, its presence introduces a local linguistic element into the digital government space. This aligns with Inoue's (2005) view that local dialects can carry cultural and symbolic meanings. Thus, the use of *mbois* can be interpreted as a symbolic representation of Malang's local identity rather than as evidence of language preservation. Against Malang's predominantly Javanese sociolinguistic background, the limited presence of local linguistic elements such as *mbois* is noteworthy. However, its occurrence is too limited to indicate systematic representation of the local language on the website.

Fourth, in terms of language style, a distinctive pattern emerges in the choice of greetings and speaker positioning on the Malang City Government website. On the website, there is a tendency to use greetings such as "Pemerintah Kota Malang/Pemkot Malang" vs "we". This choice of greetings is evident in the following data.

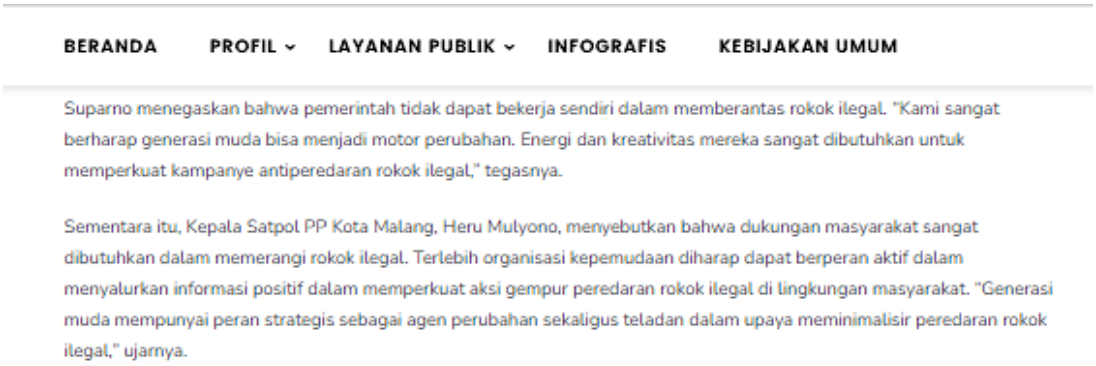


Data 10a. Institutional Self-Reference in the Website: "Malang City Government"

In Data 10a, the headline uses the explicit institutional reference "Pemerintah Kota Malang [Malang City Government]" (shortened to "Pemkot Malang") rather than first-person pronouns such as *kami 'we'*. In the context of a news headline, this explicit reference primarily serves to clearly identify the institutional actor and avoid ambiguity. In the subsequent text, however, the institutional name accours alongside the first-person plural pronoun *kami 'we'.* This shift illustrates two forms of institutional self-reference: explicit naming foregrounds institutional identity, whereas *kami* positioning the institution as a speaking collective. Thus, rather than necessarily indicating institutional distance, the alternation between these forms reflects different communicative functions within the website discourse. This institutional reference demonstrates the legitimacy and authority of the Malang City Government as a formal entity. This institutional reference also conveys a sense of professionalism, objectivity, and exclusivity, as it is separate from the public. This institutional reference is crucial in public communication to maintain the government's credibility and integrity. However, this formal greeting can create distance from the public and give the impression that the government is a detached entity.

The pronoun *kami* [we] is used alongside the institutional reference *Pemerintah Kota Malang* [Malang City Government] to create a sense of closeness between the government and the public. It presents the government as a responsible and responsive actor. However, the predominantly formal, directive, and top-

down discourse limits this egalitarian impression. Thus, *kami* simultaneously signals proximity while reinforcing the government's institutional authority and exclusive role in public affairs.



Data 10b. First-Person Plural Pronoun "we" as Institutional Self-Reference

The symbolic function is reflected in language and word choice. Indonesian reinforces institutional legitimacy, while English and Malangan Javanese convey modernity, status, global orientation, and local identity (Kim, 2022; Tan & Tan, 2015). The use of *Pemerintah Kota Malang* [Malang City Government] rather than *kami* [we] further emphasizes institutional authority and exclusivity.

Conclusion

This study addresses the limited understanding of language use on local government websites by analyzing the Malang City Government website through a Virtual Linguistic Landscape approach. As the study focuses on a single government website and does not examine the intentions behind language choices, the findings cannot represent broader practices in Indonesia. Future studies may examine other government websites and include interviews with website administrators to explore the motivations underlying their language choices.

The results show that the default language used to operate and present website content is Indonesian. Indonesian was chosen because of its relevance to the Indonesian language policy, which mandates Indonesian as the language of instruction for official communications. Government websites—as a form of official communication—are required to use Indonesian, making the language used on the website a product of identity politics. However, the website also uses English and the local language, namely the Javanese dialect of Malangan.

The VLL practices on the Malang City Government website demonstrate an informative function, characterized by clarity, accessibility, and transparency of information, which are essential pillars in realizing a smart city, particularly in the dimensions of smart governance, smart society, and smart living. Meanwhile, the symbolic function is represented in the use of Indonesian as a symbol of government power, which has established Indonesian as the official language in Indonesia. English is used as a sign of prosperity, status, and modernity; while local languages are used in relation to economic motives and cultural preservation.

In general, the results of this study reflect the power and status of the Malang City Government in representing itself through its website. The VLL itself is never static because language use in virtual spaces is very easily changed, revised, or modified, unlike LL in physical spaces. This study contributes to the understanding of VLL on official government websites, which is top-down in nature. Therefore, it is recommended that future researchers examine VLL from both a linguistic and visual perspective to obtain more comprehensive findings.

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