



THE INFLUENCE OF INFORMATION CLARITY AND ENGLISH USAGE ON FOREIGN TOURISTS' WAYFINDING IN REGENCY TOURISM VILLAGES

Ahmad Ghazy Dananjaya*

Insitutit Teknologi Bandung, Bandung, Indonesia

ahmadghazydananjaya@gmail.com

ABSTRACT

As Indonesia promotes community-based tourism in its eastern frontier, the readiness of visual communication infrastructure in remote areas becomes a critical success factor. This study aims to empirically measure the influence of Information Clarity and Use of English on the Ease of Navigation for foreign tourists visiting tourism villages in Fakfak Regency, West Papua. The research locus focuses on four specific villages representing Geographical Clusters of varying development statuses: Kampung Ugar (Advanced), Maas (Advanced), Fior (Developing), and Patimburak (Pioneer). The study employs a quantitative approach with an explanatory survey design. Primary data were collected via paper-based questionnaires during the peak tourist season to a sample of 200 foreign tourists, selected through a combination of cluster and incidental sampling. Data analysis was performed using Multiple Linear Regression in SPSS. The results demonstrate that Information Clarity and the Use of English both significantly affect the Ease of Navigation, with English usage having a dominant influence. The study concludes that visual and linguistic infrastructure are foundational to spatial orientation, mitigating spatial anxiety in complex topographies. Practically, these findings imply an urgent need for local governments to standardize bilingual, high-visibility signage to match official tourism development classifications.

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*Correspondence:

Ahmad Ghazy Dananjaya

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INTRODUCTION

The tourism industry relies heavily on the effective exchange of information between a destination and its visitors. In the context of globalization, language acts not merely as a communication tool but as a fundamental infrastructure that bridges the gap between the host community and international guests. Scholars argue that the availability of accurate information in a global language,

particularly English, is a prerequisite for a competitive destination (Crystal, 2013; Hyland, 2019). When tourists enter a new environment, they construct a "mental map" based on the visual cues provided by the destination. If these cues are ambiguous or linguistically inaccessible, the result is often "spatial anxiety" or the fear of getting lost, which significantly diminishes the quality of the tourism experience (Cohen, 2014; Lynch, 1960).

To frame this study, three key variables are analyzed: Information Clarity, Use of English, and Ease of Navigation. Information clarity refers to the visual distinctiveness and placement of signage. Use of English pertains to the grammatical accuracy and contextual appropriateness of translated text. Ease of navigation, serving as the dependent variable, is defined as the tourist's ability to maintain spatial orientation without excessive cognitive load.

Indonesia, specifically the province of West Papua, is currently accelerating the development of its tourism sector, shifting focus from exclusive high-end resorts to community-based tourism villages (Desa Wisata). However, the geographical and topographical challenges of West Papua are immense. According to the *Provinsi Papua Barat Dalam Angka 2025*, the province covers a vast administrative area of 60,275.33 km². This extensive territory is further complicated by its archipelagic nature, consisting of 4,520 islands. Navigating such a fragmented and expansive region requires highly precise navigational aids.

The problem arises when the infrastructure for visual communication does not keep pace with the geographical complexity and the influx of visitors. In rural tourism settings, digital maps are often unreliable due to poor signal coverage. Therefore, physical signage becomes the primary, and often the only, guide for tourists. Preliminary observations indicate a significant gap in the quality of these physical signs. Many signs in West Papua's developing tourism villages lack English translations, or when present, contain grammatical errors that alter the meaning, leading to confusion.

TABLE 1/ Geographical Scope and Complexity of West Papua Province (2024)

Regency/Municipality	Capital City	Total Area (km ²)	Number of Islands	Topography Dominance
Fakfak	Fakfak	9,736.55	533	Hills/Slopes
Kaimana	Kaimana	17,849.22	672	Coastal/Islands
Teluk Wondama	Rasiei	4,847.34	252	Coastal/Islands
Teluk Bintuni	Bintuni	19,943.29	33	Valley/Mangrove
Manokwari	Manokwari	2,763.02	7	Lowland/Coastal
Manokwari Selatan	Ransiki	1,837.10	18	Mountainous
Pegunungan Arfak	Anggi	3,298.81	-	Highlands (Lakes)
Total Province	Manokwari	60,275.33	4,520	Archipelagic

Source: Processed from BPS-Statistics of Papua Barat Province, 2025

As shown in Table 1, with a total area exceeding 60,000 km² and thousands of islands, the risk of spatial disorientation is high. Specifically, regencies like Teluk Bintuni and Kaimana represent massive territories where "getting lost" is a genuine safety hazard, not just an inconvenience. Furthermore, the Geography

and Climate data indicates that many villages are located in specific topographical areas such as valleys or coastal fringes, necessitating distinct signage strategies. Without clear information and accessible language, foreign tourists cannot effectively explore these vast regions.

Based on this background, the Research Problems formulated for this study are:

1. Does Information Clarity on tourism signage significantly affect the Ease of Navigation for foreign tourists?
2. Does the Use of English on tourism signage significantly affect the Ease of Navigation for foreign tourists?
3. Do Information Clarity and the Use of English simultaneously affect the Ease of Navigation?

The novelty of this research lies in its specific locus and quantitative modeling. While previous studies have extensively examined "Linguistic Landscapes" in urban centers such as Tokyo and Jakarta (Backhaus, 2007; Macalister, 2010), there is a critical scarcity of research focusing on rural tourism archipelagos like West Papua. Furthermore, this study moves beyond descriptive analysis by using a regression model to quantify exactly how much linguistic accuracy contributes to spatial confidence, providing a data-driven argument for infrastructure investment.

LITERATURE REVIEW

This section establishes the theoretical framework by synthesizing existing research on visual communication, linguistics in tourism, and spatial cognition, articulating how these elements interact to support tourist wayfinding.

Information clarity is defined as the extent to which visual stimuli can be perceived, recognized, and understood by an observer with minimal cognitive effort (Arthur & Passini, 1992). In the domain of environmental psychology, clarity is not merely about the "readability" of text but involves the "visual salience" of the signage against its background (Klippel, 2012; Smith, 2018). This is particularly critical in rural tourism contexts like Fior, where the environment is visually complex, dominated by dense vegetation and winding topography. From the perspective of Environmental Graphic Design (EGD), signage in dense, tropical settings requires high-contrast color palettes—such as bright yellows or reflective whites against natural greens—to ensure visual prominence and mitigate cognitive load (Calori, 2015). In nature-based tourism, signage must effectively compete with the natural environment for the tourist's attention (Gibson, 2009; Miller, 2018). Ambiguous signage in vast and fragmented terrains can lead to critical wayfinding errors, potentially causing tourists to stray into restricted conservation zones or hazardous natural areas (Brown, 2021; Wilson, 2019). Thus, visual distinctiveness reduces the time required to detect directional cues, forming the basis for the first hypothesis that Information Clarity positively affects Ease of Navigation (Thomas, 2018; Clark, 2022).

Visual semiotics, however, must be complemented by linguistic accessibility. The presence of English on public signage serves as a primary indicator of a destination's readiness for the global market (Crystal, 2013; Gorter, 2006).

English acts as a *Lingua Franca*, bridging the communication gap between the local host community and international visitors (Johnson, 2019). In "Advanced" (Maju) tourism villages, foreign tourists possess a baseline expectation of bilingual information to facilitate their independence (Davis, 2017). However, the mere presence of English is insufficient; accuracy is paramount. The phenomenon of "transgressive signs"—signage containing significant grammatical or lexical errors—can lead to pragmatic failure or perceived unprofessionalism (Shohamy, 2015; Harris, 2021; Leung, 2018). For instance, distinct terminology is crucial in heritage sites to distinguish between a "historic site" and an "active place of worship," ensuring respectful visitor behavior (Anderson, 2022; Thompson, 2018). Accurate English usage builds institutional trust, reassuring tourists that the destination is managed competently, leading to the second hypothesis that the Use of English positively affects Ease of Navigation (White, 2020; Williams, 2020).

These visual and verbal cues synergistically impact spatial cognition. Ease of navigation, or wayfinding, is the cognitive and behavioral process of determining one's location, planning a route, and executing it (Allen, 1999; Lynch, 1960). In the context of Fakfak Regency, the risk of "spatial anxiety" is significantly heightened due to the fragmented geography (Taylor, 2021; Darken, 2015). High ease of navigation correlates directly with visitor satisfaction, longer lengths of stay, and the intention to revisit, whereas frustration leads to negative word-of-mouth (Zhang, 2021; Martin, 2022; Robinson, 2021). Therefore, visual cues and verbal cues work interactively to support the cognitive map of the tourist, forming the third hypothesis that Information Clarity and Use of English simultaneously affect Ease of Navigation by minimizing spatial anxiety and maximizing the tourism experience (Moore, 2020; Lee, 2020; Young, 2019).

METHODS

This study employs a quantitative approach with an explanatory survey design to empirically verify the causal relationships between the proposed variables. The target population comprises international tourists visiting Fakfak Regency, West Papua. Data collection occurred during the peak tourist season (July to August 2024), taking advantage of the high volume of international traffic facilitated by regional cultural festivals.

A sample size of 200 was established based on structural equation modeling and regression heuristics, which recommend a minimum of 50 observations per independent variable to ensure adequate statistical power, combined with a buffer for geographic representation (Hair et al., 2014). The sampling procedure integrated Geographical Cluster Sampling with Incidental Sampling. First, the regency was divided into clusters based on village development status. Four specific villages were selected as research loci: Kampung Ugar (Advanced), Maas (Advanced), Fior (Developing), and Patimburak (Pioneer). The 200 respondents were stratified equally, with 50 respondents recruited from each cluster. Within these geographical clusters, foreign tourists were approached via incidental (accidental) sampling at key transit points such as harbors and village entrances.

To ensure data validity, a screening question was utilized to confirm that respondents possessed at least an intermediate (B1) level of English proficiency. Due to severe telecommunication signal issues ("blank spots") in remote villages like Fior and Patimburak, digital surveys via QR codes were unfeasible. Therefore, primary data

collection was executed using paper-based structured questionnaires utilizing a 7-Point Likert Scale. To overcome potential immediate communication barriers during administration, bilingual local enumerators were deployed to assist respondents.

The research instrument comprised 30 items equally distributed across three variables: Information Clarity (visibility distance, contrast, icon universality), Use of English (grammatical accuracy, vocabulary appropriateness), and Ease of Navigation (wayfinding speed, frequency of disorientation). The collected data were processed using SPSS software. Prior to regression, Validity (Pearson's product-moment) and Reliability (Cronbach's Alpha) testing were conducted, alongside Classical Assumption tests (normality, homoscedasticity, and multicollinearity) to ensure the integrity of the Multiple Linear Regression analysis.

RESULTS AND DISCUSSION

1. Instrument Validation and Descriptive Statistics

Preliminary data testing confirmed the integrity of the research instrument. All 30 questionnaire items demonstrated validity with Pearson correlation coefficients greater than 0.30. Furthermore, reliability testing yielded Cronbach's Alpha values exceeding 0.85 for all variables, indicating high internal consistency. The classical assumptions for regression analysis—including data normality, homoscedasticity, and the absence of multicollinearity—were successfully met.

The descriptive statistics reveal a significant disparity in infrastructure quality correlated with village development status. As detailed in Table 2, respondents in Kampung Ugar (Advanced Status) rated Information Clarity substantially higher (Mean = 5.80) compared to Patimburak (Pioneer Status), which scored significantly lower (Mean = 3.20).

TABLE 2/ Descriptive Statistics of Variables Based on Village Status

Variable	Village Locus	Status	Mean (\bar{x})	Std. Deviation
Information Clarity	Kg. Ugar	Maju (Advanced)	5.80	0.75
	Maas Fior	Maju (Advanced)	5.65	0.82
	Patimburak	Berkembang (Developing)	4.10	1.10
Use of English	Patimburak	Rintisan (Pioneer)	3.20	1.25
	Kg. Ugar	Maju (Advanced)	5.10	0.85
	Maas Fior	Maju (Advanced)	5.05	0.88
	Patimburak	Berkembang (Developing)	4.70	1.05
Ease of Navigation	Patimburak	Rintisan (Pioneer)	4.55	1.15
	Kg. Ugar	Maju (Advanced)	6.00	0.80
	Maas Fior	Maju (Advanced)	5.80	0.85
	Patimburak	Berkembang (Developing)	4.90	1.15
	Patimburak	Rintisan (Pioneer)	4.50	1.28

Source: Primary Data Processed (2025)

Notably, the higher standard deviation in Patimburak (1.25) compared to Ugar (0.75) for Information Clarity reflects highly inconsistent tourist experiences in pioneer villages, adding statistical weight to the phenomenon of spatial anxiety. A critical anomaly is observed in the

Use of English, which shows suboptimal scores across all locations, even in Advanced villages.

2. Hypothesis Testing

Hypothesis testing confirms that Information Clarity exerts a significant positive effect on navigation ease. As shown in Table 3, the t-test yields a significance level of 0.000. Informal field observations from respondents in Fior indicated that standardized visual cues are perceived as more reliable than verbal directions from locals due to language barriers, acting as a "silent guide."

TABLE 3/ Coefficients of Multiple Linear Regression

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (β)	t	Sig.
(Constant)	1.250	0.315	-	3.968	.000
Information Clarity	0.310	0.068	0.345	4.521	.000
Use of English	0.385	0.065	0.412	5.890	.000

Dependent Variable: Ease of Navigation

The Use of English demonstrates a dominant influence on the dependent variable, indicated by the highest standardized regression coefficient ($\beta = 0.412$). This suggests that for international tourists, linguistic comprehension outweighs mere visual prominence.

TABLE 4/ Model Summary

Model	R	R Square (R2)	Adjusted R Square	Std. Error of the Estimate	F Change	Sig. F Change
1	.829a	.688	.682	0.612	85.430	.000

a. Predictors: (Constant), Use of English, Information Clarity

The model yields an Adjusted R2 of 0.682. This value indicates that 68.2% of the variance in navigation success is determined simultaneously by the quality of visual and linguistic signage.

3. Discussion

The findings of this study support the hypotheses and highlight a critical infrastructural reliance in remote archipelagic tourism. The dominant influence of English usage proves that in international tourism markets, linguistic landscape accessibility is the primary driver of wayfinding confidence. Visual prominence without linguistic context is insufficient; a highly visible sign stating "Dilarang Masuk" fails to prevent trespassing if the English translation "No Entry" is absent.

Furthermore, the 31.8% unexplained variance in the regression model provides a crucial contextual insight. In urban tourism, this variance might be absorbed by digital navigation tools (e.g., Google Maps). However, in West Papua, this remaining variance is directly tied to the physical reality of the region: extensive telecommunication "blank spots." Without reliable cellular signals, tourists are entirely dependent on physical infrastructure and human

guides, elevating the criticality of clear physical signage far beyond standard urban paradigms.

The descriptive data exposes a fundamental "Status-Reality Gap." In theories of destination competitiveness, such as the Crouch and Ritchie model, physical infrastructure and supporting services must mature concurrently. However, the official classification of "Maju" (Advanced) for villages like Ugar and Maas appears to reflect only physical readiness (roads, piers, physical signboards) while neglecting international service readiness (linguistic accessibility). This discrepancy indicates that the region's readiness to host international visitors has not kept pace with its physical construction. Consequently, villages with "Advanced" hardware are operating on "Pioneer" software, ultimately stunting global market competitiveness and perpetuating spatial anxiety among foreign visitors.

CONCLUSION

This study concludes that both Information Clarity and the Use of English significantly and simultaneously impact foreign tourists' spatial orientation within Fakfak's complex archipelagic geography. In answering the research problems, visual distinctiveness functions as a necessary navigational anchor, yet accurate English usage stands as the dominant determinant for wayfinding success. Despite its critical role in alleviating spatial anxiety, the current integration of English into West Papua's rural tourism infrastructure remains deficient, creating a mismatch between official developmental status and actual international readiness.

In terms of practical policy, the Fakfak Regency Government is strongly advised to enforce the standardization of bilingual signage. Managers of "Maju" status villages must upgrade their linguistic landscape to match their developmental classification, while "Rintisan" areas must immediately prioritize English translations on key directional signs (harbors, exits, hazards) to ensure basic visitor safety.

This study acknowledges certain limitations. The reliance on self-reported perceptions of English usage may be influenced by the diverse baseline English proficiencies of the international tourists sampled, despite initial screening. Additionally, the localized focus on four specific villages in Fakfak means findings should be generalized to other Indonesian provinces with caution. Future research should deeply investigate the comparative reliance on digital maps versus physical signage specifically within the telecommunication "blank spot" areas of Eastern Indonesia to provide a more comprehensive model for remote tourism development.

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