

Translation Techniques of Technical Terms Found in the Video Game "Asphalt 9: Legends"

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Abstract. With the rapid globalization of the digital entertainment industry, video game localization has become a critical process in ensuring player immersion and maintaining software usability across diverse regional markets. This study investigates the translation of specialized game-specific terminology in the mobile and cross-platform arcade-racing game Asphalt 9: Legends from English (Source Text) into Indonesian (Target Text). Utilizing the descriptive micro-unit taxonomy of translation techniques established by Molina and Albir (2002) alongside Lawrence Venuti's (Reiss, 1981) (1995) concepts of domestication and foreignization, we analyze an empirical corpus of 78 key technical terms extracted from the game's localization databases and verified through active in-game observation. To analyze how localization strategies adapt to interface needs, the terms are classified into five functional in-game domains: Game Modes & Events, In-Game Economy, Vehicle Customization, Gameplay Stunts, and UI/Progression. Quantitative analysis reveals a highly concentrated distribution of translation techniques dominated by Borrowing (46.15%) and Established Equivalent (38.46%), followed by Literal Translation (12.82%), Transposition (1.28%), and Modulation (1.28%). Qualitative analysis demonstrates that the localizer's strategies shift systematically with the term's functional domain. Action-heavy, on-track stunts (e.g., Drift, Shockwave) rely almost exclusively on foreignizing Pure Borrowing to match global "gamer jargon" and to fit tight user interface constraints. Conversely, general navigation menus, mechanical upgrades, and player milestones are domesticated using native Established Equivalents (e.g., Chapter → Babak) to ensure intuitive usability. These findings challenge flat-dataset translation approaches and demonstrate that successful game localization requires a flexible, domain-shifting approach to balance cultural naturalness, player subcultural expectations, and technical layout limitations.

Keywords: arcade-racing, domestication and foreignization, molina and albir, translation techniques, video game localization,

RESEARCH BACKGROUND

In the contemporary digital era, video games have evolved from a niche recreational hobby into a dominant force in global entertainment, surpassing the film and music industries combined in revenue and cultural reach. As games are distributed globally to diverse players across continents, they transcend geographic, cultural, and linguistic boundaries. To capture and sustain these international markets, game publishers rely heavily on video game localization. This comprehensive process adapts a game's textual, audio, and visual assets to align with the linguistic conventions and cultural expectations of target markets abroad.

Unlike traditional translation—such as literary or academic translation—video game localization operates within a highly interactive, multimodal environment. Localizers must translate text while accounting for real-time player interactions, voiceover timing, visual assets, and strict user-interface (UI) layout constraints. Text boxes in games are often designed around the shorter word lengths of English. When translating these terms into languages with longer word structures, such as Indonesian,

translators face significant spatial limitations. Additionally, games are highly immersive. Any unnatural translation, confusing terminology, or grammatical error can break a player's immersion, leading to frustration and a poor user experience.

The Challenge of Game-Specific Technical Terms

At the heart of the localization process is the translation of technical terms. In video games, technical terms represent specialized, domain-specific vocabulary that defines the core systems of the game. Rather than representing general language, these terms act as precise markers for:

1. Game Modes and Events: Playable campaign structures and timed challenges (e.g., Multiplayer, Grand Prix, Drive Syndicate).
2. In-Game Economy and Currency: Virtual financial networks, collectible assets, and monetization menus (e.g., Blueprints, Tokens, Legend Pass).
3. Vehicle Customization and Attributes: Mechanical components and performance specifications (e.g., Top Speed, Drivetrain, Onderdil Bodi).
4. In-Game Mechanics and Stunts: Active physical driving mechanics on the track (e.g., Drift, Barrel Roll, Shockwave).
5. User Interface (UI) and Progression: Navigation menus and progression indicators (e.g., Leaderboard, Missions, Posisiku).

These technical terms carry highly precise meanings. If a translator fails to translate them consistently, it can break key gameplay mechanics, make menus confusing, and render community wikis and guides useless.

Scope and Commercial Reach of Asphalt 9: Legends

This study focuses on the localization of the award-winning arcade-racing game Asphalt 9: Legends, developed and published by Gameloft. As part of a long-running, highly successful global franchise, Asphalt 9: Legends features an extensive array of real-world licensed supercars, advanced driving physics, complex monetization schemes, and diverse multiplayer events.

To understand the massive scale of Asphalt 9: Legends and why its localized interface must maintain a high level of linguistic accuracy, it is essential to consider the game's official commercial performance statistics. According to official corporate statements from Gameloft (2021), the Asphalt racing franchise surpassed 1 billion total downloads across all mobile, console, and PC platforms. Furthermore, Asphalt 9: Legends alone reached a massive milestone of over 150 million downloads within just three years of its initial release (Gameloft, 2021).

By 2024, cumulative downloads of the individual title Asphalt 9: Legends surpassed 250 million globally, cementing its position as one of the most successful racing video games in history. This commercial success translates to an extremely active player base: the game sustains an estimated 15 million monthly active users (MAUs) and over 2.5 million daily active users (DAUs) worldwide. These millions of players engage in competitive multiplayer tournaments and cooperative Club activities every day across various platforms. This massive, multilingual player base underscores the critical importance of high-quality localization; even minor translation errors in the UI or progression systems can disrupt gameplay and lead to high churn rates among millions of active users.

Game-Specific Design and Features

The game is distinguished by several unique, proprietary gameplay and structural features that directly impact its technical terminology database:

1. TouchDrive™ Control Scheme: Unlike traditional racing games that rely solely on manual steering, Asphalt 9 introduced the TouchDrive™ control system, a highly automated piloting mechanism that lets players focus on timing boosts, drifts, and path selection (Gameloft, 2018). This mechanic generated a suite of specialized technical terms around path-selection interfaces, automatic drifts, and boost prompts.
2. Cinematic Air Stunts and Boost Physics: The core gameplay loop of Asphalt 9 revolves around performing high-flying acrobatics. Mechanics such as the "360 Spin" and the "Barrel Roll" are performed on-track to accumulate Nitro boost power (Gameloft, 2018) rapidly. These stunts, alongside the "Nitro Shockwave"—a maximum-velocity booster state that emits a visible purple aura around the vehicle—form a highly specialized, game-specific jargon that requires careful localization.
3. Hybrid Progression and Monetization Systems: Vehicle acquisition and performance upgrades are driven by a collectible-card mechanic in which players accumulate "Blueprints" to unlock and star-up vehicles (Gameloft, 2018). This gacha-style system is supported by complex UI menus, including the "Legend Pass" seasonal progression system, timed "Car Hunts," and virtual currencies such as "Tokens" and "Credits" (Gameloft, 2018).
4. Social and Competitive Networks: To foster player retention, the game relies heavily on social systems, including "Clubs" (the game's clan/guild mechanic) and structured "Multiplayer Leagues" (Gameloft, 2018), which compare player ratings globally on live Leaderboards.

Because of this deep, multi-layered design, Asphalt 9: Legends contains a highly specialized, technical UI database. Translating this database accurately is essential to support the game's massive international player base across multiple platforms, including mobile, console, and PC.

Using an empirical dataset of 78 key technical translation pairs extracted from the game's localization files, this article addresses three core research questions:

1. What are the types of technical terms that appear in the video game Asphalt 9: Legends?
2. What translation techniques are used to translate these technical terms in the video game Asphalt 9: Legends?
3. Which translation technique is dominant in this process, and what are its linguistic and pragmatic implications?

REVIEW OF RELATED LITERATURE

To situate this study within the broader academic landscape of translation studies and video game localization, we reviewed five prominent previous studies that investigate the translation of specialized terms in digital media:

O'Hagan and Mangiron (2013) established the theoretical foundation for video game localization, arguing that games are interactive software products that require localizers to prioritize player immersion over strict linguistic fidelity. While this work provides the essential *Skopos*-driven framework for game translation, it remains a broad textbook that lacks micro-level analysis of specific racing-game terminology within a unified taxonomy.

Mangiron (2016) examined subtitling constraints in RPGs, finding that screen size limitations force localizers to rely heavily on *Linguistic Compression* and *Reduction* to prevent text overflow. This confirms that spatial layout restrictions are a major factor in translation decisions, though the study focused exclusively on narrative dialogue rather than the technical menus and mechanical upgrades analyzed in the present research.

Pratama (2018) applied the Molina and Albir (2002) framework to the Indonesian localization of *Clash of Clans*, identifying *Established Equivalent* as the dominant technique for making fantasy mechanics accessible to casual players. This study provides a direct Indonesian context and methodological precedent, but strategy-game terminology is fundamentally different from the technical, physics-based vocabulary of arcade racing.

Wijaya and Kusuma (2020) analyzed *PUBG Mobile* and found that *Pure Borrowing* exceeded 60% of all translation decisions, arguing that Indonesian shooter players prefer English terms for fast-paced communication. This confirms that Indonesian gamers favor borrowed terms for action-oriented content, though the study lacked a rigorous taxonomy and did not separate terms by functional domain.

Sari (2022) studied *Gran Turismo Sport* and concluded that hyper-realistic racing simulators rely on *Calque* and *Literal Translation* to maintain engineering accuracy for automotive enthusiasts. While directly relevant to racing games, this study addresses simulator terminology rather than the arcade-style fantasy stunts, gacha economies, and seasonal passes that characterize *Asphalt 9: Legends*. These five studies collectively reveal a gap at the intersection of arcade-racing mechanics, mobile monetization vocabulary, and Indonesian localization that the present study addresses.

Domestication versus Foreignization

To bridge the gap between English source texts (ST) and Indonesian target texts (TT), localizers must constantly choose between two major translation philosophies first outlined by Lawrence Venuti (1995): domestication and foreignization.

1. **Domestication** seeks to minimize the foreignness of the source text by adapting it to the linguistic and cultural values of the target language. This is achieved by finding natural, culturally familiar equivalents that feel native to the reader.
2. **Foreignization**, on the other hand, deliberately retains the source text's cultural and linguistic elements, importing them directly into the target language.

In video game localization, this division is particularly complex. Modern gamers belong to a globalized subculture. They are highly familiar with English gaming terminology and often prefer it over translated terms. For instance, translating *Drift* into a literal Indonesian equivalent, such as *Hanyut* or *Meluncur*, might sound grammatically correct, but it would alienate players already accustomed to the universal English term *Drift*. Conversely, failing to translate general navigational menus or progression labels would make the game inaccessible to casual players. Localizers must therefore find a careful balance, using domestication to ensure ease of navigation while using foreignization to maintain genre conventions.

Theoretical Framework: Molina and Albir (2002)

To study these localization decisions objectively, scholars require a precise descriptive model. Many classical translation taxonomies, such as those of Vinay and Darbelnet (1958) or Catford (1965), focus heavily on comparative linguistics and decontextualized language systems. They also tend to confuse cognitive translation strategies (the process) with translation techniques (the final result).

To resolve these conceptual overlaps, Lucía Molina and Amparo Hurtado Albir (2002) established a functional and dynamic taxonomy of translation techniques. They define a translation technique as "a procedure to analyze and classify how translation equivalence works." Under this framework, a technique is characterized by five basic features:

1. It affects the final result of the translation rather than the cognitive process.
2. It is classified strictly by comparing the target text with the source text.
3. It operates on micro-units of text (words, phrases, or collocations).
4. It is discursive and contextual by nature.
5. It is functional, meaning its appropriateness is evaluated based on the game's genre, target audience, and interface constraints.

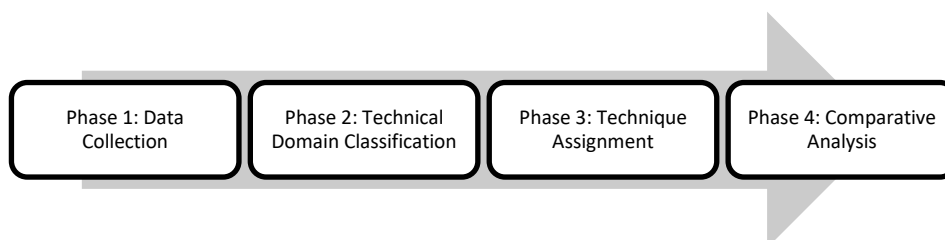
Molina and Albir outline 18 distinct techniques, ranging from direct linguistic copying (Borrowing) to complete cultural replacement (Adaptation). This framework provides researchers with a highly structured, objective tool for analyzing localized game data and understanding the micro-level decisions made by translators.

RESEARCH METHOD

This study employs a descriptive-qualitative research design, supported by quantitative frequency analysis, to identify, classify, and analyze the translation techniques applied to the technical terms in Asphalt 9: Legends. Qualitative research is well-suited to this study, as it enables nuanced, contextual analysis of translation pairs and linguistic adaptations. At the same time, quantitative measures provide an objective overview of the distribution and dominance of specific techniques.

Research Design Flow

The methodological workflow of this research is structured into four sequential phases, progressing from data collection to final linguistic analysis:



Data Source and Corpus Selection

The primary data source for this study consists of the official localization files and in-game text assets of the arcade-racing video game Asphalt 9: Legends (Gameloft, 2018).

1. Linguistic Scope: The study focuses on English as the source language (SL) and Indonesian as the target language (TL). English is the canonical development language for Gameloft's global releases, while Indonesian represents a rapidly growing Southeast Asian target market characterized by a distinct blend of formal vocabulary and borrowed Western gaming slang.
2. Corpus Selection Criteria: To build a highly representative and focused research corpus, we applied a selective sampling method based on three criteria:
 - The term must function as a specialized, game-specific technical term rather than general narrative prose or dialogue.
 - The term must be a visible component of the game's user interface (UI), menus, game modes, attributes, or in-game upgrade systems.
 - The term must have a documented translation pair within the game's active localization database.
 - Applying these criteria yielded a final corpus of 78 unique technical translation pairs (the "thesis dataset").

Data Collection Procedure

Data collection was conducted in a systematic, step-by-step manner to ensure the authenticity and contextual accuracy of the corpus:

1. Text Extraction: The 78 technical translation pairs were extracted directly from the game's structured database. This data was compiled into a raw tabular format featuring the source text (ST) and the target text (TT) for comparative analysis.
2. In-Game Verification: To prevent decontextualized analysis, each of the 78 pairs was verified in-game on mobile and PC platforms. This step allowed us to observe where each term appeared in the interface, check for UI character limits, and examine the active visual context of each term (such as buttons, progress bars, and event banners).
3. Linguistic Cleaning: The extracted pairs were compiled into a centralized database, and formatting codes and platform-specific symbols were cleaned to isolate the raw textual strings.

Data Classification and Analysis

Once compiled and verified, the corpus underwent a two-tiered classification process:

Step 1: Technical Domain Classification

To answer the first research question (What are the types of technical terms in Asphalt 9: Legends?), the 78 terms were grouped into five distinct technical domains based on their functional role within the game's architecture:

1. Game Modes & Events (19 terms): play zones, event challenges, and tournament formats.
2. In-Game Economy & Currency (15 terms): currencies, store listings, passes, and purchasing menus.
3. Vehicle Customization & Attributes (15 terms): mechanical parts, customization features, and performance specs.
4. In-Game Mechanics & Stunts (9 terms): physics-based active driving moves and boost controls on the track.

5. User Interface (UI) & Progression (14 terms): menus, profiles, quest tracking, leaderboards, and general navigation.

Step 2: Translation Technique Assignment

To answer the second and third research questions (What techniques are found, and which is dominant?), each translation pair was analyzed and assigned its corresponding translation technique under the Molina and Albir (2002) framework.

1. Linguistic analysis was conducted on each pair to determine how the source term was modified to form the target term. For example, terms that were copied without changes were classified as Pure Borrowing, terms with spelling adjustments as Naturalized Borrowing, terms with word-class shifts as Transposition, and terms with perspective shifts as Modulation.
2. To ensure the reliability and validity of our classifications, peer debriefing and triangulation with established bilingual dictionaries (such as the Kamus Besar Bahasa Indonesia/KBBI) were conducted.

Step 3: Statistical Synthesis

Following qualitative classification, the frequency (f) and percentage share (%) of each identified technique were calculated using the following standard statistical formula:

$$\% = \left(\frac{f}{N}\right) \times 100\%$$

Where:

1. % represents the percentage share of a specific translation technique.
2. f represents the frequency count of that technique within the corpus.
3. N represents the total size of the corpus ($N = 78$).

The resulting statistical distribution was visualized using summary tables and charts to illustrate the dominance and strategic patterns of the techniques clearly.

RESULTS AND DISCUSSION

Quantitative Distribution of Translation Techniques

An analysis of the 78 translation pairs reveals a highly concentrated distribution of translation techniques, with two major methods dominating the localizer's decisions.

Table 1 The percentage of translation Techniques

Translation Technique	(f)	(%)	Representative Examples
Borrowing	36	46.15%	MULTIPLAYER → MULTIPLAYER CAREER → KARIER
Established Equivalent	30	38.46%	CHAPTER → BABAK BLUEPRINTS → CETAK BIRU
Literal Translation	10	12.82%	SEASON FLAGS → FLAG MUSIM SYNDICATE COINS → KOIN SINDIKAT
Transposition	1	1.28%	MY POSITION → POSISIKU
Modulation	1	1.28%	GAS TANK → BAHAN BAKAR
Total	78	100.00%	

Detailed Linguistic Analysis of Each Identified Technique

The localizer did not apply these techniques uniformly. Instead, each technique was selected to solve specific linguistic, grammatical, or technical challenges. Below is a detailed, word-by-word analysis of each identified technique within the dataset:

Table 2 Identified Translation Techniques

Translation Techniques	Examples
1. Pure Borrowing	MULTIPLAYER, DRIFT
2. Naturalized Borrowing	KARIER
3. Established Equivalent	AJANG
4. Literal Translation	FLAG MUSIM
5. Transposition	POSIKUR
6. Modulation	BAHAN BAKAR

1. Pure Borrowing (No Orthographic Changes)

Pure borrowing is used to transfer a term directly from the source language to the target language without any changes in spelling or pronunciation. In *Asphalt 9: Legends*, this technique is applied extensively to game-specific actions, mechanics, and event brands.

- Linguistic Analysis of MULTIPLAYER: The English term MULTIPLAYER is copied directly as MULTIPLAYER in the Indonesian target text. This choice represents a foreignizing strategy. Because multiplayer is a standard, universal concept across all gaming genres, keeping the term unchanged ensures consistency with global gaming culture. It allows Indonesian players to easily understand the game's multiplayer lobbies without needing further translation.
- Linguistic Analysis of DRIFT: Transferred directly as DRIFT in the driving physics menu. Translating *drift* into a literal Indonesian word like *hanyut* would sound incredibly awkward in a racing game. Keeping it as a pure loanword ensures the term remains highly dynamic and instantly recognizable to arcade-racing players.

2. Naturalized Borrowing (Orthographic and Grammatical Adaptation)

Naturalized borrowing occurs when a source term is modified to conform to the spelling, pronunciation, or grammatical rules of the target language.

- Linguistic Analysis of CAREER → KARIER: The English noun CAREER represents the game's main solo story mode. The localizer adapted the word to match Indonesian spelling rules, substituting the letter 'c' with 'k' and the double-vowel 'ee' with 'i' to form KARIER. This orthographic adjustment integrates the foreign term into Indonesian, making it feel natural to native readers while preserving the core meaning.
- Linguistic Analysis of DECALS → DECAL: In English, DECALS refers to customizable aesthetic stickers for the car body. When translating this term, the localizer systematically stripped away the English plural suffix "-s" to form the singular loanword DECAL. Because Indonesian grammar expresses plurality through context or reduplication rather than a trailing suffix, this grammatical reduction prevents the target term from sounding awkward or unnatural.

3. Established Equivalent (Standard Contextual Matching)

Established Equivalent involves using a standard, recognized term or expression in the target language that has been institutionalized by dictionaries or common bilingual usage.

- Linguistic Analysis of SPECIAL EVENT → AJANG SPESIAL: While the English word *event* literally translates to *peristiwa* (an occurrence) or *kejadian* (a happening) in standard dictionaries, the localizer opted for AJANG as the established equivalent. In Indonesian, *ajang* refers specifically to a competitive venue, arena, or forum. This selection is highly functional, anchoring the game's menu in a natural-sounding, competitive Indonesian context that perfectly matches the game's athletic and racing atmosphere.
- Linguistic Analysis of BLUEPRINTS → CETAK BIRU: The compound noun BLUEPRINTS (collectible cards used to unlock cars) is translated as CETAK BIRU. This term is a widely accepted, institutionalized equivalent in Indonesian technical and architectural vocabulary. Utilizing this standard equivalent immediately conveys the concept of a "design template" or "unlock requirement" to Indonesian players without needing complex descriptions.

4. Literal Translation (Word-for-Word Syntax Inversion)

Literal Translation is the word-for-word translation of a phrase or compound noun. In this dataset, all literal translations undergo grammatical word-order inversion to match standard Indonesian syntax.

- Linguistic Analysis of SEASON FLAGS → FLAG MUSIM: The nouns in the English compound noun are translated individually (*season* → *musim*, *flags* → *flag* [borrowed]). To match Indonesian's Noun-Modifier (DM) structure, the localizer flipped the word order from English Modifier-Noun (MD) to Indonesian Noun-Modifier (DM), resulting in FLAG MUSIM. This structural flip ensures the literal translation remains grammatically correct and natural-sounding in Indonesian.

- Linguistic Analysis of SYNDICATE COINS → KOIN SINDIKAT: Both components of the noun phrase are translated literally (*syndicate* → *sindikat*, *coins* → *koin*), and the word order is flipped to place the core noun *koin* before the modifier *sindikat*, resulting in a highly accurate, grammatically correct Indonesian phrase.

5. Transposition (Grammatical Category Shift)

Transposition involves shifting a grammatical category or part of speech from the source text to the target text to resolve structural mismatches.

- Linguistic Analysis of MY POSITION → POSISIKU: The English source phrase is composed of two separate words: a possessive pronoun (*my*) and a noun (*position*). In Indonesian, instead of translating them as two separate words (*posisi saya*), the localizer transposed the possessive pronoun *my* into the bound enclitic pronominal suffix "-ku", attaching it directly to the naturalized noun *posisi*. This grammatical shift reduces a two-word phrase to a single, compact Indonesian word (POSIKSIKU), which is ideal for a fast-paced game with limited screen space.

6. Modulation (Perspective and Focus Shift)

Modulation involves a change in point of view, focus, or cognitive category. It is applied when a literal translation would sound awkward, mechanical, or unnatural in the target language.

- Linguistic Analysis of GAS TANK → BAHAN BAKAR: The English term GAS TANK refers physically to the car's fuel container (the "tank"). The Indonesian target text, however, translates literally to BAHAN BAKAR (the "fuel"). This shift in cognitive focus moves from the container (the tank) to the contents (the fuel). In a mobile racing game, players care more about the consumable resource required to enter a race (fuel) than about the mechanical tank itself (*tangki gas*). This modulation is highly functional, delivering a user-friendly translation that perfectly matches the player's immediate needs on the car selection screen.

Analysis of Findings by Technical Domain

By dividing our 78-term corpus into five functional domains, we can analyze how the localizer's strategies shift depending on the technical function of each term. This domain-by-domain analysis reveals the systematic, professional patterns used in the game's interface:

Table 3 Distribution by Technical Domain

Technical Domain	Translation Techniques
Game Modes & Events	Dominant: Borrowing
In-Game Economy	Dominant: Mixed
Vehicle Parts & Upgrades	Dominant: Equivalent
Gameplay Stunts & Physics	Dominant: Borrowing
UI & Campaign Progression	Dominant: Equivalent

1. Game Modes & Events (19 Terms)

This domain includes names for playable modes, seasonal events, and competitive formats.

- Linguistic Analysis: Because these terms function as "brand names" or specific playable content markers, the localizer relies heavily on Pure Borrowing (e.g., *SPECIAL HUNT*, *STARWAY*, *DRIVE SYNDICATE*, *GAUNTLET*, *SPOTLIGHT*).
- The Localization Strategy: Keeping these terms in their original English maintains branding consistency across the global player base. However, for recurring structural modes, the localizer switches to Established Equivalents (e.g., *PRACTICE* → *LATIHAN*, *QUALIFIER* → *KUALIFIKASI*, *FINAL ROUNDS* → *BABAK FINAL*) to make basic participation clear to Indonesian players.

2. In-Game Economy & Currency (15 Terms)

This domain covers transaction systems, shop menus, and progress passes.

- Linguistic Analysis: Here, we see a balanced, hybrid strategy. The localizer uses Literal Translation with syntax inversion for progression passes (e.g., *MULTIPLAYER PASS* → *PAS MULTIPLAYER*, *LEGEND PASS* → *PAS LEGENDA*), translating the core nouns and modifiers literally but flipping the word order to match Indonesian noun-modifier syntax.
- The Localization Strategy: For virtual currencies, the localizer utilizes Naturalized Borrowing (e.g., *TOKENS* → *TOKEN*), *CREDITS* (*KREDIT*), stripping the English plural suffix -s and adapting the spelling to match Indonesian phonological rules. This hybrid approach keeps game-specific currencies easily recognizable while making the transaction menus feel clean and professional.

3. Vehicle Customization & Attributes (15 Terms)

This domain represents physical car parts and upgrade specifications.

- Linguistic Analysis: To ground these physical elements, the localizer relies heavily on Established Equivalents (e.g., *PAINT* → *CAT*, *ENGINE* → *MESIN*, *CAR EVOLUTION* → *EVOLUSI MOBIL*). For complex mechanical parts, Dutch-derived Indonesian terms are used as established equivalents (e.g., *BODY PARTS* → *ONDERDIL BODI*, *IMPORT PARTS* → *ONDERDIL IMPOR*).
- The Localization Strategy: Using established equivalents for physical car modifications makes the upgrade menus highly intuitive for Indonesian players, who are already familiar with standard automotive terms in daily life.

4. In-Game Mechanics, Actions & Stunts (9 Terms)

This domain covers active, physics-based driving moves on the track.

- Linguistic Analysis: Because these actions represent fast-paced, arcade-style racing mechanics, Pure Borrowing is the absolute dominant technique (e.g., *DRIFT*, *BARREL ROLL*, *SHOCKWAVE*, *PERFECT RUN*, *PERFECT NITRO*, *AIR TIME*).

- The Localization Strategy: These terms act as universal gameplay labels. Translating them literally into Indonesian (such as *Hanyut* for *Drift* or *Gelombang Kejut* for *Shockwave*) would sound incredibly awkward in a fast-paced setting. It would alienate players from global community guides. Keeping them unchanged preserves the universal "gamer jargon" that players prefer.

5. User Interface (UI) & Progression (14 Terms)

This domain covers general campaign modes, player statistics, social systems, and navigation menus.

- Linguistic Analysis: To ensure smooth, daily navigation across the game's menus, the localizer prioritizes Established Equivalents (e.g., *CHAPTER* → *BABAK*, *LEADERBOARD* → *PAPAN PERINGKAT*, *RATING* → *NILAI*, *MISSIONS* → *MISI*).
- The Localization Strategy: This is the most "domesticated" domain. By translating menus, leaderboards, and milestones into standard Indonesian equivalents, the game becomes accessible to players of all ages and English proficiency levels, ensuring they never get lost in the interface.

Comparative Analysis: Borrowing vs. Established Equivalent

The dynamic relationship between Borrowing (46.15%) and Established Equivalent (38.46%) is the core of the game's localization success. Comparing these two dominant techniques illustrates how the localizer balances foreignization and domestication:

1. Linguistic Processing: Borrowing requires minimal translation processing, focusing on keeping the original word intact or adjusting its spelling. Established Equivalent requires high cognitive processing, as the translator must find standard, culturally accepted equivalents (such as using *Ajang* for *Event* or *Onderdil* for *Parts*).
2. Player Interaction: Borrowed terms are kept for on-track actions and unique event brands where players expect modern, fast-paced English terms. Established equivalents are used for navigation and rewards, where players need immediate clarity about their progress.
3. Linguistic Integration: While Borrowed terms are imported as foreign elements, Established Equivalents draw on mature Indonesian vocabulary, grounding the game's interface in a native linguistic environment.

This balanced, hybrid strategy ensures that *Asphalt 9: Legends* feels both modern and accessible to Indonesian players, proving that successful game localization requires a flexible, domain-specific approach rather than a rigid, flat translation method.

Summary of Key Findings

To synthesize the qualitative and quantitative analyses of this study, three core linguistic and strategic findings are summarized below:

Dominance of the Dual Strategy (Borrowing & Established Equivalent): Combined, Borrowing (46.15%) and Established Equivalent (38.46%) account for a massive 84.61% of all translation

decisions. This shows that the localization of *Asphalt 9: Legends* is characterized by a deliberate, strategic tension between foreignization (using borrowings to preserve high-tech branding and on-track action conventions) and domestication (using standard equivalents to ensure seamless menu navigation and progression tracking).

Systematic Syntactic and Morphological Adaptation: When translation occurs, the localizer strictly adheres to target-language (TL) grammatical rules.

Morphological adaptation is demonstrated by the systematic stripping of the English plural suffix "-s" (e.g., *Tokens* → *Token*) to align with the singular default structure of Indonesian nouns.

Syntactic adaptation is demonstrated in all Literal Translations, where noun-adjunct phrases undergo word-order inversion (e.g., English Modifier-Noun → Indonesian Noun-Modifier, as in *Season Flags* → *Flag Musim*) to maintain perfect Indonesian grammatical flow.

Domain-Specific Translation Shifts: Rather than applying a single, flat translation method across the entire text database, the localizer's strategy shifts systematically based on the term's functional role within the game's architecture. On-track gameplay mechanics and specialized event brands rely almost exclusively on *Pure Borrowing*, while physical car upgrades, campaign progression, and general user-interface menus rely on *Established Equivalents*. This domain-shifting approach ensures that the game remains technically authentic while being highly accessible and user-friendly.

CONCLUSION

This study provides a comprehensive, empirical analysis of the localization of technical terms from the arcade-racing video game *Asphalt 9: Legends* into Indonesian, using the strong micro-unit taxonomy of Molina and Albir (2002).

Based on the detailed linguistic and statistical analysis of our 78-term corpus, we draw the following conclusions:

The Nature of Racing Jargon: Technical terms in arcade-racing games are highly diverse, spanning five distinct domains: *Game Modes & Events*, *In-Game Economy*, *Vehicle Customization*, *Gameplay Stunts*, and *UI/Progression*. Unlike realistic simulator games, arcade-racing terminology blends real-world automotive parts with abstract, game-specific fantasy actions and mobile microtransaction passes.

The Hybrid Balance of Techniques: The localization process is highly strategic, relying on Borrowing (46.15%) and Established Equivalent (38.46%) as its primary tools. This dual strategy represents a balanced compromise between Venuti's philosophies of *domestication* and *foreignization*.

Rejection of the "Flat" Translation Approach: Our findings show that the term's functional role systematically drives a professional translator's decisions. On-track stunts and unique seasonal modes utilize pure borrowing to align with global community slang and fit tight UI layouts. Conversely, physical upgrades and navigational menus are domesticated through established equivalents, grounding the player's experience in a familiar linguistic environment.

Adherence to Target Grammar: When translation is used, the localizer carefully adapts English terms to Indonesian language singular noun structure (by removing plural suffixes) and reverses noun-adjunct phrases, placing the core noun before the modifier. This ensures that even hybridized phrases (such as *Pas Multiplayer*) flow naturally in Indonesian syntax.

Ultimately, the Indonesian localization of *Asphalt 9: Legends* is a highly successful model of functionalist translation. It proves that video game localization is not a rigid process of finding literal word matches, but a dynamic practice of balancing cultural naturalness, player conventions, and technical layout limitations.

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